Grades

Prep to Year 6

SCIENCE & TECHNOLOGY

Unit 1

“Origins of the Ancient World & Orderliness”

Homeward Education Support

COURSE OVERVIEW

Instructions for Teacher or Parent:

Science & Technology Content: This science and technology course is designed to teach children about God's creation through the lens of science and technology from Origins and Ancient Civilizations up to our Postmodern Era. The science and technology courses include the latest scientific information, discussion, hands-on activities, and exploration. Each topic focusses on a Christian approach to science. The lessons satisfy Australian Curriculum content in Earth and Space Sciences, Biological & Health Sciences, Scientific Inquiry, and the interaction of systems within natural and designed environments.

Based on Historical Themes: The overall Homeward Curriculum follows a thematically integrated cycle of 12 units, each comprising 8 topics taken over one or two terms (3 to 6 months). The 12 units (from Creation & Ancient Civilisations to Post-modern Times) can be accomplished in Primary School (using the Prep to Year 6 Study Guides), and then cycled through in High School (using the Year 7 -10 and or Year 10 to 12 study Guides). The High School Guides are also aligned towards completion of nationally approved graduation awards (Certificate II & III in General Education & Certificate IV in Tertiary Preparation).

Family Friendly Multi-age Differentiated Activities: For most subjects there will be between 3 and 5 lessons per topic. The course is designed multi-age, so the whole family can be working on the same topic, while each child engages at their own level of maturity. Our multi-age design makes it easier for teachers and parents to make 'reasonable adjustments' for students of differentiated abilities. Teachers and parents choose the 'Thinking Questions' and 'Activities' that are most appropriate for the ability of their child/student.

The amount the students accomplish each week can be adjusted according to their ability and special needs in two ways:
i) a slower to average student might accomplish 2 to 3 lessons per week, whereas a much more advanced highly performing student might accomplish up to 5 lessons per week including all the creative and hands-on activities;
ii) adjustments can be made so that a Year 6 student who is struggling to keep up, could answer the 'Thinking Questions' and learning 'Activities' at the Year 4 level. An advanced Year 3 or 4 student could also complete the Year 5 & 6 questions and activities or there is sometimes an extra Optional Extension Activity at the end of a lesson.

As the course is multi-aged, it is suitable for small multi-age classrooms or for homeschool families, allowing all the children to engage with the same topic, where each child answers questions at their age or ability level.

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Some suggestions for extra reading include but are not limited to…

Sciences:

- "A is For Adam" by Ken & Mally Ham [Ages 4 and under]
- "D is for Dinosaur" by Ken & Mally Ham [Ages 2 through 11]
- "How Many Animals Were on the Ark: Understanding the Animal Kinds" edited by Craig Froman [Ages 8 & up]
- "Answers Books for Kids" (Complete Set) from Answers in Genesis [Prep to Year 6]

- "All through the Year" by Jane Godwin [Prep to Year 1: Seasons]
- "A Year on our Farm" by Penny Matthews [Prep to Year 3: Calendars/Seasons]

Mathematics:

- "Woo's Wonderful World of Maths" by Eddie Woo [Years 3-6], [& Prep to Year 2 if able].
- "Eddie Woo's Magical Maths" by Eddie Woo (fun Maths activities for kids) [Prep to Yr 6]

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Prior to starting each week, review the recommended resources.

Contents

TOPIC 1	OUR CREATED UNIVERSE

Bible Verse of the Week: Genesis 1:1 – "In the beginning, God created the heavens and the earth."

Overview:

This week, children will learn about **God's creation of the universe**, the vastness of space, the laws of motion, and the importance of light.

Introduction Activity:

Parent says: "During this course, as you work on the science lessons each day, you will record your answers to questions and your thoughts about the topics, in your Science Journal.

We will be trying to keep your science journals neat and organised by using headings and subheadings to locate your work. Your Science Journal may be collected for assessment. For each school-term, you will need a separate exercise book to use as your Science Journal for that unit of the course.

So, let's get out the exercise book you will be using for your Science Journal. The first thing to do to keep it organised is to create your headings and sub-headings.

The Front Cover: On the front cover, you should record the subject title as "SCIENCE JOURNAL". Then write the name of the unit of study for this first term = "ORIGINS & ANCIENT CIVILISATIONS: (& ORDERLINESS)".

Topics: To keep your work organised, so it is easy for your teacher to review, you should place a heading for each Topic in this unit. For example – TOPIC 1..

Lessons: Then, you need to create a subheading for LESSON 1.
Under 'Lesson 1' you will then write your responses to questions and activities on the pages for that lesson. The next sub-heading on a new page will be LESSON 2, etc. You will have between 3 and 5 lessons in the week.

Then next week there will be a new heading for TOPIC 2, followed by the lesson numbers in TOPIC 2.

Lesson 1: God's Amazing Creation

Theme: God Brings Order Out of Chaos
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:
• Understand the concept of order in creation through the biblical account of Genesis 1.
• Identify features of the natural world (light, land, sky, animals, people) and describe patterns and observable properties.
• Recognise that living things have external features that help them survive in their environment.
• Begin to explore how humans are called to steward the earth in an orderly and purposeful way.
• Represent creation events using models, drawings, or sequences.
• Pose questions about the natural world and communicate their ideas clearly.

A) Introduction

Parent/Teacher Says:
"Today we are going to learn about the most amazing story ever told – the story of how the world began. This isn't a pretend story – it's the true account from God's Word about how everything came to be. As we listen, we'll see how God made everything step-by-step in a special order."

Vocabulary to Pre-teach:

- **Creation** – the act of making something from nothing.
- **Orderliness** – doing things in a careful, planned way.
- **Steward** – someone who takes care of something that belongs to someone else.
- **Light** – energy that lets us see things.
- **Sky/Heavens** – the space above the earth, where we see clouds, stars, the sun, and moon.
- **Habitat** – the place where a plant or animal lives.
- **Species** – a group of similar living things.
- **Observe** – to look closely and carefully.
- **Pattern** – something that repeats in an ordered way.

Instructions: Write these words on a board or paper and briefly explain them before reading the story.

B) Informational Story

Title: From Nothing to Everything – God's Orderly Plan

As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So, while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

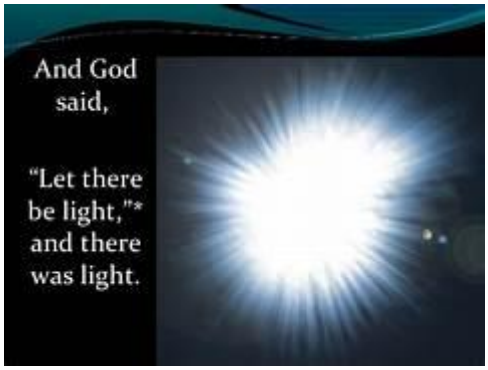
Before there was anything – before the sun warmed the earth, before birds soared in the sky, before even a single blade of grass swayed in the breeze – there was God.

There were no sounds. No colours. No light. Only darkness, emptiness, and stillness. The Bible tells us, "In the beginning, God created the heavens and the earth" (Genesis 1:1). This means He created the entire universe – from nothing. That's hard for us to imagine because we always need something to build with. But God didn't. He didn't need tools or materials or blueprints. He simply spoke, and things appeared. That's how powerful He is.

And when God created, He didn't just make things in a random or messy way. He brought **order** to what he was once creating. He created everything in a **sequence**, with **purpose**, and with **beauty**.

Let's explore the days of creation – God's amazing, orderly plan for the universe.

Day 1 – Light and Darkness



God's first words were, "Let there be light." And there was light! Before that, everything was dark. But when God spoke, light burst forth. It wasn't sunlight yet – that would come later. This was a special light created by God Himself. Then God **separated** the light from the darkness. He called the light "Day" and the darkness "Night." Just like that, time began. Morning and evening. A pattern. A rhythm. The first day came to a close.

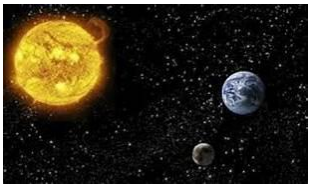
Day 2 – Sky and Waters

Next, God said, "Let there be a space to separate the waters!" And He made the sky – a huge expanse that divided the waters above (like clouds and moisture in the air) from the waters below (like oceans, lakes, and rivers). God called the space "Heaven" or "sky." This created a space for air, weather, and clouds. Now the earth had **layers** and **structure**. Everything had its place.

Day 3 – Land, Seas, and Plants

On the third day, God gathered the waters together so dry land could appear. He named the dry land "Earth," and the gathered waters He called "Seas." This was the first time people could have stood somewhere if they had existed yet.

But God wasn't finished with Day Three. He also created all the plants! Green grass, fruit trees, tall forests, delicate flowers, creeping vines, vegetables – all growing and full of seeds. And He made each plant to **reproduce** according to its kind. Apple trees grew apples. Wheat seeds made more wheat. There was order, design, and purpose in every leaf and root. The earth was beginning to look like a home.



Day 4 – Sun, Moon, and Stars

On Day Four, God said, "Let there be lights in the sky to separate day from night." This is when He made the **sun**, to give light during the day, and the **moon** and **stars** to shine at night. But they weren't just decorations! God gave them purposes:

- To mark time
- To separate day and night
- To guide people and animals
  The sun gives warmth and energy. The moon affects tides. The stars help travellers find their way. These lights became part of the great **system** God was creating. Every part connected. Every movement measured.

Day 5 – Birds and Fish

The next day, God turned His attention to the skies and seas. He said, "Let the waters be filled with living creatures, and let birds fly above the earth!"
So the oceans teemed with life – shimmering fish, dolphins, sea turtles, enormous whales, tiny plankton. God made sea creatures in every size and shape.
Then, He filled the skies with birds – soaring eagles, tiny hummingbirds, chirping robins, colourful parrots. Each creature was made to **live** in its specific **habitat** – water or air.
And God blessed them. He said, "Be fruitful and multiply!" He designed them to reproduce and fill the earth.

Day 6 – Land Animals and People
On the sixth day, God created all the land animals. Lions, cows, kangaroos, snakes, lizards, ants, elephants – each one perfectly suited to its environment. Some had fur, some had scales. Some walked, others crawled. All of them had a place in God's world.

But God saved the best for last.

He said, "Let Us make man in Our image, according to Our likeness." So God made the first man, Adam. From the dust of the earth, He formed

Adam's body. Then, God breathed into him, and Adam became a living soul. Later, God created Eve, the first woman, from Adam's side to be his companion.

Humans were different from animals. People were made in God's **image**. That doesn't mean we look like God physically – God is Spirit – but it means we can think, choose, create, love, and understand right from wrong. God gave people a job: to take care of the world. He told them to care for the plants, animals, and land – to be **stewards** of His creation.

God looked at everything He had made and said, "It is very good."

Day 7 – Rest and Celebration
On the seventh day, God rested. Not because He was tired – He doesn't get tired! – but because His work was complete. He blessed this day and made it holy. It was a day to reflect, rejoice, and enjoy all He had made.

God gave us this pattern of work and rest for our benefit. Working is good, and resting is good too. Both are part of the **order** of life.

Patterns and Purposes in Creation
If we look carefully, we can see the pattern in God's creation:

- Days 1–3: God **formed** the spaces – light/dark, sky/sea, land/vegetation.
- Days 4–6: God **filled** those spaces – sun/moon/stars, birds/fish, animals/people.

Each pair fits together! What was formed was later filled. That's not random – that's design. That's **orderliness**.

And every part of creation connects with the others. Plants need sunlight. Animals need plants. People need air, water, and food. The sun and moon help with time and seasons. All things are designed to work **together**, not separately.

When we observe that everything is interconnected and works together, we are observing an 'ecosystem'.
An **ecosystem** is made up of all of the living and nonliving things in an area. This includes all of the plants, animals, and other living things that make up the communities of life in an area. An ecosystem also includes nonliving materials – for example, water, rocks, soil, and sand. A swamp, a creek valley, an ocean, an area of grasslands, and a forest are all examples of ecosystems.

An ecosystem usually contains many different kinds of life. A grassland, for example, is an ecosystem that contains more than just grass. It includes other plants, mammals, insects, earthworms, and many tiny living things in the soil.

When something in nature breaks out of order – like when animals go extinct or ecosystems are damaged – everything else feels it. But when things are in balance, they reflect the beauty and care God intended.

People as Stewards
Because people were made in God's image, we have a special role. We aren't just part of nature – we're caretakers. God gave Adam and Eve (and all of us!) the job of tending the garden, naming animals, and making wise choices. This means using creation well – without waste, greed, or harm.

Even today, we can still follow that calling:

- Caring for animals

- Recycling and reusing
- Planting trees and gardens
- Avoiding pollution
- Learning more about how nature works

When we do these things, we reflect God's image. We show respect for His work. We practise **orderliness** – just like our Creator.

What We Learn from God's Creation
God's creation isn't just a list of things He made. It's a picture of who He is.

- He is **powerful** – He made everything by speaking!
- He is **wise** – everything fits together in perfect balance.
- He is **good** – He made a beautiful, safe world for us to enjoy.
- He is **purposeful** – nothing was an accident or mistake.
- He is **orderly** – each day built upon the last, step by step.

Even today, scientists study nature to discover how things work. They see patterns in weather, animal behaviour, and how plants grow. These patterns help us predict, prepare, and understand. That's because God's world is full of order. It was designed that way from the very beginning.

Closing Thought
God took a dark, empty world and filled it with colour, life, sound, and beauty. He took chaos and brought order. And He made us – people – to live in it, care for it, and enjoy it.

So, the next time you see a rainbow, smell a flower, or feel the sunshine on your face, remember: this didn't just happen. It was created – on purpose – by a God who loves order, beauty, and you.

C) Narration

Parent/Tutor Says:
"Now, I want you to tell me everything you remember from the story. Start from the beginning: What was there before anything was made? What did God make each day? What did God do last? Can you remember why the order of creation was important?"

Encourage the child to retell key concepts, using any drawings or sequence cards if needed.

D) Teaching Skills

Skill Focus: Observation, Pattern Recognition, Scientific Communication, Representing Information

Parent/Teacher Says:
"Let's learn how to be good observers like scientists. Scientists use their senses to observe things in nature: sights, sounds, smells, and textures. Then, they describe what they see using words or pictures. In today's

story, God made things in an ordered pattern – day by day. We are going to learn how to notice and represent patterns too."
Let's think about the ways people make and use **observations** and **questions** to learn about the natural world. If you were a scientist (a biologist or botanist) going into the forest to learn about nature, **what kinds of questions** would you want to find the answers for? What things would you like to find out? Tell me some questions.

Instructions for Parent/Teacher:

1. Model how to use a "creation chart" to track what was made each day (Day 1 to Day 7).
2. Show how to draw or write what was created each day.
3. Emphasise using clear order and labels (like a timeline or sequence map).
4. Practice drawing, modelling, or using picture cards to show the sequence.

E) Thinking Questions

Foundations to Year 2

1. What did God make first?
2. Why do you think God made light before other things?
3. What are some things that live in the sky? In the sea? On land?
4. How do you think God wants us to take care of His creation?

Years 3–4

1. What do you notice about the order God used in creation?
2. Why was each step important before the next could happen?
3. What is one pattern you noticed in the story?
4. What does it mean to be a steward of the earth?

Years 5–6

1. How does the creation account show the difference between humans and animals?
2. What evidence can you observe in nature that shows things are not random but orderly?
3. How does understanding creation help us understand science?
4. What responsibilities do humans have to care for ecosystems today?

F) Practical Activities

Foundations to Year 2
Option 1: Creation Timeline Strip – Create a long strip of paper with each day of creation represented by drawings or cut-out images. Add labels and arrows to show order.
Option 2: Creation Sound & Light Exploration – Use flashlights and sound-making objects to explore what it was like before light and sound. Discuss the changes when light entered the darkness.

Years 3 & 4
Option 1: Ecosystem Collage – Create a poster that shows different habitats (land, sea, sky) with plants and animals placed in their proper areas. Label each group.
Option 2: Observation Journal – Take a walk outside and record observations of patterns in nature (plant growth, cloud shapes, colours). Think of some questions you would like to research when you get back home (or in the classroom or library).Then draw or write findings.

Years 5 & 6
Option 1: Stewardship Poster Project – Design a poster that teaches others how to care for creation (e.g., water conservation, tree planting, animal habitats).
Option 2: Habitat & Adaptation Report – Choose one plant or animal and research how it is suited to its environment. As you read, think of questions you would like to find out more about. Present findings through a poster or oral presentation.

G) Optional Extension Research Activity

Task: Research one specific day of creation (e.g., Day 5 – birds and fish). Find out:

- How birds and fish are different in structure.
- Where they live and how their features suit their habitat.
- Why they are important in God's world.
  Present your findings through a written report, model, or slideshow.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Let's remember Genesis 1:1 – 'In the beginning, God created the heavens and the earth.'
This verse tells us that God is the Master Designer. Everything He made was carefully ordered. And because we are made in His image, we are also made to love order, beauty, and purpose. One way we show that is by observing, understanding, and caring for creation."

Reflective Questions:

- How can you be more orderly like God this week?
- What part of creation helps you see God's power?

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU01	***Observe external features of plants and animals and describe ways they can be grouped based on these features.***	**The lesson compares different plants and animals created on Days 3, 5 and 6 and encourages students to identify features and habitats.**
AC9S1U01	***Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs.***	**Discussion of created habitats (sea, sky, land) includes how creatures live where they are suited and cared for.**
AC9SFH01	***Explore the ways people make and use observations and questions to learn about the natural world.***	**Students are asked to observe nature, look closely, and draw/record in their Science Journals.**

Code	Full Description	Justification
AC9S1I01	***Pose questions to explore observed simple patterns and relationships and make predictions based on experiences.***	**The narration and Thinking Questions sections ask students to notice and describe the order in creation.**
AC9S2I06	***Write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary.***	**Students record their narration, drawings of creation days, or ecosystem diagrams in journals.**

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U01	***Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals.***	**Lesson contrasts non-living creation (light, land, water) with living creation (plants, animals, humans).**
AC9S4U01	***Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships.***	**The story introduces ecosystems and how plants (producers) and animals depend on one another in connected systems.**
AC9S3H02	***Consider how people use scientific explanations to meet a need or solve a problem.***	**Students learn how stewardship and scientific observation help humans care for environments.**
AC9S3I04	***Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns.***	**The "Creation Sequence Chart" and "Ecosystem Mapping" activities directly fulfil this.**

YEARS 5 – 6

Code	Full Description	Justification
AC9S5U01	***Examine how particular structural features and behaviours of living things enable their survival in specific habitats.***	**Students consider why animals and plants were designed for specific ecosystems (e.g., fish in water, birds in air).**
AC9S6U01	***Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions.***	**The stewardship discussion addresses how damage to environments harms ecosystems.**
AC9S5H02	***Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.***	**The lesson applies scientific understanding to modern stewardship, sustainability and caring for creation.**
AC9S5I04	***Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships.***	**Years 5–6 students create more advanced representations – ecosystem diagram, food chain, or stewardship poster.**

DESIGN & TECHNOLOGY (Multi-Age)

Code	Full Description	Justification
AC9TDE2K01 (Y1–2)	*Identify how familiar products, services and environments are designed and produced by people to meet personal or local community needs and sustainability.*	"Stewardship" section teaches how humans intentionally sustain environments.
AC9TDE4P02 (Y3–4)	*Generate and communicate design ideas using technical terms and graphical representation techniques, including using digital tools.*	The **Ecosystem collage and diagram tasks** require clear graphical organisation.
AC9TDE6P03 (Y5–6)	*Select and use suitable materials, components, tools and equipment to safely make designed solutions.*	Upper students create posters, reports or habitat designs using planned materials and layout.

Lesson 2: The Vast Universe

Theme: God Brings Order to the Universe
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:
• Understand that the universe operates in an orderly, predictable way according to patterns of movement.
• Recognise that the Earth is part of a solar system with observable movements of the sun, moon, and stars.
• Observe and describe celestial patterns (e.g. day/night, moon phases).
• Use models or representations to explore spatial relationships in the universe.
• Reflect on how human planning and order reflect God's character.

A) Introduction

Parent/Teacher Says:
"Today's lesson is about the universe – space, stars, planets, and the amazing order that God placed in the sky. We'll learn how God didn't create a jumbled, spinning mess but a perfectly timed and ordered system. We'll discover what the Bible says and how science helps us observe that order."

Vocabulary to Pre-teach:

- **Universe** – all space, planets, stars, and galaxies
- **Orbit** – the path one object takes as it moves around another
- **Galaxy** – a huge collection of stars, dust, and gas
- **Solar system** – our sun and the planets that revolve around it
- **Axis** – an invisible line that a planet spins around
- **Rotation** – the spinning of Earth on its axis (causes day/night)
- **Revolution** – one full orbit of Earth around the sun (takes one year)
- **Observation** – something you notice or see carefully
- **Pattern** – something that repeats or follows a rule

B) Informational Story

Title: *The Universe with a Plan*

As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So, while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

The night sky stretched out above Ellie and Jonah as they sat with their dad on a blanket in the backyard. The stars sparkled across the darkness like diamonds sprinkled on a deep blue canvas. The evening was calm, and not a single cloud covered the view.

“Look how many stars there are!” Jonah whispered. “It’s like a million!”

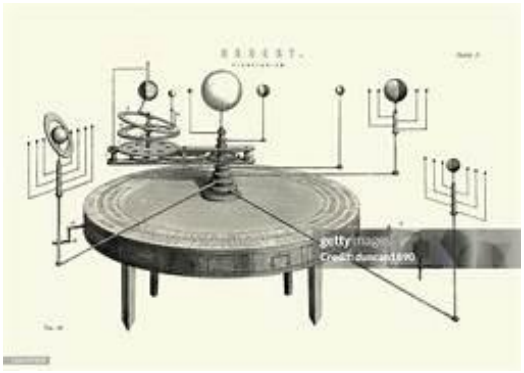
“There are actually way more than that,” Dad said, pointing upward. “There are billions – and even more than we can count. But guess what? Psalm 147:4 tells us that God knows exactly how many stars there are – and He even calls each one by name.”

“Wait,” Ellie said, her eyes wide. “He named them all?”

“That’s right,” said Dad. “Each one. He didn’t just toss the stars into space like a bucket of glitter. He placed each one carefully, exactly where He wanted it to be. The whole universe was made with a plan.”

Jonah leaned back on his elbows, thinking. “So… space isn’t just a big mess?”

“Not at all,” said Dad. “When God made the universe, He made it with **order**. Every planet, every star, every galaxy is part of His design. The Earth moves in a perfect path around the sun. The moon orbits the Earth. Everything fits together like the gears in a clock – ticking just right, at the exact speed needed for life.”



Ellie sat up straighter. “Is that why we have night and day at the right times?”

“Exactly,” said Dad. “The Earth spins on its axis, so different parts face the sun at different times – giving us day and night. Then, as the Earth travels in a path around the sun, we get seasons. In summer, we’re tilted toward the sun. In winter, we’re tilted away. It’s all planned.”

Jonah frowned. “But if the universe is that big... aren’t we just tiny and unimportant?”

Dad smiled and put his arms around both children. “That’s what makes it so amazing. Even though space is huge, and the Earth is like a tiny dot compared to the size of the universe, God still knows **you**. He knows your name, your thoughts, your heart. He made the stars – but He made you in His image. You are special because God chose to create you.”

Ellie looked up again. “Wow. God really is organized.”

“He is,” said Dad. “And He wants us to be, too. When we plan well, take care of our things, keep our homes tidy, or even manage our time, we are following His example. God doesn’t love chaos – He loves order.”

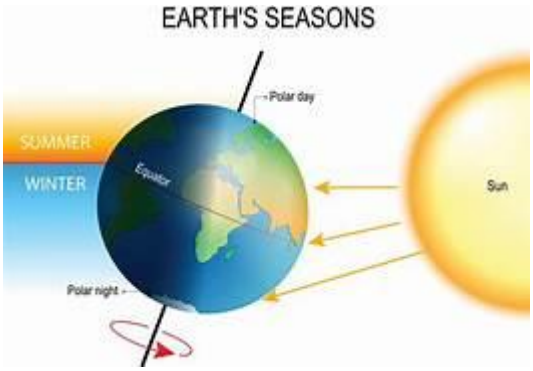
As they lay back on the blanket, the stars seemed to shine even brighter.

The Universe God Made

Let's explore more about the universe God created.

In the beginning, there was nothing – no time, no light, no space. Then God created everything. He didn't create it all at once in confusion. He began with light and space, then formed the Earth, stars, moon, sun, and planets in a beautiful sequence.

God created **laws** that the universe follows. For example, He created the law of **gravity**, which keeps planets in orbit and our feet on the ground. He designed **light** to travel in straight lines so we could see. He planned the **tilt** of the Earth's axis so we could enjoy different seasons.



The sun gives us warmth and energy. It helps plants grow, keeps animals alive, and gives us vitamin D. The moon controls the ocean's tides, helping clean the shores and guide sea creatures. The stars help us tell direction and time, and their brightness shows us beauty even in the dark.

Everything in the universe is moving. The Earth spins once every 24 hours, giving us day and night. It takes one year to orbit the sun – 365 days! The moon goes around the Earth every 29 days, giving us the different phases we see in the sky.

Yet all this movement doesn't create chaos. Instead, it creates **patterns**. Regular, dependable, beautiful patterns.

Patterns in the Sky

Have you noticed that the sun always rises in the east and sets in the west? That's not random – it's because of the Earth's rotation. This spinning also makes shadows move, birds know when to fly home, and people know when to sleep and wake.

The moon has phases – the part of the moon that we see changes shape across the month. First, we see a tiny crescent, then a half moon, then a full circle. Then it gets smaller again. That's because of how sunlight shines on it as it moves around Earth. We call this pattern the **lunar cycle**.

And stars? Some of them form **constellations**, like Orion or the Southern Cross. These patterns in the stars have helped sailors and farmers for thousands of years.

And all of this – every galaxy, planet, and orbit – is part of a vast design.

A Giant Clock

Scientists often describe the universe as a **giant clock**. Imagine all the planets as gears that spin and turn in perfect rhythm. Each part depends on the others. If one gear spun too fast or too slow, everything would fall apart.

But the universe doesn't fall apart. It stays in motion with breathtaking accuracy.

- The Earth is the perfect distance from the sun – not too hot, not too cold.
- The moon is just the right size to keep Earth's tilt steady.
- The stars shine light years away, but their patterns stay predictable.

This didn't happen by accident. It happened because God is a Master Designer. He loves **order**, not confusion.

We Are Part of That Order

Did you know that you're also part of God's order?

You're not just a random person in a big world. You were created on purpose. The Bible says you were "fearfully and wonderfully made." Your heart beats in a rhythm. Your body has systems that work together. You have thoughts, emotions, and creativity.

God made you in His image – so you can choose to live with **order** in your life, just like He does.

- You can clean your room because God values beauty and care.
- You can plan your day because God is not random.
- You can study science and learn patterns because God made the universe understandable.

Even when things in the world feel confusing, God is not confused. He still holds everything together.

Looking Through a Telescope

One night, Jonah and Ellie went to a local observatory where a giant telescope was set up. They took turns looking through the lens.

"I can see Jupiter!" Ellie shouted.

Jonah saw Saturn and its rings. "This is amazing!"

The astronomer nearby explained how each planet orbits the sun, how their distance from the sun affects their temperature, and how their gravity helps keep the solar system balanced.

"But who keeps it all in place?" Jonah asked.

The astronomer smiled. "That's a good question. Science explains **how** the universe works. But faith helps us understand **who** made it and **why**."

That night, Ellie wrote in her journal:
"God made the stars, but He also made me. The same way He keeps planets from crashing, He helps me stay steady. I want to follow His way and be someone who brings order, not chaos."

Conclusion

The universe is massive, complex, and beautiful. But above all, it is **ordered**.

Every part – from the spinning Earth to the smallest moon – is part of a plan. And every time we look at the stars or watch a sunrise, we are seeing a glimpse of God's thoughtful design.

You are not lost in the vastness. You are known. Named. Loved.

God didn't just place the stars with care. He placed **you** in this time and place – on purpose.

Let's choose to live in that purpose, to walk in His order, and to reflect His beauty in how we live, work, plan, and care.

C) Narration

Parent/Tutor Says:
"Can you retell the story in your own words? What were Ellie and Jonah wondering? What did their dad say about the stars, planets, and the universe? What did this story teach you about God's design?"

Let the student share freely, then prompt with follow-up questions if needed to include ideas about structure, movement, and purpose.

D) Teaching Skills

Skill Focus: Observing and describing patterns in the sky, using models to explain space phenomena, recognising structure and function.

Parent/Teacher Says:
"Let's learn how scientists and students like you observe the sky. The sky changes in patterns – night and day, seasons, the moon's phases. Scientists look for those patterns to understand how things move. Today we'll use models and diagrams to explore some of those movements.

If you were an astronomer with a powerful telescope, **what kinds of questions** would you want to find the answers for? What things would you like to find out? Tell me some questions."

Instructions:

1. Use a torch (sun), ball (earth), and marble (moon) to demonstrate:
    - Earth's rotation = day/night
    - Earth's revolution = seasons/year
    - Moon's orbit = changes in moon shape (phases)
2. Show how planets stay in orbit through gravity and motion.

3. Draw or label a solar system diagram with the sun at the centre and planets in orbit.

E) Thinking Questions

Foundations to Year 2

1. Who made the stars and planets?
2. What happens when the Earth turns?
3. What do we call the big space we live in?
4. How does day and night show God's order?
5. How can you be organised today like God is?

Years 3–4

1. How does the sun help us measure time?
2. What do you know about Earth's movement around the sun?
3. How do we see God's patterns in the sky?
4. Why is it helpful that the sun rises and sets in a pattern?
5. How does planning or cleaning show orderliness?

Years 5–6

1. What is the relationship between Earth's rotation and day/night?
2. How does Earth's orbit relate to the seasons?
3. Why is it important that God's universe follows patterns?
4. How can science help us see the order God made?
5. What is one habit in your life you could organise better to reflect God's order?

F) Practical Activities

Foundations to Year 2
Option 1 – Paper Plate Day/Night Wheel
• Draw and cut out a paper plate with a rotating circle showing night on one half, day on the other. Label sun and stars. Rotate it to show day/night cycle.

Option 2 – Create a Star Map
• On dark paper, draw dots to represent stars, use white pencil or stickers. Optional: form a simple constellation. Discuss how God placed them with purpose.

Years 3–4
Option 1 – Moon Phases Craft
• Use Oreo biscuits or paper cut-outs to represent phases of the moon. Sequence them in correct order and label each phase.

Option 2 – Orbit Model
• Using balls or string, make a simple model of the sun, Earth, and moon. Show how they orbit and rotate. Label each part.

Years 5–6
Option 1 – Time and Seasons Poster
• Create a poster explaining how Earth's tilt and orbit create seasons. Include a diagram and explanation.

Option 2 – Write a Space Report
• Choose one planet or star and research how it shows God's order (e.g., predictable orbit, unique design). Present in a creative format (poster, presentation, story).

G) Optional Extension Research Activity

Task:
Research a constellation like Orion or the Southern Cross. Find out:
• What stars are in it
• When and where we can see it
• If ancient people used it for travel or farming
Reflect on how even ancient people noticed God's order in the sky.

H) Biblical Connection & Wrap-Up

Psalm 147:4 – "He determines the number of the stars and calls them each by name."

Parent/Teacher Says:
"This verse shows how powerful and personal God is. He knows every single star. He made the patterns of the sky – and He made you. That means your life also has meaning and purpose. When you follow His way of order, you reflect His image."

Discuss:
• What's one way you've seen God's order in the sky or seasons?
• What's one area of your life that needs more order?

Finish with prayer:
"Dear God, thank You for creating the universe with such beauty and order. Help us to see Your wisdom in the stars and the sky. Teach us to live with order in our hearts, homes, and choices. Amen."

AUSTRALIAN CONTENT DESCRIPTIONS BY YEAR LEVEL BAND

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S2U01	**Recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky.**	**The story and model activities teach that Earth is part of a solar system and that day/night and moon phases follow a predictable pattern.**
AC9SFH01	**Explore the ways people make and use observations and questions to learn about the natural world.**	**Students observe sky patterns (sunrise/sunset, moon changes) and discuss what they notice.**
AC9S2I04	**Sort and order data and information and represent patterns, including with provided tables and visual or physical models.**	**Day/night wheels and basic orbit models require students to organise and show patterns physically.**

Code	Full Description	Justification
AC9TDE2P01	Generate and communicate design ideas through describing, drawing or modelling, including using digital tools.	Students produce simple models showing Earth rotating or orbiting, or draw solar system layouts.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3H01	Examine how people use data to develop scientific explanations.	Lesson discussion explains how studying star and planet movement helps people explain day/night and seasons.
AC9S3I04	Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information.	Students construct more detailed solar system diagrams and/or moon phase sequences.
AC9S4U02	Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean. *(Introduced, not assessed)*	The lesson links sky patterns and seasons, which is foundational knowledge leading into weather and water cycle study, but does not teach the whole water cycle yet.
AC9TDE4P02	Generate and communicate design ideas and decisions using technical terms and graphical representation techniques.	Years 3–4 model orbits using labelled diagrams with correct spatial arrangement and vocabulary (orbit, axis, rotation).

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U02	Describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation and revolution relate to observable day and night and seasons.	This is the central learning outcome of the lesson. Students directly model tilt, rotation, revolution using torch/ball demonstrations.
AC9S5H02	Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.	The reflection section connects sky patterns to navigation, farming seasons, and calendar use.
AC9S5I04	Construct and use appropriate representations, including graphs and visual or physical models, to organise and process data and describe patterns.	Years 5–6 produce more formal diagrams (e.g., annotated Earth–Sun–Moon system showing angle and position).
AC9TDE6P03	Select and use suitable materials, components, tools and equipment to safely make designed solutions.	Upper students create more sophisticated models that require careful selection and safe use of materials (polystyrene balls, rods, compasses, etc.).

Lesson 3: The Laws of Motion in Space

Theme: God's Order in How Things Move
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:
• Describe Newton's three Laws of Motion in age-appropriate terms.
• Understand that movement in space follows consistent, observable rules.
• Explore how gravity and force influence the motion of planets and objects.
• Use models and demonstrations to represent motion, force, and orbits.
• Recognise that God created physical laws that bring order to the universe.

A) Introduction

Parent/Teacher Says:
"Today we're going to explore something amazing: how things move! Whether it's a rocket, a swing, or a falling apple, things don't just move randomly – they move in order, because God designed invisible rules called the Laws of Motion. We'll learn how Isaac Newton helped explain those rules, and how they show God's order in creation."

Vocabulary to Pre-teach:

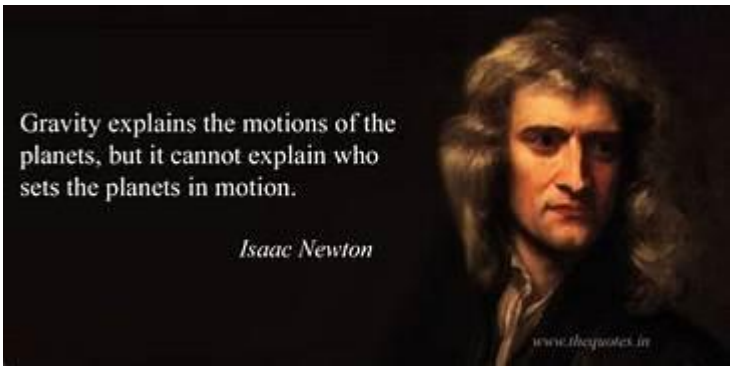
- **Motion** – movement
- **Force** – a push or pull that makes something move
- **Gravity** – the force that pulls things toward each other (like Earth pulling us down)
- **Orbit** – the path something takes as it moves around another object
- **Inertia** – the tendency of something to keep doing what it's already doing (staying still or moving)
- **Acceleration** – a change in how fast something is moving
- **Reaction** – what happens in response to an action

B) Informational Story

Title: *The Rules that Keep Planets Moving*

As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

Have you ever thrown a ball across a field? Watched a swing move back and forth at the park? Or seen a rocket launch on TV with a huge burst of fire and smoke? All of those things move – and none of them move randomly. They move because they are following invisible rules. These are rules that God placed into creation when He made the universe.



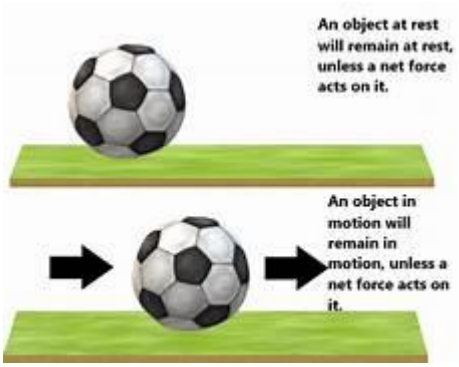
Long ago, a man named **Isaac Newton** wanted to understand more about how things move. He watched falling apples and moving carts. He asked questions and made observations. After years of study, he described three rules – called **Newton's Laws of Motion** – that explain how things move in a world full of forces like gravity, friction, and push or pull.

But here's something important: Newton didn't create those laws – **God did**. Newton simply discovered what God had already designed. These laws don't just help us understand playgrounds and sports. They help us understand how stars, moons, and planets move through space.

Let's explore these three laws and see how they show God's order.

Law 1: Things Don't Move Unless Something Makes Them Move

This is called the **Law of Inertia**. Imagine a ball sitting in the grass. It won't roll unless someone kicks it. In the same way, if something is moving, it won't stop unless something slows it down – like friction or a wall.

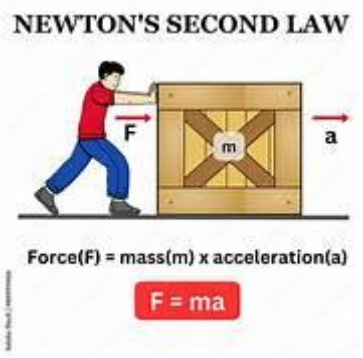


In space, this rule becomes really clear. If a rock is floating in the middle of space, with no air or gravity nearby, it will just keep drifting in a straight line forever – unless something bumps into it or pulls it. There's nothing out there to slow it down!

Think about the Earth. It's spinning and moving through space, and nothing is stopping it. Why? Because God designed it that way. He gave the Earth a spin and set it on a perfect path around the sun. It's moving at just the right speed – not too fast to fly away, and not too slow to fall into the sun.

That's inertia. That's God's order in action.

Law 2: The Harder You Push, the Faster It Goes

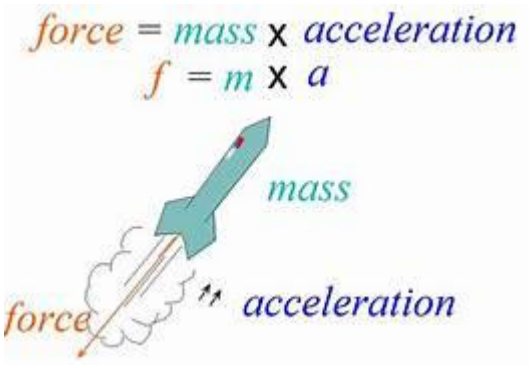


This law says that the **force** you apply changes how an object moves. If you push gently, something moves slowly. If you push hard, it moves fast.

The fancy version of this law says: **Force equals mass times acceleration** (F = m × a). That means the bigger the object, the more force it takes to move it.

Let's say you're trying to roll a basketball and a bowling ball. If you use the same push, the basketball rolls easily – but the bowling ball barely moves. Why? Because it has more mass. You'd have to push it harder to get it going.

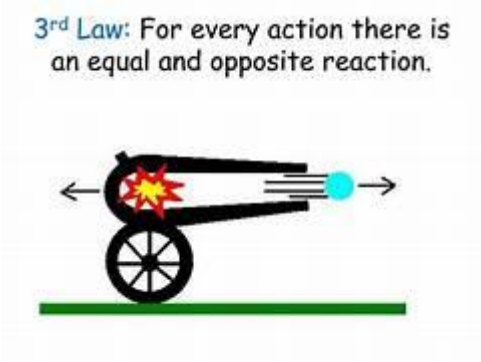
In space, this helps us understand how **rockets** work. If a rocket engine creates a little force, the rocket moves slowly. But when it creates a huge force (tons of fire and pressure), the rocket accelerates rapidly and escapes Earth's gravity!



Engineers use this law to design space missions. They calculate exactly how much fuel and force is needed to launch a rocket, guide it through space, or land it safely on the moon or Mars. Without God's predictable law, space travel would be impossible.

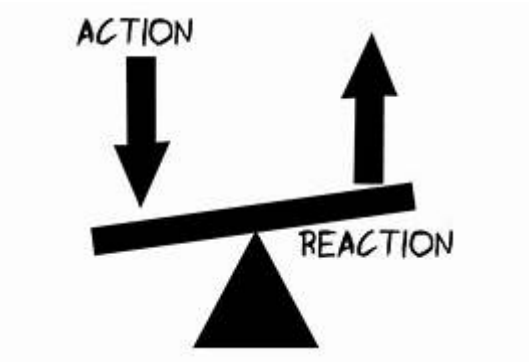
Law 3: For Every Action, There Is an Equal and Opposite Reaction

This law explains a lot of things you've probably seen. Have you ever let go of a blown-up balloon without tying it? It zips across the room, right? That's because the air rushing out the back pushes the balloon in the opposite direction.



The same thing happens with a rocket. The fire blasts downward, and the rocket goes upward. The action (fire pushing down) causes the reaction (rocket lifting up). They're equal in strength but go in opposite directions.

God uses this law to keep the solar system balanced. When one object pushes or pulls another – like the moon pulling Earth's oceans – it creates tides and waves. Every motion has a response. Nothing happens without affecting something else. That's not chaos – it's balance.

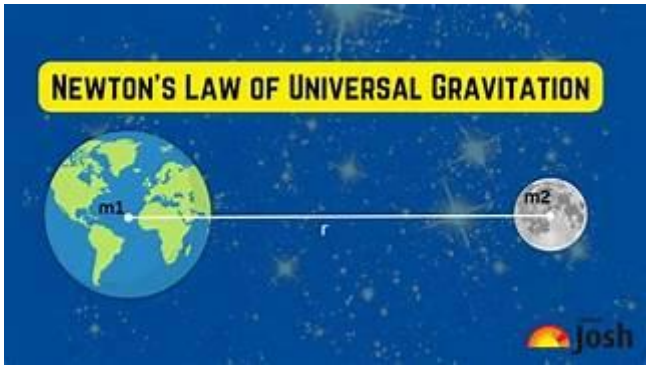


Imagine a world where a rocket sometimes went up and sometimes sideways, or where jumping off a swing sent you flying randomly. That would be scary! But thanks to God's orderly laws, everything works the same way every time.

Order in the Solar System

The Earth orbits the sun at just the right speed. The moon orbits Earth without crashing. Saturn's rings swirl in balance. All of this happens because of Newton's laws working with **gravity**, **mass**, and **motion**.

And gravity? That's another invisible force that God created. It's the reason we don't float off the ground. It's the force that pulls the moon toward Earth, keeping it in orbit. Gravity works with Newton's laws to keep the planets moving in neat paths – called **orbits** – just like God planned.



If the Earth were spinning too slowly, it would fall into the sun. If it spun too fast, it would fly away. But God set the balance perfectly.

That's not just clever – it's awe-inspiring.

God's Invisible Rules

Isaac Newton once said, "Gravity explains the motions of the planets, but it cannot explain who sets the planets in motion." Newton believed that science and faith go together. He believed in God as the One who not only made the rules – but keeps them working.

Colossians 1:17 says, "He is before all things, and in Him all things hold together." That's talking about Jesus. He didn't just make the universe and walk away. He is still **holding it together** – every orbit, every atom, every law of motion.

That's why we can trust the universe to keep working. That's why we can build rockets, ride bikes, and swing on swings – because God made a world with **order**, not randomness.

Imagine if the rules changed every day! You might throw a ball and watch it float. Or step forward and go flying backward. That would be frightening and confusing. But instead, the universe is **predictable**, because God is **faithful**.

Everyday Examples of Motion

These laws don't just apply in space. They work on Earth every day.

- When you kick a ball, it rolls because of inertia and force.
- When you pedal a bike harder, you go faster – that's acceleration.
- When you jump on a trampoline, the surface pushes you up as you push down. That's action and reaction.

Even walking is a result of these laws! You push your foot backward, and your body moves forward.

So, the next time you're walking, jumping, or riding, remember – you are following God's design.

A God of Order, Not Chaos

God didn't create a messy world. He didn't fill the sky with randomly spinning things. He didn't leave the planets to figure it out on their own.

He created the sun to give light and warmth. He made the Earth to spin just right. He gave us gravity, motion, and the tools to understand it.

And then, He gave us minds to explore it.

Every time you learn about science, you're discovering more about the amazing order that God placed into the universe.

Every time you notice a pattern or predict what will happen next, you're thinking like a steward – someone made in God's image to care for His world.

Even when you do something simple like tidy your room, organise your schedule, or follow instructions – you're reflecting the orderliness of your Creator.

Conclusion

The universe moves with purpose. Planets orbit. Stars shine. Rockets lift. Apples fall. And all of it follows invisible rules that come from a God who never changes.

Isaac Newton helped describe those rules. But God wrote them. He is the source of all order.

So, when we learn science, we're not just learning facts. We're learning how God holds everything together with wisdom, beauty, and balance.

And that includes you.

Just like the planets have a place and path, so do you. God made you for a reason, and when you live with order in your heart, habits, and thinking – you are living the way God designed you to.

C) Narration

Parent/Teacher Says:
"Can you tell me what you remember from the story? Start by explaining one of Newton's laws. Can you give an example of how it works in space or in everyday life? What does this story tell you about how God brings order to the world?"

Encourage children to explain each of Newton's three laws in their own words, with examples from the story or personal experience.

D) Teaching Skills

Skill Focus: Understanding how force, gravity, and mass affect movement; using models to represent real-world systems; describing patterns and outcomes of physical interactions.

Parent/Teacher Says:
"Scientists like Newton didn't make up the rules of motion. They discovered them by observing how things work. Today, we'll use models and experiments to see how these laws explain God's design for movement."

Instructions:

1. Review the three laws using real-world examples:
    - Law 1: A toy car stays still until pushed.
    - Law 2: A harder push makes it go faster.
    - Law 3: When you push a wall, you feel it push back.
2. Create a chart with headings: *Law*, *Explanation*, *Example*. Fill it in together.
3. Model orbit and gravity with simple props (see Activity F).

E) Thinking Questions

Foundations to Year 2

1. What makes a toy car start moving?
2. What happens if you push it softly? What about hard?
3. Why does the rocket go up when fire blasts down?
4. How does God keep everything moving in space?
5. Can you think of something in your house that shows order?

Years 3–4

1. What is Newton's first law, and what does it mean?
2. Why do planets stay in orbit?
3. What might happen if gravity stopped working?
4. Why do we call God's laws "invisible rules"?
5. How can organising your schoolwork or chores be like living in God's order?

Years 5–6

1. How do Newton's laws help engineers plan space travel?
2. What does Colossians 1:17 mean about Jesus holding things together?
3. Why is predictability in science important?
4. How does Newton's second law explain the difference between a golf ball and a bowling ball being pushed?
5. How can studying these laws help you worship God better?

F) Practical Activities

Foundations to Year 2
Option 1 – Push and Watch
• Use toy cars or balls. Gently push, then strongly push, and observe the differences.
• Record with words or drawings.

Option 2 – Balloon Rocket
• Blow up a balloon and release it without tying. Watch how it flies in the opposite direction.
• Relate to Newton's third law.

Years 3–4
Option 1 – Marble Inertia Test
• Roll a marble on a table. What happens when it hits something?
• Try rolling heavier or lighter objects. Record and compare.

Option 2 – Gravity Spinner
• Tie a string to a small ball and spin it in a circle. Let go and observe direction.
• Discuss orbit, gravity, and force.

Years 5–6
Option 1 – Newton's Laws Comic Strip
• Create a short illustrated comic explaining each law with a real-life example (e.g. rocket launch, seatbelt, trampoline).
• Include captions and arrows to show action and reaction.

Option 2 – Design a Mini Rocket Launcher
• Use a straw, balloon, and tape to design a launcher. Launch the balloon rocket along string.
• Test and measure how far it travels depending on balloon size.

G) Optional Extension Research Activity

Task:
Choose one of Newton's three Laws of Motion and find examples of how it is used in space missions.
Research:

- How engineers use this law in building rockets.
- Why predictable laws help astronauts.
  Present your findings as a poster or oral presentation.

H) Biblical Connection & Wrap-up

Colossians 1:17 – "He is before all things, and in Him all things hold together."

Parent/Teacher Says:
"This verse reminds us that everything we learn about motion, movement, and physics isn't merely science – it's a window into God's perfect plan. He designed every rule, every force, and every orbit. And He didn't just make the world and walk away. He's still holding it all together."

Discuss:
• How does science help us see God's order?
• What's one part of your life where you can practise more order this week?

Close in prayer:
"Dear God, thank You for creating the laws that hold everything together. Help us to see Your wisdom in motion, and to live in a way that reflects Your order and peace. Amen."

Australian Curriculum (v9) Content Descriptions Used in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification (What happens in the lesson that matches it)
AC9SFU02	Describe how objects move and how factors including their size, shape or material influence their movement.	Students observe that objects move differently when pushed or released (toy cars, balls, etc.). This is the introductory understanding behind Newton's First and Second Laws.
AC9S1U03	Describe pushes and pulls in terms of strength and direction and predict the effect of these forces on objects' motion and shape.	Balloon rockets, rolling marbles, and pushing objects demonstrate that stronger pushes cause faster movement and direction changes.
AC9SFH01	Explore the ways people make and use observations and questions to learn about the natural world.	Students observe cause-and-effect and discuss "What happens when…?" during demonstrations.
AC9S1I01	Pose questions to explore observed simple patterns and relationships and make predictions based on experiences.	Students predict which push will move an object further / faster before testing.

YEARS 3 – 4

Code	Full Description	Justification
AC9S4U03	Identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects.	Newton's First and Second Laws are demonstrated through pushes, collisions, gravity, and motion examples. The balloon rocket also prompts discussion of forces interacting.
AC9S3H01	Examine how people use data to develop scientific explanations.	The lesson describes Newton observing motion and forming explanations based on repeated patterns (apple falls, objects slow or continue).
AC9S3I04	Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information.	Students build and use physical models (balloon rockets, rolling marbles, orbit rope models) to explain forces and motion.
AC9TDE4P02	Generate and communicate design ideas and decisions using technical terms and graphical representation techniques.	Students conceptually design or illustrate cause-and-effect diagrams (push → motion; weight → inertia).

YEARS 5 – 6

Code	Full Description	Justification
AC9S5H01	Examine why advances in science are often the result of collaboration or build on the work of others.	The lesson presents Newton as someone who described laws God built into creation – showing scientific discovery builds on previous ideas of gravity and motion.
AC9S5I04	Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and describe patterns, trends and relationships.	Years 5–6 students record observations comparing force strength to motion outcome, or illustrate Newton's laws through structured diagrams (e.g., "Action → Reaction").
AC9TDE6P03	Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.	Older students construct more refined balloon rockets or motion demonstrations requiring deliberate material choices and safe tool handling.

Lesson 4: Light and Darkness

Theme: Light Brings Order
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:
• Understand how light enables life, timekeeping, and order in the world.
• Explore the observable properties of light, including reflection and refraction.
• Use simple tools and materials to observe how light behaves.
• Recognise that God created light to bring structure and purpose.
• Reflect on how biblical "light" connects to truth, peace, and order.

A) Introduction

Parent/Teacher Says:
"Today we're learning about something we see every day – light. We're going to find out how light works, why it's important, and how God used light to bring order to the world from the very beginning."

Vocabulary to Pre-teach:

- **Light** – energy we can see, helps us see other things
- **Reflect** – to bounce off a surface, like a mirror
- **Refract** – to bend when moving through water or glass
- **Darkness** – the absence of light
- **Order** – structure and pattern, the opposite of chaos
- **Shadow** – a dark shape made when something blocks light

Instructions: Discuss these terms using real-world examples. Demonstrate reflection with a mirror or metal spoon; demonstrate refraction with a pencil in a glass of water.

B) Informational Story

Title: *From Darkness to Light*
As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So, while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

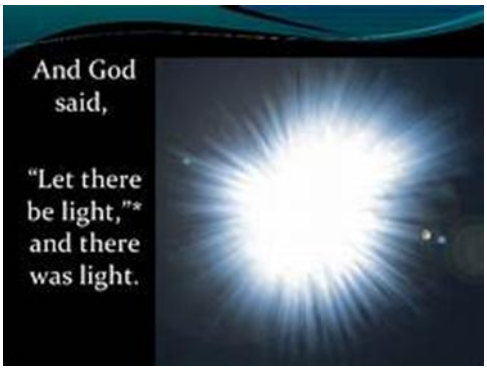
Before the world began, there was no sun, no moon, no people, no plants – nothing at all. There wasn't even time. Just stillness. Darkness. Complete and total emptiness.

This wasn't like night-time when the lights are off and the stars are out. This was a kind of darkness no one had ever seen or felt – a world without shape, form, or sound. There were no shadows because there was no light to block. It was what the Bible calls "formless and void."

But then something happened that changed everything.

God spoke.

“Let there be light,” He said.



And just like that – **there was light.**

It didn’t take time. It didn’t take building tools. It took God’s word. In an instant, brilliant light shone into the darkness. It wasn’t sunlight yet – that came later. This was pure, perfect light from God Himself. It broke through the chaos and filled the emptiness with warmth, energy, and clarity.

And with that light, something else began: **order**.

God **separated** the light from the darkness. He didn’t let them stay mixed up or confused. He gave each one a place. The light was for daytime, and the darkness for night. That simple act created the very first rhythm – **morning and evening, one full day**.

From that point on, time had begun.

God Continues the Pattern

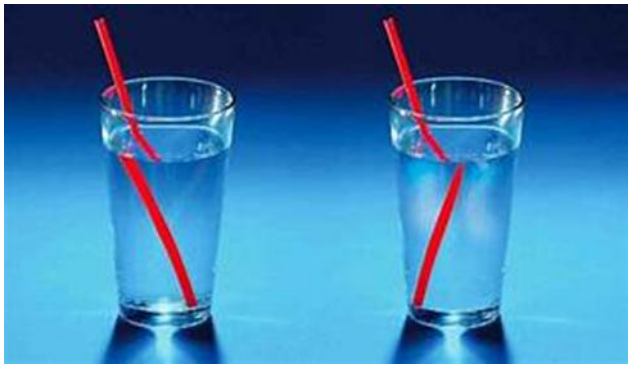
As God continued creating the world, He didn’t do it in a random jumble. He added things in a thoughtful, purposeful order. On the first day, He gave light. On the fourth day, He made **the sun** to shine during the day, and **the moon and stars** to light the night. But they weren’t merely beautiful – they were also useful.

God gave the sun, moon, and stars a **job**. They helped people know when it was day or night, what season it was, when to plant, and when to harvest. They gave a rhythm to life.

The sun warms the earth and helps plants grow. The moon guides the oceans with its pull on the tides. The stars help travellers find their way. And all of them move in patterns that can be predicted and trusted.

None of that is accidental. All of it shows God’s **orderly design**.

Light Behaves in Amazing Ways



Did you know that light follows rules? It doesn’t wiggle and wander randomly. It moves in straight lines. That’s why shadows have clear shapes. It **reflects** off shiny surfaces like mirrors, bouncing away in a new direction. It also **refracts** – which means it bends when it passes through something like water or glass.

When you look at a straw in a glass of water, it looks bent. That's because light bends as it moves from air into water. It's following the laws God made for it.

Sometimes, if light shines through water droplets or a prism, it separates into colours – red, orange, yellow, green, blue, indigo, and violet. We call that a **rainbow**. Even that happens because light moves in a predictable, beautiful way.

Light Is Life

Without light, plants couldn't grow. Light gives them the energy to make their own food in a process called **photosynthesis**. Animals wouldn't know when to hunt or sleep. People wouldn't be able to work, cook, read, or build. Without light, there would be no colour, no shadows, no warmth.

Imagine waking up to total darkness – every single day. No sunrise. No shape or form. No way to know where you are or what's ahead.

Light gives us more than vision. It gives us the ability to live.

But light isn't only about science.

God Is Light

The Bible says, "God is light, and in Him there is no darkness at all" (1 John 1:5). That doesn't just mean God glows. It means He is **truth**, **goodness**, and **purity**. Where God is, there is no confusion. No lies. No fear. No shadows of evil.

When God said "Let there be light," He was doing more than lighting up the sky. He was bringing truth and meaning to a world that had no shape. He was making a place where people could live, work, and enjoy His creation.

Later in the Bible, Jesus says, "I am the Light of the World" (John 8:12). What does that mean?

It means that just like a torch helps us find our way in the dark, Jesus helps us know what's true and right in a world that sometimes feels confusing, sad, or scary.

He doesn't leave us stumbling around trying to figure things out. He shines clearly. He shows us the path. His Word – the Bible – is like a lamp to our feet and a light for our path (Psalm 119:105).

Light and Order Go Together

When light came into the world, it didn't just make things visible. It made them **understandable**. Light began the daily rhythm of work and rest, planting and harvesting, waking and sleeping.

That's why people all around the world use light to tell time – sunrises, sunsets, clocks, calendars. And that's why we use light to see clearly. Darkness hides things. Light reveals them.

Even our homes follow this pattern. We turn lights on when we need to focus or work. We dim them when it's time to rest. We use light to organise our days.

When you switch on a light in a messy room, it's easier to see what needs to be tidied. In the same way, when you bring truth and peace into a confusing situation, you are bringing **order** – just like God did at creation.

Being Like God

Because we are made in God's image, we can be people who bring light into the world too.

- When you clean your room, you bring order where there was mess.
- When you speak kindly to someone who's upset, you bring peace where there was hurt.
- When you tell the truth, you shine light where there was confusion.
- When you follow a routine or schedule, you bring structure that helps your day run smoothly.

Every time you act in a way that makes things clearer, calmer, or more beautiful – you are acting like your Creator.

You are shining your light.

Jesus told His followers, "You are the light of the world... Let your light shine before others" (Matthew 5:14–16). That means our words, choices, and actions should help others see what is good and right. Not to make ourselves look great – but to point people to the One who made the light in the first place.

From Chaos to Clarity

In the beginning, everything was formless and dark. But God didn't leave it that way. He spoke, and light appeared. Then He continued shaping the world day by day – sky, sea, land, plants, animals, people – until everything was just right.

God brought **order** from **chaos**.

And He's still doing it today.

In our hearts, in our homes, in our world – God wants to shine His light, bring peace where there is confusion, bring understanding where there is fear, and bring beauty where there is mess.

And He invites us to do the same.

When you turn on a light in a dark room, everything changes. In the same way, when you live with truth, peace, kindness, and discipline, you change the world around you – little by little, like a lamp glowing in the night.

Conclusion

Light isn't just useful. It's powerful. It reveals, separates, guides, and supports life. It has order and direction. And it comes from a God who is full of wisdom and purpose.

From the very beginning, God showed that light is the starting point of all good things. Without it, we're lost. But with it, we see clearly – and live rightly.

So, the next time you step outside into the sunlight, flick on a lamp, or see a rainbow, remember:

God made light.
God brings light.
And He has called you to shine, too.

C) Narration

Parent/Teacher Says:
"Now it's your turn! Can you tell me what you remember from the story? What did God make first? Why is light important? How does it help bring order to the world?"

Encourage the student to include:

- God's command "Let there be light"
- Light separating day from night
- How light helps plants, animals, and people
- How light represents Jesus bringing truth

D) Teaching Skills

Skill Focus: Understanding observable properties of light – reflection, refraction, straight-line travel – and communicating ideas through observation.

Parent/Teacher Says:
"Let's learn how light behaves. Scientists study light to understand how it moves and changes. Today we'll observe two ways light behaves: reflection and refraction. Reflection is when light bounces off shiny surfaces. Refraction is when light bends as it moves through water or glass."

Instructions:

1. Set up a flashlight and mirror. Let the student observe the beam bounce.
2. Shine the light through a glass of water. Observe bending.
3. Encourage students to describe and draw what they see.
4. Ask: What does this tell us about light following rules?

E) Thinking Questions

Foundations to Year 2

1. What did God say on the first day?
2. Why did God make light?
3. What does light help us do?
4. How does God use light to bring order to the world?
5. Can you think of one way to bring order to your room or home this week?

Years 3–4

1. What does it mean that light separates day from night?
2. What happens in the world when there's no light?
3. Why do you think Jesus is called the Light of the World?
4. How does light help keep the Earth in balance?
5. What's something in your life that needs more order – and how can you help bring it?

Years 5–6

1. How does the way light travels (reflects, bends, shines) show God's intelligent design?
2. What does the Bible mean when it says "God is light"?
3. Why is orderliness important in how we work, learn, and treat others?
4. How can we shine like light in a world that often feels confusing or dark?
5. What would it look like to bring more light (truth, peace, or order) into a messy or chaotic situation?

F) Practical Activities

Foundations to Year 2
Option 1 – Shadow Play
• Use a flashlight and toys to create shadows. Move the light closer/further. Discuss: What changes?
Option 2 – Day/Night Sort
• Cut and paste images of daytime and nighttime activities. Sort them to match light and dark.

Years 3–4
Option 1 – Rainbow Refraction
• Shine light through a glass of water onto paper. Observe how light bends. Optional: use a prism.
Option 2 – Light Maze Challenge
• Use a mirror to direct a flashlight beam through a "maze" (walls made of blocks or boxes). Draw a diagram.

Years 5–6
Option 1 – Light Reflection Experiment
• Use protractors and mirrors to measure angles of incidence and reflection. Record your data.
Option 2 – Light in the Bible Poster
• Make a poster or digital presentation of verses about light (e.g. Genesis 1:3, John 8:12, Matthew 5:14–16). Explain how light and truth go together.

G) Optional Extension Research Activity

Task:
Research the speed of light. Compare how fast it travels through air, water, and glass. Use diagrams or a chart to explain your findings. Explain: Why is it important that light travels in straight lines and follows predictable rules?

H) Biblical Connection & Wrap-up

Genesis 1:3 – "God said, 'Let there be light,' and there was light."

Parent/Teacher Says:
"This verse shows us that God brought light into darkness – not just physical light, but the start of structure and meaning. Jesus also said He is the Light of the World. That means when we follow Him, we walk in truth, not confusion."

Discuss:
• Why do you think God made light first?
• What would it be like to live in a world with no light?
• What's one way you can shine God's light this week?

Pray together:
"Dear God, thank You for giving us light. Thank You for showing us how it brings warmth, truth, and life. Help us to live like You – bringing peace, clarity, and order to the world around us. Amen."

Australian Curriculum (v9) Content Descriptions Used in this Lesson

Light and Darkness

Focus: Light enables life and order; light travels in straight lines; shadows form when light is blocked; reflection and refraction explored through simple demonstrations; connection between physical light and biblical "light" as truth and clarity.

FOUNDATION – YEAR 2

Code	Full Description	Justification (What happens in the lesson that aligns directly)
AC9SFU02	**Describe how objects move and how factors including their size, shape or material influence their movement.**	**When students move objects into light beams (e.g., torch + object), they observe how shape affects shadow size and outline. The lesson includes physical movement and object size/shape comparison.**
AC9SFU03	**Recognise that objects can be composed of different materials and describe the observable properties of those materials.**	**Students observe how different materials interact with light (transparent, translucent, opaque).**
AC9SFH01	**Explore the ways people make and use observations and questions to learn about the natural world.**	**Students are encouraged to notice what happens when light is blocked, reflected, or passes through water/glass.**
AC9S2I03 / AC9S2I06	**Make and record observations; write and create texts to communicate ideas using everyday and scientific vocabulary.**	**Students record shadow shapes, draw diagrams of torch/object/light source, or narrate their observations.**

YEARS 3 – 4

Note: In AC9, light is not formally introduced as a physical science concept until Year 5.
So for this band, alignment focuses on observation, inquiry, representation, and explanation building, not content knowledge claims.

Code	Full Description	Justification
AC9S3H01	Examine how people use data to develop scientific explanations.	Students discuss how repeated patterns in shadow length, reflection, and light direction help scientists understand the behaviour of light.
AC9S3I04	Construct and use representations, including visual or physical models, to organise data and information and show simple relationships.	Students construct shadow diagrams, ray direction sketches, or "light source → object → shadow" models.
AC9TDE4P02	Generate and communicate design ideas and decisions using technical terms and graphical representation techniques.	Students label models or diagrams using terms like light source, surface, shadow edge, reflection.

YEARS 5 – 6

Code	Full Description	Justification
AC9S5U03	Identify sources of light, recognise that light travels in a straight path and describe how shadows are formed and light can be reflected and refracted.	This is the core scientific content of the lesson – demonstrated through: torch + object for shadow formation, mirrors for reflection, and pencil-in-water refraction demonstration.
AC9S5I04	Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and describe patterns, trends and relationships.	Upper students diagram ray direction, angle of reflection, and light path changes when passing through water.
AC9S5H02	Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.	The stewardship & biblical connection sections explain that understanding light helps humans measure time, plant seasons, navigate, and build technologies like lenses and lamps.
AC9TDE6P03	Select and use suitable materials, components, tools and equipment to safely make designed solutions.	Years 5–6 students may build shadow screens, mirror setups, or refraction demonstration models, requiring safe selection and handling of materials.

Bonus Optional Science Quiz:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

Creation & the Universe – Fun Quiz

Theme: Orderliness & God's Design
Grade Range: 1–6
Covers Lessons 1–4

You can:

- Read questions aloud and have students answer verbally
- Turn this into a quiz game with points
- Use it as a group/family review activity

Lesson 1: God's Amazing Creation

1. What was the world like before God started creating?
2. What did God make on Day One?
3. Name **two things** God created that helped bring order to the world.
4. Why did God rest on the seventh day?
5. What does it mean that God created everything "in order," not randomly?

Lesson 2: The Vast Universe

6. What does Psalm 147:4 say God does with the stars?
7. What is a galaxy? What's the name of our galaxy?
8. True or False: The universe is a big mess with no pattern or order.
9. Why is it amazing that God knows your name even though the universe is so big?
10. How does the structure of stars and planets show God's orderliness?

Lesson 3: The Laws of Motion in Space

11. What are **Newton's 3 Laws of Motion**? (Explain simply!)
12. How do rockets and planets show that God made the universe to move in order?
13. What happens if you push a ball in space?
14. True or False: Things move randomly in space with no rules.
15. What does Colossians 1:17 say Jesus does for all of creation?

Lesson 4: Light and Darkness

16. What did God say on Day One?
17. Why is light important for bringing order to the world?
18. What happens to light when it hits a mirror?
19. What does the Bible mean when it says, “God is light”?
20. How can we bring light and order to the world around us?

Bonus Round: Memory Match!

Match the Bible verses to the correct lesson:

A. Genesis 1:1	1. Lesson on Light and Darkness
B. Colossians 1:17	2. Lesson on Motion in Space
C. Psalm 147:4	3. Lesson on the Vast Universe
D. Genesis 1:3	4. Lesson on Amazing Creation

Answer Key:
A – 4, B – 2, C – 3, D – 1

Optional Scoring & Rewards

- 1 point per correct answer
- Bonus points for narration, memory verses, or thoughtful reflections
- Prize ideas: star stickers, a space snack, drawing time, or choosing tomorrow’s Bible verse

TOPIC 2	PLANETS & THE SOLAR SYSTEM

Bible Verse of the Week: Psalm 19:1 – "The heavens declare the glory of God."

Overview:

In this topic, children will learn about **the sun, the planets, the moon, and why Earth is uniquely designed for life.**

Lesson 5: The Sun – God's Light in Space

Theme: God Creates Light and Order
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:
• Understand the structure and function of the sun and its role in sustaining life on Earth.
• Recognise the sun's importance in marking time (day, night, seasons).
• Describe how shadows form and change throughout the day.
• Use a model to explore how Earth's rotation causes shadow movement.
• Reflect on the spiritual symbolism of light as representing God's order and truth.

A) Introduction

Parent/Teacher Says:
"Today we are going to learn about the sun – the amazing light God placed in the sky to give us warmth, energy, and order. We'll find out what the sun is made of, how it helps life on Earth, and how it reflects God's character as the One who brings light and structure."

Vocabulary to Pre-teach:

Instructions for Parent or Teacher: Introduce the vocabulary before the story using visual aids, diagrams, or simple gestures (e.g., spin a globe to show rotation).

- **Sun** – a star that gives light and heat to Earth
- **Core** – the centre of the sun, where energy is made
- **Photosphere** – the visible part of the sun
- **Corona** – the outer layer of the sun's atmosphere
- **Shadow** – the dark area made when light is blocked

- **Rotation** – the spinning of Earth, causing day and night

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B) Informational Story

Title: *The Sun That Lights Our Days*
As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So, while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

Long ago, before humans had electricity, clocks, or calendars, they looked up at the sky to understand time. They didn't have streetlights or smartphones – but they had something more powerful and reliable: the sun.

The sun rises every morning and sets every evening. Without needing batteries or switches, it gives light to the world. Its rising tells people when to wake up. Its setting tells them when to rest. For thousands of years, people have watched the sun to plant their crops, measure seasons, and plan their lives.

But where did the sun come from? Who made it, and why?

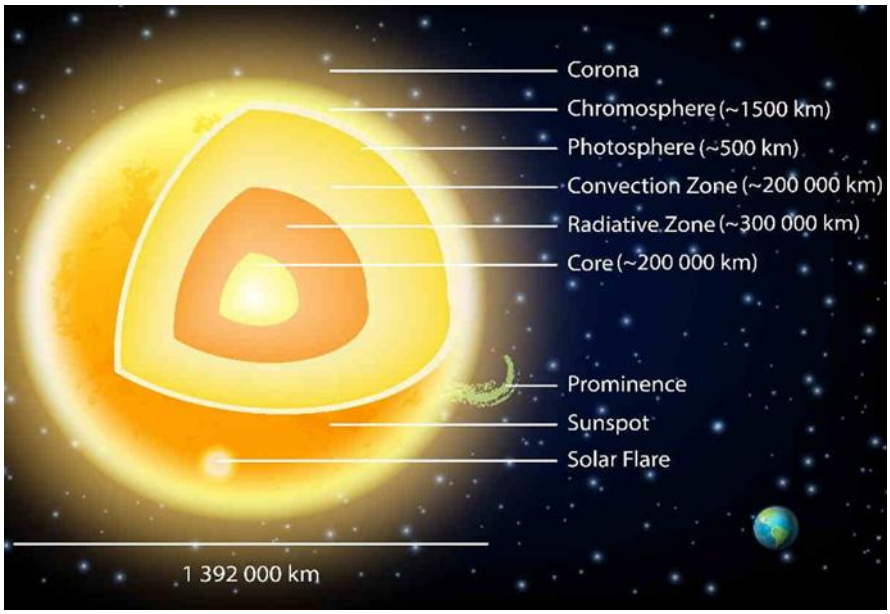
The Bible tells us that on the **fourth day of creation**, God made the sun. Genesis 1:16 says, *"God made the two great lights – the greater light to govern the day and the lesser light to govern the night. He also made the stars."*

That "greater light" is the sun. But God didn't just toss a fireball into space. He specifically designed it with order and purpose.

Let's look at some amazing facts about the sun.

The Sun's Structure

The sun might look like a glowing ball in the sky, but it's a massive, burning star made of gas – mostly hydrogen and helium. It's **so large** that **1 million Earths** could fit inside it! And even though it's about **150 million kilometres** away from Earth, its heat and light reach us every single day.



The sun has several layers – like a giant onion, but far more powerful.

- **Core**: This is the sun's centre. It's where energy is made through nuclear fusion. Atoms are squeezed together under enormous pressure to create light and heat.
- **Radiative Zone**: The energy from the core passes slowly through this thick layer.

- **Convective Zone**: In this outer part, hot gases rise and cooler gases fall, moving energy toward the surface.
- **Photosphere**: This is the part we can see from Earth. It looks like a glowing orange or yellow ball and is where sunlight comes from.
- **Chromosphere and Corona**: These are the outermost layers. During a solar eclipse, you might see the corona as a glowing white halo around the dark moon.

Isn't that incredible? God made the sun full of detail and structure – He didn't create it randomly. Every layer has a purpose, just like every part of a house keeps it strong and safe.

The Sun and Life on Earth

The sun is **the main source of energy** for life on Earth. Plants need sunlight for photosynthesis. That's how they make food. Animals eat the plants. People eat the plants and the animals. So, without sunlight, there would be no food.

But that's not all the sun does.

- It **keeps the Earth warm**. Without the sun, Earth would be a frozen planet.
- It **drives weather** patterns. The sun heats the oceans and air, causing wind and rain.
- It **gives light**, so we can see, work, travel, and enjoy life during the day.

The sun also **helps mark time**. The Earth spins on its axis as it orbits the sun. That's why we have **day and night**. One full spin = one day. When we're facing the sun, it's day. When we're turned away, it's night.

The Earth also takes about **365 days** to orbit the sun. That's how we get a **year**. And as the Earth tilts during this orbit, we get **seasons** – summer, autumn, winter, and spring.

Can you imagine trying to live without that pattern? What if day and night were unpredictable? What if you didn't know when to plant food, or when animals would migrate, or when winter would come? God gave us the sun not just to warm the Earth, but to bring rhythm and order to our days and years.

Shadows and Movement

Have you ever watched your shadow change during the day? In the morning, your shadow is long and stretches behind you. At noon, it's short and right under your feet. In the evening, it stretches out again, but in the opposite direction.

This happens because the Earth is **turning** – rotating on its axis – while the sun stays in place. It's a little like spinning around with a flashlight. The light stays steady, but your body moves, changing where the light falls and where the shadows go.

People long ago noticed this and even used shadows to tell time! They made sundials – special clocks that use shadows instead of numbers and hands. The shadow's position tells you what time it is.

Isn't that an amazing way to tell time? No batteries. No ticking. Just the light God made, shining on the Earth, creating shadows that follow a pattern.

God's Order in Creation

From the very beginning, the Bible shows us that God brings **light out of darkness** and **order out of chaos**.

Genesis 1:2–3 says, *"The earth was without form, and void; and darkness was on the face of the deep… Then God said, 'Let there be light,' and there was light."*

The very first thing God did in creation was bring light. That tells us something very important about His nature. God is not a God of confusion. He brings clarity, purpose, and peace.

That same pattern continues when He created the sun, moon, and stars. He made them for **signs and seasons, days and years** (Genesis 1:14). They help us live in harmony with the world around us.

Every morning, when the sun rises, it's like a message from God: *"I'm still here. My world still works. My order still stands."*

Even Jesus is called the **Light of the World** (John 8:12). Just like the sun lights up the day and shows us where to go, Jesus lights up our lives and shows us how to live. He helps us see the truth, know right from wrong, and walk in God's ways.

Living in the Light

God wants us to live in light – not just physical sunlight, but the kind of light that brings truth and goodness.

1 John 1:5 says, *"God is light; in Him there is no darkness at all."*

That means God never lies. He never changes. He doesn't hide things or trick people. He brings everything into the open and helps us walk in wisdom and love.

And just like the sun reflects God's power and order, we're called to reflect His light in how we live.

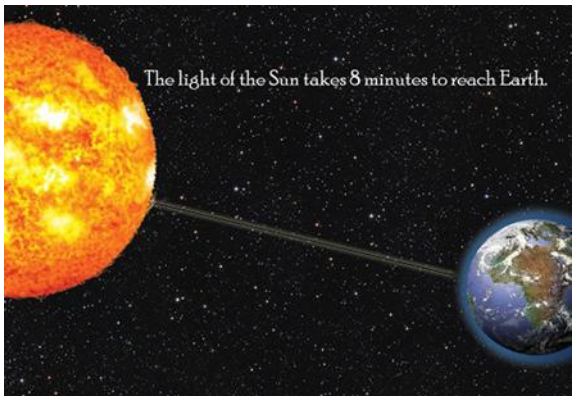
- When we **wake up on time**, we're following a pattern that God built into the world.
- When we **study and learn**, we're using our minds to understand His creation.
- When we **help others and bring peace**, we're shining light into dark places.

Even something simple like **organising your room** or **planning your day** can be a way to reflect God's orderliness. When you live with structure and purpose, you're copying your Creator!

Did You Know? (Sun Facts for Curious Learners)

- The sun is about **4.6 billion years old** (according to current scientific models). From a biblical worldview, its age may be understood differently – but we know it was created on **Day 4** of creation week.

- The sun's surface temperature is around **5,500°C**, and its core is over **15 million°C**!
- Light from the sun takes about **8 minutes** to reach Earth.
- Sunlight is actually a mix of **all colours** – that's why rainbows show the light broken into red, orange, yellow, green, blue, indigo, and violet.
- The sun's gravity holds the solar system together. Without it, the planets would drift into space.



Final Thoughts

When we look at the sun, we should be amazed – not just by its power and beauty, but by the wisdom of the One who made it. God didn't have to give us a world that runs like a clock. He could have made a world of confusion and darkness.

But He didn't.

He gave us a sun that rises and sets, a world that spins and orbits, and days that flow one after another in perfect rhythm.

And He gave us His Son – Jesus – so we can live in His spiritual light and never walk in darkness again.

So next time you feel the sun on your face, or see your shadow on the ground, or watch a sunrise, remember: **God made it on purpose – to bring light, life, and order into His world.**

And we're invited to live in that light, every day.

C) Narration

Parent/Teacher Says:
"Now it's your turn! Can you tell me what you remember from the story? What is the sun made of? Why did God make it? What does the sun do for us every day?"

Encourage the child to explain:

- The sun's structure
- Its role in providing heat, light, and time
- Why the sun is a sign of God's order

D) Teaching Skills

Skill Focus: Understanding light sources, shadow formation, and observable patterns related to the Earth's rotation.

Parent/Teacher Says:
"Let's learn how the sun creates shadows and helps us tell time. When light shines on something, it can't go through solid objects. That's why shadows form. As the Earth rotates, the angle of sunlight changes, and so do our shadows."

Instructions:

1. Demonstrate with a flashlight and object on a table.
2. Move the light source slowly to mimic the sun's movement across the sky.
3. Ask: "When is the shadow long? When is it short?"
4. Use this to explain how we know it's morning, noon, or afternoon.

E) Thinking Questions

Foundations to Year 2

1. What is the biggest light in the sky during the day?
2. What does the sun help plants and people do?
3. What happens when the sun rises and sets?
4. Who made the sun?
5. How does the sun help make things feel neat and in order?

Years 3–4

1. What are the three layers of the sun called?
2. How does the sun help bring order to our day?
3. What would Earth be like without the sun?
4. Why do you think God made the sun instead of just using lamps?
5. How can we be more orderly in our lives, like how God made the sun to work in a pattern?

Years 5–6

1. How does the sun's design show that God values precision and order?
2. What does the sun teach us about God's power and creativity?
3. Why is it important that the sun rises and sets in a regular pattern?
4. How can we reflect God's orderliness in our schedule, work, or environment?
5. How does light bring physical and spiritual order into our lives?

F) Practical Activities

Foundations to Year 2
Option 1 – Shadow Drawing
• Take an object outside in the morning. Trace its shadow on paper or pavement with chalk. Check again in the afternoon – how has the shadow moved?
Option 2 – Sun Art
• Use yellow/orange paper to make a sun collage. Cut and paste rays. Add a smiley face. Write "God made the sun to give us light!"

Years 3–4
Option 1 – Sun Model
• Build a simple sun model with labelled parts: core, photosphere, corona. Use tissue, card, string.
Option 2 – Shadow Time Chart
• Mark and measure the length of a stick's shadow three times in one day. Graph the changes.

Years 5–6
Option 1 – Poster: The Sun's Role in Earth's Systems
• Create a research poster showing the sun's role in photosynthesis, timekeeping, temperature, and life cycles.
Option 2 – Design a Daylight Tracker
• Create a "sunrise/sunset" tracker over one week. Compare daylight hours and discuss seasonal change.

G) Optional Extension Research Activity

Task:
Research how ancient civilisations used the sun to tell time or plan farming seasons. Examples: sundials in Egypt, solar temples of the Incas. Present your findings in a short written or visual presentation.

H) Biblical Connection & Wrap-up

Genesis 1:16 – "God made the two great lights – the greater light to govern the day and the lesser light to govern the night."

Parent/Teacher Says:
"This verse reminds us that God made the sun to 'govern the day.' That means He gave it a job. The sun brings structure to the world – day and night, warmth, life, and time."

Discuss:
• What are ways light helps bring order?
• How does God want us to live – confused and messy, or with purpose and peace?
• What's one way you can bring more order into your day this week?

Close in prayer:
"Thank You, God, for the sun. Thank You for its warmth, its light, and the order it brings to the world. Help us to shine like the sun – to live with purpose, to reflect Your truth, and to bring peace and light into every part of our day. Amen."

Australian Curriculum (v9) Content Descriptions Used in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S1U02	Recognise that light and sound are produced by objects and can be sensed.	Students observe that the sun is a natural light source and recognise that light allows us to see.
AC9S2U02	Identify sources of light and describe how light helps us to see.	The lesson identifies the sun as our main source of light and explains how sunlight makes vision possible.
AC9SFI01	Pose questions and make predictions based on experiences and observations.	Students are encouraged to ask questions and discuss observations about what happens when sunlight is blocked (shadows).
AC9TDE2P01	Generate and communicate design ideas through describing, drawing or modelling, including using digital tools.	Younger students draw or model the sun, Earth, and shadows when recording or communicating understanding of light and day/night.

YEARS 3–4

Code	Full Description	Justification
AC9S4U02	Identify sources of water and describe key processes in the water cycle, including evaporation and condensation.	The lesson explains how sunlight provides heat that drives evaporation and contributes to the water cycle.
AC9S4U03	Identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects.	The lesson refers to the sun's gravitational pull that keeps planets in orbit, introducing gravitational force.
AC9S3U03	identify sources of heat energy and examine how temperature changes when heat energy is transferred from one object to another	The Sun as a source of heat
AC9S4I01	Pose questions to explore observed patterns and relationships and make predictions based on observations.	Students examine patterns such as day/night cycles and seasonal changes, discussing why these patterns repeat.
AC9TDE4P02	Generate and communicate design ideas and decisions using appropriate attributions, technical terms and graphical representation techniques, including using digital tools.	Students draw or label diagrams of the sun and Earth to show day/night and seasonal patterns, communicating scientific ideas visually.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	If students create a shadow-tracking chart or simple sundial (as suggested in optional activities), they are selecting and using simple materials purposefully and safely.

YEARS 5–6

Code	Full Description	Justification
AC9S5U03	Identify sources of light, recognise that light travels in a straight path and describe how shadows are formed and how light can be reflected and refracted.	The lesson explicitly explains shadow formation and encourages observation of how sunlight travels in straight lines.
AC9S6U02	Describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation and revolution relate to day/night and seasons.	The lesson teaches that Earth rotates to create day/night and revolves around the sun to form seasonal cycles.
AC9S5I04	Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and describe patterns and relationships.	Students may chart changing shadow lengths or draw Earth–sun diagrams, demonstrating pattern recognition.
AC9TDE6P02	Generate, iterate and communicate design ideas, decisions and processes using technical terms and graphical representation techniques, including using digital tools.	Older students may refine diagrams or models of Earth–sun relationships using labelled, ordered visual representations.
AC9TDE6P03	Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.	If students construct a simple physical model (e.g., Earth–sun–moon system), they must choose and handle materials safely and purposefully.

Lesson 6: The Planets in the Solar System

Theme: God Designed the Planets with Purpose and Order
Character Trait: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:

- Identify and describe the key features of planets in the solar system.
- Understand the concept of orbits and how they demonstrate order.
- Recognise how God's design of space reflects His orderly nature.
- Construct a model to represent planetary arrangement and scale.

Curriculum Content Descriptions:

- **Science – AC9S3U01**: compare characteristics of living and non-living things and examine the characteristics of Earth, other planets and stars.
- **Science – AC9S4U02**: investigate how Earth's surface changes over time and identify the effects of human and natural processes.
- **Design & Technology – AC9TDE2K01**: explore how familiar … environments are designed … for specific purposes.
- **Design & Technology – AC9TDE4K01**: investigate how forces and the properties of materials affect the behaviour of designed solutions.

A) Introduction

Vocabulary to Introduce:

- **Solar System** – The sun and all the planets that orbit it.
- **Orbit** – The path a planet follows around the sun.
- **Gravity** – An invisible force that pulls objects together.
- **Gas Giant** – A large planet made mostly of gases (like Jupiter and Saturn).
- **Terrestrial Planet** – A rocky planet (like Earth and Mars).

Parent/Tutor Says:
"Today we're going to take a trip through the solar system – not in a spaceship, but through a story that helps us understand how God created the planets and placed them in perfect order. Let's listen and think about how this shows us God's wisdom and design."

B) Informational Story: "God's Planet Parade"

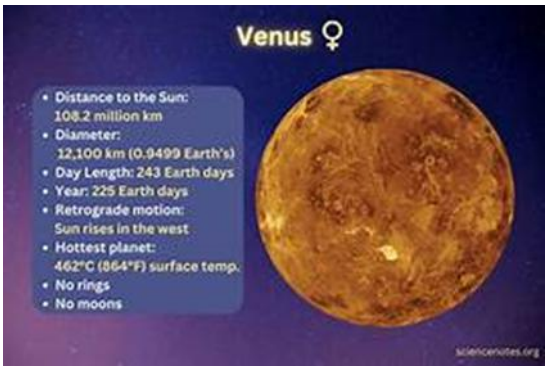
As we read this story, I need you to listen very carefully, because at the end of the story, I will ask you to tell me everything you remember about the story. So, while we are reading, try to visualise each scene – if it helps you to concentrate, you might like to close your eyes and try to see what is happening in your mind. Here we go….

Imagine you're climbing into a rocket ship, buckling up, and preparing to leave Earth. The countdown begins: "3… 2… 1… LIFTOFF!" Your seat rumbles. Outside the window, clouds swirl and the blue sky

turns dark as you blast into space. Earth is getting smaller behind you, and ahead is something wonderful – the solar system, a parade of planets, each one different, and each one placed by God on purpose.

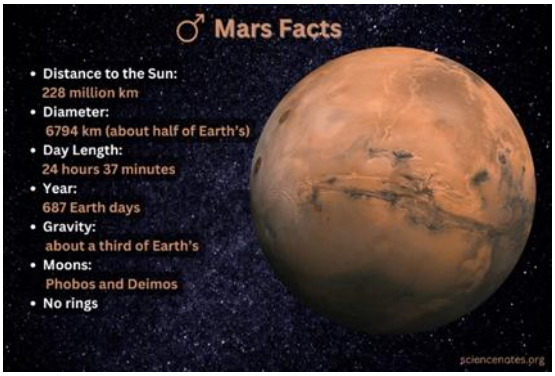
As you float weightlessly in your ship, you look out and see the sun behind you. It's huge and glowing, a fiery ball of light and heat. Everything in our solar system orbits the sun. That means every planet travels in a path around it, kind of like how horses move in a circle on a merry-go-round. But this isn't a game – this is precision, design, and purpose. The Bible says in Job 26:7, "He spreads out the northern skies over empty space; He suspends the earth over nothing." Isn't that amazing? Earth floats in space, held up by no strings at all – just God's design and laws like gravity.

As you begin your journey through the solar system, the first planet you pass is **Mercury**. It's small, rocky, and zooms around the sun faster than any other planet. Its surface looks a bit like the moon's – covered in craters. It has no air, and it gets really hot during the day but freezing at night. Why? Because Mercury doesn't have an atmosphere to trap heat. It reminds us that even though it's small, God gave it a place and a job.

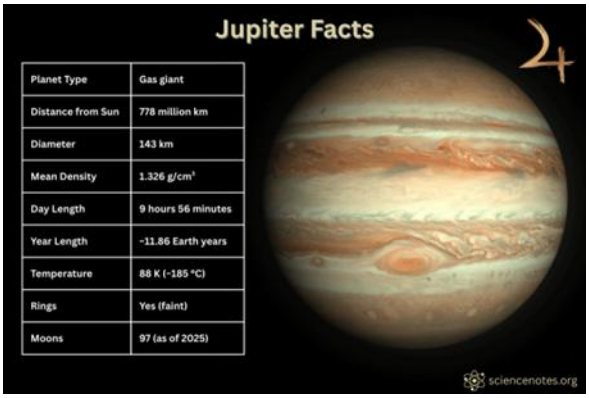


Next comes **Venus**, the second planet from the sun. It's about the same size as Earth but covered in thick clouds of gas. Those clouds trap the sun's heat, making Venus the hottest planet. It's like a giant oven! Its surface could melt metal. Some call it Earth's "twin" in size, but it's not a friendly place to visit. God made it that way to show variety – and to protect Earth's specialness.

Now you arrive at your home planet – **Earth**. It's the only planet with just the right mix of things needed for life: air to breathe, water to drink, land to live on, and perfect temperatures. Earth is exactly the right distance from the sun. If it were closer, we'd burn. If it were farther, we'd freeze. Earth is not too big or too small. God made it "just right," like a well-planned home. Isaiah 45:18 says, "God formed the earth… He did not create it to be empty, but formed it to be inhabited." What a wonderful truth!

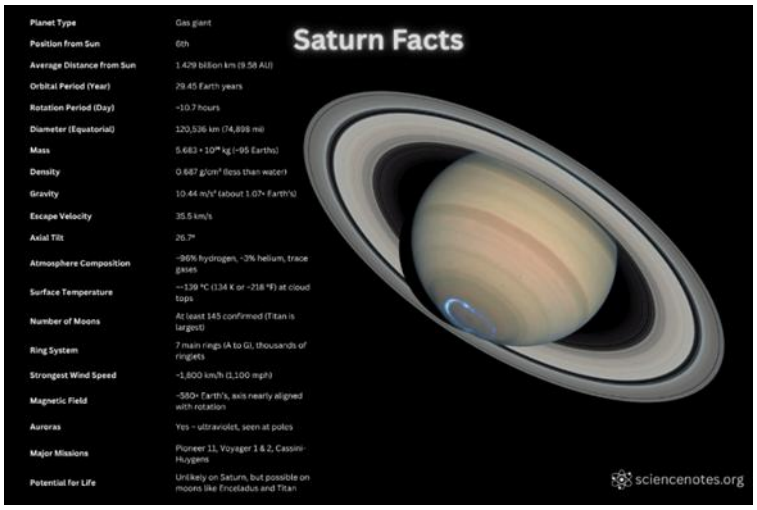


After Earth, you zoom past **Mars**, the red planet. It's covered in red dust, giving it its famous colour. Mars has the tallest volcano in the solar system and a huge canyon. Long ago, it may have had water, but now it's dry and cold. Some scientists dream about people living there one day. But for now, Mars reminds us of God's creativity and variety.

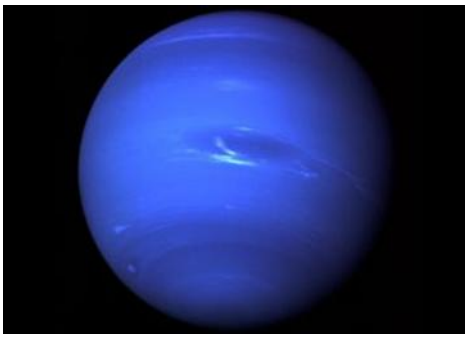


Now your rocket flies past something enormous – **Jupiter**. It's so big that more than 1,300 Earths could fit inside it! Jupiter isn't solid like Earth – it's made mostly of gas. Swirling across its surface is the Great Red Spot, a giant storm that's been raging for hundreds of years. Jupiter also has at least 79 moons, and some of them are almost as big as planets. Isn't it fascinating how God made one planet so huge and stormy, while Earth is calm and just right for life?

Then comes **Saturn**, with its beautiful rings. These rings aren't solid – they're made of ice and rock chunks, floating in perfect paths. Saturn is another gas giant, and it spins so fast that it bulges at the sides. Scientists still don't fully understand why the rings are so perfectly shaped, but we know: God made them with care. Psalm 19:1 says, "The heavens declare the glory of God." When we look at Saturn's rings, we're seeing God's beauty and power.



Next is **Uranus**, a pale blue-green planet that's very cold and spins on its side! Unlike the other planets that spin upright, Uranus is tipped over almost 98 degrees. Some scientists wonder if it was hit by something long ago – but no one really knows. What we do know is that God made it to spin that way, showing that His design can be surprising but still orderly.



Last in line is **Neptune**, the most distant planet in our solar system. It's deep blue and full of storms. Winds on Neptune are the fastest in the solar system – up to 2,000 kilometres per hour! That's faster than a speeding jet. Even though it's far from the sun, Neptune still orbits like the rest. It reminds us that even the farthest places in space are known and controlled by God.

You might be wondering: What happened to **Pluto**? It used to be called the ninth planet, but scientists now call it a "dwarf planet" because it's much smaller than the others and doesn't meet all the rules for being a full planet. But even Pluto, tiny and icy, follows a path set by God. Nothing in the universe is forgotten.

As your rocket turns around and heads back toward Earth, you look again at the whole solar system. Every planet orbits at the right speed. They don't crash into each other. They stay in

their places. That's because God gave them rules – like **gravity** (the force that pulls things together) and **inertia** (which keeps them moving in a line unless something changes it). The whole solar system moves like a dance – slow, beautiful, and full of purpose.

Imagine what would happen if the planets stopped obeying those rules! Earth might crash into the sun or freeze far away. Life would end. But that doesn't happen – because God is a God of order.

Just like the planets, we were made to follow God's ways – not to spin wildly or crash into confusion. God gave us routines: day and night, weeks and seasons, work and rest. And He wants our lives to reflect that same kind of peace and structure.

When we tidy our rooms, make a schedule, treat others kindly, and obey rules, we're showing that we belong to a God who made the universe in perfect order. We're not accidents, and neither are the planets. Just as people purposefully design products and services, and then make things to use – so too God made everything with purpose – and you were also made for a purpose.

C) Narration

Parent/Tutor Says:
"Now it's your turn! Can you tell me what you remember about the story? Which planets did we visit? What makes each one special? How do they show God's order?"

Encourage children to use their own words.

- Younger students might simply name a few planets and say "God made them."
- Middle students can describe features of each.
- Older students should include the concepts of orbits, gravity, and precision.

D) Thinking Questions

i) Foundation–Year 2 (Ages 5–7)

1. What is the name of the planet we live on?
2. Can you name two other planets in the solar system?
3. Who made the planets?
4. Do the planets bump into each other or move in order?
5. How can you be more orderly at home or in your schoolwork?

ii) Years 3–4 (Ages 8–10)

1. What does it mean that God "suspended the earth over nothing"?
2. Why is Earth the only planet with life?
3. Why do you think the planets don't crash into each other?
4. What does the solar system teach us about God's wisdom and power?
5. What's one area in your life that could use more order? How can you fix it?

iii) Years 5–6 (Ages 11–12)

1. What are orbits, and why are they important in the solar system?
2. How does the structure of the solar system reflect God's character?
3. What's the danger of living without order or structure?
4. What would you say to someone who believes the universe happened by accident?
5. What's one practical way you can reflect God's orderliness this week – in your room, your time, or your relationships?

E) Learning Activities

Foundation–Year 2:

1. **Planet Colouring Sheet:** Colour planets and label their names. Use glitter or stickers to show how God made each one beautiful.
2. **Orbit Walk Game:** Place printed planet cards in a circle and walk around them like orbits, saying each planet's name.

Years 3–4:

1. **Planet Fact Flipbook:** Create a mini booklet with one page per planet. Include a fun fact and a drawing.
2. **Gravity Demonstration:** Drop different objects and see how gravity pulls them down at the same speed. Discuss how gravity holds planets in orbit.

Years 5–6:

1. **Solar System Model:** Use string, balls, and measurement tools to create a more accurate-to-scale solar system.
2. **Planetary Debate:** Prepare a short speech arguing which planet (besides Earth) is the most interesting. Share your reasons with your family or group.

For All Ages (Shared Activity):
Create a Model Solar System (Craft/Construction Task)
Materials Needed:
• Clay or foam balls (for planets)
• String, yarn, or pipe cleaners (optional)
• Paint or markers
• A printout or space to arrange the planets in order

Instructions:
1. Make a sun out of yellow/orange clay or paper.
2. Create each planet using different sizes and colours.
3. Arrange them in order: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.
4. (Optional) Hang them using string to show orbits, or place them on a table with labels.
5. Say aloud what makes each planet unique and how God placed it on purpose.

Parent/Tutor Says: "God made the planets like a perfect parade. They move in order, not chaos. Let's follow His example and bring order and beauty into what we do, too!"

F) Optional Extension Activity

Science Journal Prompt:
Write a short paragraph or draw a comic showing the planets obeying God's rules for orbits – like a parade moving in perfect order. Include a Bible verse.

G) Biblical Connection & Wrap-Up

Job 26:7 – "He spreads out the northern skies over empty space; He suspends the earth over nothing."

Parent/Tutor Says:
"This verse reminds us that the universe doesn't need strings to hold it together. God keeps it going by His power. That shows how wise and powerful He is – but also how much He loves order. He wants our lives to be peaceful, not messy. When we follow His ways – doing things with purpose, planning well, and being careful – we reflect His order."

Discuss:

- What does it mean to "suspend the earth over nothing"?
- How does that make you trust God more?
- What can you do today to bring more order into your day – just like God did in space?

Australian Curriculum (v9) Content Descriptions Used in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification (What in the Lesson Matches This)
AC9S2U01	Recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky.	The lesson introduces the planets by name, teaches that Earth is one of the planets, and identifies each planet's place in the solar system.
AC9S1I01 / AC9S2I01	Pose questions to explore observed simple patterns and relationships and make predictions based on experiences.	During narration and planet discussions, children are encouraged to observe patterns (e.g., planets move in order, do not crash) and ask simple questions.
AC9TDE2P01	Generate and communicate design ideas through describing, drawing or modelling.	The shared/model-making task (simple solar system model / orbit walk) requires children to represent and communicate the arrangement of planets.

YEARS 3–4

Code	Full Description	Justification
AC9S3U02	Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources.	When comparing rocky vs. gas planets, students observe planet composition differences (rocky inner planets vs. gas giants). This is aligned conceptually (not assessed formally).
AC9S3I04	Construct and use representations, including tables, simple column graphs, and visual or physical models, to organise data and identify patterns.	The planet flipbook, orbit diagrams, and identifying planet differences all involve constructing visual representations.
AC9TDE4P02	Generate and communicate design ideas and decisions using graphical representation techniques.	Students create labelled drawings and flipbook pages describing planet features in a systematic visual way.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	The gravity demonstration and planet flipbook/model tasks require choosing materials and constructing with safe handling.

YEARS 5–6

Code	Full Description	Justification
AC9S6U02	**Describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation and revolution relate to cyclic observable phenomena.**	**The lesson explicitly teaches orbits, movement around the sun, and the orderly structure of the solar system.**
AC9S5I04	**Construct and use appropriate representations, including visual or physical models, to organise and describe patterns and relationships.**	**Students are asked to design scaled models of the solar system and compare relative sizes and distances where possible.**
AC9S5H02	**Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.**	**The lesson connects solar system order to navigation, scheduling, calendars, and human decision-making informed by astronomy.**
AC9TDE6P02	**Generate, iterate and communicate design ideas and decisions using technical terms and graphical representation techniques.**	**In constructing more precise solar system models, students must communicate scale and labelling using correct terminology (orbit, rotation, axis, gas giant, etc.).**
AC9TDE6P03	**Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.**	**Students may create a more advanced three-dimensional solar system model requiring measuring, spacing, and safe material handling.**

Lesson 7: The Moon and Its Phases

Theme: God's Order in Time and Light
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will be able to:
• Identify and describe the different phases of the moon and explain why they occur.
• Understand that the moon reflects sunlight and follows an orbit around Earth.
• Recognise that lunar phases follow a regular pattern that helps measure time.
• Reflect on God's creation of the moon as a source of light, rhythm, and order in the night sky.
• Construct models or visual representations of moon phases using materials.
• Appreciate and apply the concept of orderliness in natural systems and personal habits.

A) Introduction
Parent/Tutor Says:
"Today we are going to learn about the moon – the beautiful light we see in the night sky. But did you know the moon doesn't shine on its own? And did you know it changes shape across the month? These changes happen in an orderly pattern, and they help us understand how God designed the world to move in rhythms and time."

Read through and discuss these words before reading the story aloud.

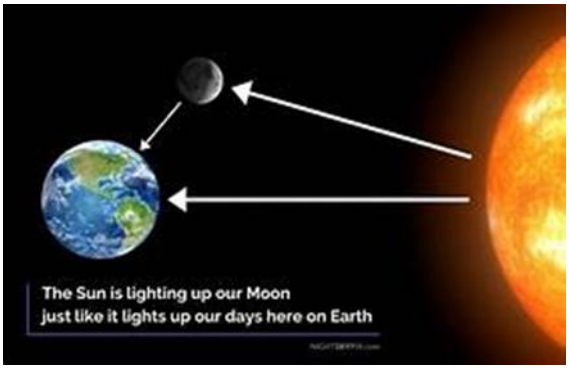
Introduce and define the following key vocabulary before reading the story:
• **Orbit** – the path one object takes around another in space
• **Reflect** – to bounce light off a surface
• **Phases of the moon** – the different shapes of the moon we see from Earth as it moves around us
• **Waxing** – when the moon looks like it's getting bigger
• **Waning** – when the moon looks like it's getting smaller
• **New Moon** – when the moon is not visible from Earth
• **Full Moon** – when the entire moon is lit and visible

- **Gibbous Moon** - The adjective ***gibbous*** has its origins in the Latin noun *gibbus*, meaning "hump." It was adopted into Middle English to describe rounded, convex things. While it has been used to describe the rounded body parts of humans and animals (such as the back of a camel) and to describe the shape of certain flowers (such as snapdragons), the term is most often used to describe the moon: a gibbous moon is one that is between half full and full.

B) Informational Story
Parent/Tutor Says:
"Now I'm going to read you a story filled with knowledge about the moon. Please listen very carefully and imagine the scenes in your mind. When I finish reading, I'll ask you to tell me everything you remember."

Story: "The Moon That Changes but Stays the Same"

Every night, the moon hangs high in the sky, a glowing companion to Earth. Whether it's bright and full or just a sliver of light, it captures the attention of people all around the world. For thousands of years, the moon has lit up the night, guided travellers, helped farmers, and marked the passing of time. It has been a steady part of life on Earth, silently reminding us that God has placed all things in order – even the sky.



But how does the moon shine? Is it like the sun, making its own light? No, the moon doesn't shine by itself. It reflects the light of the sun, much like a mirror reflects a flashlight beam in the dark. The moon's rocky surface catches sunlight and bounces it back to us, giving us moonlight.

As the moon travels around the Earth, the amount of light we see from it changes in a pattern called phases. This movement takes about 29 and a half days to complete. Each phase has a name, and the pattern never changes – it always goes in the same order, again and again.

Let's travel through the phases of the moon, one by one.

The first phase is called the **New Moon**. During this phase, the moon is between the Earth and the sun. The sun shines on the side of the moon that faces away from us, so from Earth, we see no light at all. It looks like the moon has disappeared, but it's still there – just hidden in shadow.

Next comes the **Waxing Crescent Moon**. "Waxing" means growing. A small curve of light begins to appear on the right side of the moon. It's just a sliver, but each night, that crescent grows bigger.

After that, we reach the **First Quarter Moon**. This is when half of the moon is visible. We call it a "quarter" moon because it's one quarter of the way through its orbit around Earth.

The moon keeps growing until it becomes the **Waxing Gibbous Moon**. "Gibbous" means more than half but not full. The moon looks like a rounded shape, with just a bit still in shadow.

Finally, we reach the **Full Moon**. The whole face of the moon is shining brightly! The Earth is between the sun and the moon now, so sunlight covers the whole side of the moon that we can see.

But the story isn't over. Now the light begins to shrink. We call this **Waning**, which means getting smaller.

First comes the **Waning Gibbous Moon** – still bright, but starting to lose some light on the right side.

Then the **Last Quarter Moon** appears. Again, we see half the moon, but this time it's the left side that's lit.

After that, the moon becomes a **Waning Crescent Moon**, a tiny sliver of light that gets smaller each night.

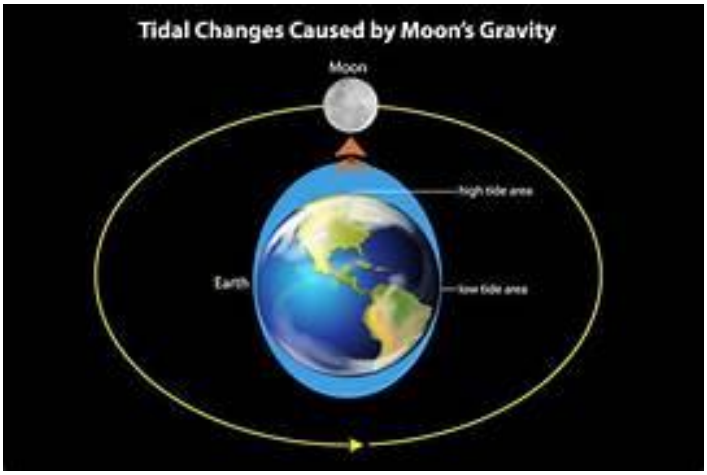
And then we're back to the **New Moon** again! The cycle starts over.

This whole pattern takes about a month – specifically, 29.5 days. This rhythm is so reliable that many ancient cultures used it to build their calendars. Even today, some people still use the moon to mark the months and special celebrations.

So why does the moon follow this pattern so perfectly? It's because of God's amazing design. He made the moon to orbit the Earth in a regular path, held in place by gravity. Gravity is the invisible force that pulls things toward each other – like the moon toward the Earth, and the Earth toward the sun.

God didn't create a random universe. He created one filled with order, rhythm, and purpose.

The moon's orderly path does more than just change its shape in the sky – it also helps to move Earth's oceans. That's right – the moon causes tides!



Tides are the gentle rising and falling of ocean water. When the moon's gravity pulls on Earth's oceans, it causes water levels to rise in some places and fall in others. This cycle of rising and falling happens every day, and it helps keep the oceans healthy. Fish, seaweed, birds, and many other animals depend on the tides to survive.

This, too, is part of God's order. The moon doesn't just make the night beautiful; it plays a big part in how life works on Earth. Isn't that amazing?

Farmers have noticed that some plants grow differently depending on the phase of the moon. While not every idea about moon gardening is scientific, we know that the moon's light and gravitational pull are connected to natural rhythms. Some animals – like turtles – use the moonlight to know when to lay their eggs. Birds migrate using the moon. Even coral reefs release eggs at night in sync with the full moon!

These rhythms are not random. They are part of God's carefully timed world, showing us that He cares deeply about both big and little details.

And what about people? Long ago, before we had electricity, people used the moon to plan when to walk at night or plant their crops. Festivals and holidays often followed the lunar calendar. Even now, people feel a sense of wonder when they see a full moon rise over the horizon.

Let's not forget the spiritual lesson of the moon. The Bible says in Psalm 136:9, "The moon and stars to govern the night, His love endures forever." That means the moon was given a task – to bring light and order to the darkness.

We can learn from the moon. Just as the moon reflects the light of the sun, we are meant to reflect the light of God. When we walk closely with Him, we don't shine from our own strength – but His love shines through us. And just like the moon follows its path faithfully, we are called to live with order and purpose.

Even when life feels dark or confusing, the moon reminds us that God's order still holds the universe together. The moon always returns to its phase. The tides always rise and fall. And God is always faithful.

So, the next time you see the moon in the sky, stop and look. Which phase is it in? What direction is it waxing or waning? What part is lit and what part is dark?

Then remember: God is a God of order. And just like the moon, you have a purpose in His great design.

One evening, a family gathered in their backyard for a "moon night." They brought a flashlight, a ball, and a notebook. The dad held the flashlight (like the sun), and the children took turns holding the ball (like the moon) and moving in a circle around him, showing how the moon reflects light differently depending on its position. They laughed when the "New Moon" meant they couldn't see any light on the ball – and cheered when they saw the full-face light up like a Full Moon.

Mum pointed to the sky. "Look, tonight it's a waxing gibbous! That means it will be full in a few nights. Let's write that in our moon journal."

They marked the phase and drew a little picture in their notebooks. Over the next month, they kept checking the moon every night, sketching its shape and writing down the date. As they did this, they started noticing patterns. The Full Moon always came after a Waxing Gibbous. The Last Quarter always came about a week after the Full Moon.

Each evening ended with a quiet moment. The family would sit on the grass and read a Bible verse – sometimes Psalm 136:9, sometimes Genesis 1:16 ("He made the moon to govern the night"). They would pray, thanking God for the rhythms of life – the days, the seasons, the patterns of the moon.

One night, the youngest child asked, "If the moon always does its job, can I always do my job?"

Dad smiled. "Yes. God made the moon with a job – and He gave you one too. To live with order, love, and trust in Him."

From then on, the moon was more than just a light in the sky. It became a reminder to live in the light of God's order and love.

So, whether you're looking through a telescope, drawing the phases in your notebook, or simply gazing up at night, remember this: God made the moon to reflect the sun's light and govern the night. And you are made to reflect His light and bring His order and love to your part of the world.

C) Narration
Parent/Tutor Says:
"Now it's your turn! I'd love to hear what you remember from the story. Can you tell me what the moon does each month? What are the different phases? How does the moon reflect light? What does this teach us about God?"

Instructions:

- Ask the student to describe the sequence of moon phases aloud.
- Younger students can name and point to pictures of the phases.
- Older students can explain the science behind each phase using drawings or diagrams.
- Optionally, draw the phases together on a whiteboard or notebook.

D) Teaching Skills
Parent/Tutor Says:
"Now let's learn some science skills so we can explore the moon phases and how to model them."

Skill 1: Modelling Phases with a Ball and Light

- Hold a small white ball or sphere (moon).
- Shine a flashlight (sun) on it.
- Move the ball around your head (Earth) to simulate the moon's orbit.
- Observe how only parts of the ball are lit at different angles.

Skill 2: Drawing and Sequencing

- Teach the student how to draw each moon phase and place them in order around a circle to represent the lunar cycle.
- Show how the pattern is symmetrical (it grows, then shrinks).

Skill 3: Observation Recording

- Show how to record observations of the moon (sketch + label + date).
- Create a simple moon journal.

E) Thinking Questions
Ask these reflective and comprehension questions after the teaching section.

i) Foundations to Year 2

1. What shape is the moon tonight?
2. Who made the moon and told it what to do?
3. Can you remember one way the moon helps the Earth?
4. How does the moon follow God's plan?
5. What's one way you can be orderly like the moon?

ii) Years 3 & 4

1. What causes the moon to have different shapes?
2. What is the difference between waxing and waning?
3. How is gravity important in space?
4. How do the moon's phases help people plan time and events?
5. What does it mean that the moon reflects light? How can you reflect God's love?

iii) Years 5 & 6

1. Why does the moon follow a predictable path?
2. How does the moon influence life on Earth through tides or patterns?
3. What would happen if the moon didn't follow an orderly cycle?
4. How does the concept of 'reflection' help you understand your purpose as a Christian?
5. How could you build more structure into your daily habits to reflect God's order?

F) Practical Activities
Offer two activity choices per age group. Encourage children to choose one or both.

Foundations to Year 2

1. **Oreo Moon Phases**
    - Use cream-filled biscuits to model New, Crescent, Half, and Full Moon.
    - Arrange them on a plate in correct order.
2. **Moon Phases Wheel**
    - Create a rotating paper wheel that shows the phases of the moon.
    - Colour and label each phase.

Years 3 & 4

1. **Moon Journal**
    - Observe and draw the moon each night for 7 days. Label its phase.
2. **Moon Orbit Model**
    - Use a tennis ball (moon), torch (sun), and globe (Earth) to act out the lunar cycle.

Years 5 & 6

1. **Investigating Tides**
    - Research and record how the moon affects tides. Use online tide charts or local maps.
    - Present your findings with drawings or a written paragraph.
2. **Design a Lunar Calendar**
    - Create a 29-day calendar showing the phases.
    - Add space for recording moonrise times and visible changes.

G) Optional Extension Research Activity
Years 3–6
Research how ancient cultures used the moon for timekeeping.

- How did Indigenous Australians use the moon to track time and seasons?
- What festivals or planting events are based on the moon in different cultures?
- Create a short report or poster with your findings.

H) Biblical Connection & Wrap-up
Parent/Tutor Says:
"Let’s read this verse together."
Psalm 136:9 – 'The moon and stars to govern the night, His love endures forever.'

"God made the moon for a purpose. He gave it a job to do – just like He gives each of us a purpose. The moon helps bring order to the night and even helps guide the oceans. It reflects light. It follows a pattern. And even when we can’t see it, it’s still obeying God’s plan.

That’s how we should live, too – with purpose, peace, and obedience. We don’t shine on our own, but when we stay close to Jesus, His light shines through us. Let’s try to be orderly in our homes, our habits, and our hearts – just like the moon follows its pattern in the sky.”

Close in prayer:
"Dear Lord, thank You for the moon. Thank You for making everything with order and beauty. Help us to live with Your light shining through us. Teach us to follow Your ways, just like the moon follows its path. In Jesus' name, Amen."

Australian Curriculum (v9) Content Descriptions Used in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification (What actually happened in the lesson)
AC9S2U01	Recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky.	Students learn that the Moon moves around Earth in a repeating cycle and that its appearance changes in a predictable pattern.
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.	Students observe how the Moon changes shape over days and understand that this is part of a repeating natural pattern.
AC9S2I03	Make and record observations, including informal measurements, using digital tools as appropriate.	Students observe Moon phases using a physical model (torch + ball) and record what they see.
AC9TDE2P01	Generate and communicate design ideas through describing, drawing or modelling, including using digital tools.	Students draw or build simple Moon phase models to show their understanding.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3H01	Examine how people use data to develop scientific explanations.	The lesson explains how observing repeated changes in the Moon helped early people understand the Moon cycle.
AC9S3I04	Construct and use representations, including visual or physical models, to organise data and show simple relationships and patterns.	Students create **Moon phase charts** or **orbit demonstrations**, making the relationship between Moon position and visible phase clear.
AC9TDE4P02	Generate and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques.	Students use labelled diagrams and correctly sequence phases such as crescent, half, gibbous, full.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	Students create a **Moon orbit model** using simple craft materials, handled safely and purposefully.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U02	Describe the movement of Earth and other planets relative to the sun and model how Earth's rotation and revolution relate to cyclic observable phenomena.	Students model the Moon orbiting Earth and link this motion to the repeating cycle of Moon phases.

Code	Full Description	Justification
AC9S5U03	Identify sources of light, recognise that light travels in a straight path, and describe how shadows are formed and how light can be reflected and refracted.	The lesson explicitly teaches that the **Moon does not produce its own light** but **reflects sunlight**, and phases result from the angle of light and shadow.
AC9S5I04	Construct and use appropriate representations, including visual or physical models, to describe patterns and relationships.	Students create more advanced models or diagrams showing **waxing** (increasing light) and **waning** (decreasing light).
AC9TDE6P02	Generate, iterate and communicate design ideas and decisions using technical terms and graphical representation techniques.	Older students create **accurately labelled** Moon cycle diagrams using correct scientific terminology.
AC9TDE6P03	Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.	More detailed Moon–Earth–Sun models require deliberate selection of materials and safe construction techniques.

Lesson 8: The Earth – Our Special Home

Theme: God Created Earth with Perfect Order
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:

- Understand and describe how Earth's systems support life through patterns and interdependence.
- Recognise how Earth's position and movement in space bring day, night, and seasons.
- Identify ways the Earth is uniquely designed for life, compared with other planets.
- Describe how natural and built environments are ordered by design and purpose.
- Reflect on God's orderly creation and our responsibility to care for it.

A) Introduction – Vocabulary and Opening

Parent/Tutor Says:
"Today we're going to learn about Earth – our home – and how it is wonderfully made with order and balance. God created Earth with everything we need: air, water, sunlight, seasons, and more. Let's look at some words that will help us understand this better."

Key Vocabulary (define for students):

- **Atmosphere** – the layer of gases surrounding Earth that we breathe.
- **Orbit** – the path Earth travels around the Sun.
- **Rotation** – the spinning of the Earth, giving us day and night.
- **Gravity** – the force that holds everything on Earth and in orbit.
- **Biosphere** – all the living things on Earth and where they live.
- **Sustainable** – something that can keep going without running out or being harmed.
- **Interdependence** – when different systems or creatures rely on each other to survive.

B) Informational Story

Parent/Tutor Says:
"Now I'm going to read you a long and wonderful story filled with things to learn. Please listen very carefully and think about the story as I'm reading it, because I'm only going to read it once. After the story, I want you to tell me everything you can remember. Ready?"."

Story: *"Earth: The Planet Made for Life"*

Earth: The Planet Made for Life

Imagine walking through a lush green forest at sunrise. The golden light filters through tall trees, casting long shadows on the mossy ground. You hear birds singing in the treetops, insects buzzing gently, and the

rustle of leaves under the feet of small animals. As you walk, you notice a stream flowing over smooth stones, bringing clean, fresh water to the plants and animals that live nearby. The air smells of pine and earth. You take a deep breath. Isn't it wonderful that this planet – Earth – is just right for life?

Earth is not just a ball of rock floating in space. It is a complex, living system made with perfect design. When God made the world, He didn't do it randomly. Isaiah 45:18 says, "For this is what the Lord says – He who created the heavens, He is God; He who fashioned and made the Earth, He founded it; He did not create it to be empty, but formed it to be inhabited." That means God made Earth on purpose – for people and living things to live in.

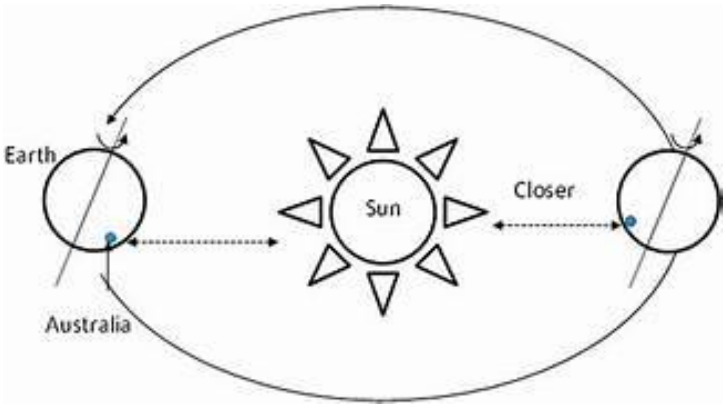
Let's explore how God's design makes Earth different from every other planet we know.

First, there's the **atmosphere** – the invisible blanket of gases around our planet. It gives us air to breathe – oxygen for people and animals, carbon dioxide for plants. It also keeps us warm by trapping just enough of the sun's heat. If Earth didn't have an atmosphere, the days would be too hot and the nights too cold for anything to survive. Some other planets have poisonous gases or no atmosphere at all. Earth's atmosphere is perfectly balanced.

Next, let's look at the **distance from the sun**. If Earth were even a little closer to the sun, it would be too hot, like Venus, and all water would be turned into steam. If it were farther away, like Mars, it would be too cold, and any water would be turned into ice. But Earth is in what scientists call the "Goldilocks zone" – not too hot, not too cold, but just right. This perfect position means we get liquid water on Earth, which is essential for life.

Water is everywhere on our planet. Oceans cover more than 70% of Earth's surface. Water evaporates, forms clouds, falls as rain or snow, and fills rivers and lakes. This is called the **water cycle**, and it's another system God designed with perfect order. It keeps everything alive – from the tiniest plants to the largest whales.

Then there's the **tilt of Earth's axis**. Earth is tilted at just the right angle – about 23.5 degrees. This tilt is what gives us **seasons**. When one part of the Earth is tilted toward the sun, it's summer there. When it's tilted away, it's winter. Without this tilt, we wouldn't have the variety of seasons that help different plants grow and provide rhythms of rest and harvest.



God also made the Earth to **rotate** on its axis once every 24 hours. That gives us **day and night**. Imagine if there were no night – plants wouldn't rest, and people wouldn't sleep. The Earth also **orbits** the sun once every 365¼ days, which gives us a full year. These movements create the pattern of time we live by: morning, noon, evening, night; spring, summer, autumn, winter.

Another part of God's design is **gravity** – the invisible force that holds everything in place. Gravity keeps our feet on the ground, holds the oceans in their basins, and keeps the moon orbiting Earth and the Earth orbiting the sun. If gravity were even a little bit weaker or stronger, life on Earth would not work the way it does.

Now let's zoom in. Earth's **landforms** are beautifully arranged. There are high mountains, low valleys, vast plains, winding rivers, and deep oceans. Each kind of

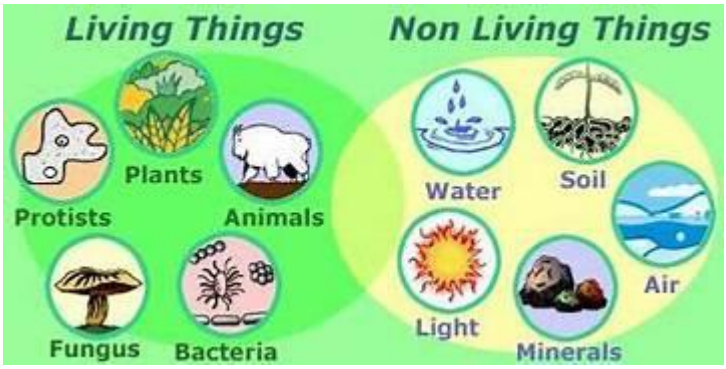
land supports different kinds of life. Some animals live in the rainforest, others in the desert, others in the mountains. The soil is designed to hold roots and provide nutrients for plants. Under the ground, there are layers of rock, minerals, and water – each part has a purpose in God's design.

God also made **ecosystems**. An ecosystem is all the living things and the non-living things in their environment, interacting together.

In a forest ecosystem, for example, trees provide shelter for birds and food for insects. Animals spread seeds and fertilize the soil. Microorganisms break down fallen leaves and turn them into nutrients. Everything is connected and works together. That's God's order in action.

Even more amazing, Earth has systems for **recycling**. The **carbon cycle**, the **nitrogen cycle**, and the **water cycle** all help keep the environment clean and balanced. Trees take in carbon dioxide and give out oxygen. Bacteria in the soil help break down waste and return nutrients to the earth. Nothing is wasted.

And then there's **life**. God filled the Earth with living things – from tiny bacteria to giant elephants, from colourful fish in coral reefs to birds that soar in the sky. He gave them what they need to live: food, water, shelter, and the ability to reproduce. Humans are different from animals because we're made in God's image. He gave us minds to think, hearts to love, and the responsibility to care for creation.

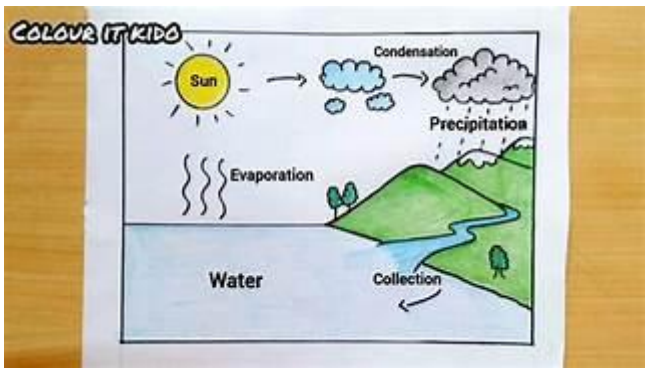


Genesis 1:28 says, "God blessed them and said to them, 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.'" That means God gave humans a special job – to take care of His world with wisdom and kindness.

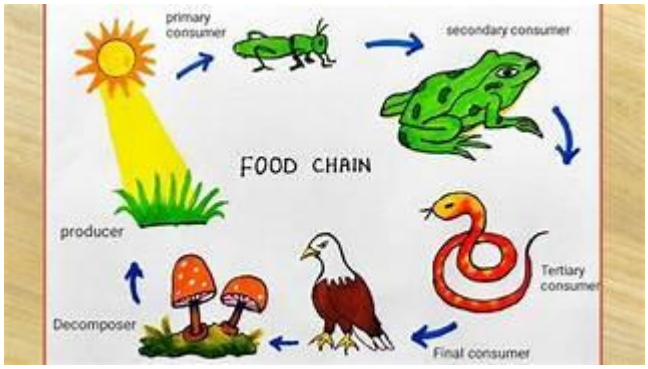
We can do that by keeping our environment clean, protecting animals and plants, and using resources wisely. We can plant trees, reduce waste, recycle, and learn about the world so we can make good choices. When we do this, we are joining in God's work of keeping the world in order.

Let's take a closer look at how some of Earth's natural systems work together with precision.

Take the **water cycle** for example. It starts when the sun heats up water in lakes, rivers, and oceans. This water evaporates – turns into a gas – and rises into the sky. When it cools, it forms clouds. Eventually, the water falls back to Earth as rain or snow. That water soaks into the soil, flows into rivers, and returns to the ocean. This cycle keeps going every day without anyone needing to push a button or turn a switch. It's God's automatic watering system, and it helps grow food, nourish trees, and keep animals and people alive.

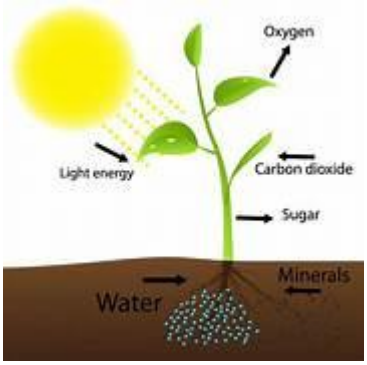


Another amazing system is the **food chain**. In a simple food chain, the sun gives energy to plants. Animals eat the plants. Other animals eat those animals. When animals or plants die, bacteria and insects break them down and return their nutrients to the soil. Then, plants use those nutrients to grow again. It's a perfect circle! Each part plays its role, and nothing is wasted. This kind of system didn't just happen. It shows the wisdom and care of the One who made it.



And what about the **air** we breathe? It's not just any mixture of gases – it's a special blend: mostly nitrogen, with just enough oxygen, plus a tiny bit of carbon dioxide and other gases. If there were too much oxygen, fires would start too easily. If there were too little, we couldn't breathe. Plants take in carbon dioxide and give out oxygen, while animals and people do the opposite. It's like a giant breath shared by all living things. This balance is another sign of perfect design.

Now think about **energy from the sun**. The sun gives light and heat to the Earth. Plants use sunlight in a process called **photosynthesis** to make their food. That food gives energy to animals and people. Without sunlight, there would be no energy, no plants, no food – and no life. The sun rises and sets every day with perfect timing, thanks to the Earth's rotation. Day and night give us time to work and rest, to grow and heal.



Have you ever looked at a **compost pile**? It might seem like a mess at first – full of banana peels, grass clippings, and dry leaves. But with time, air, and tiny organisms, it turns into dark, rich soil full of nutrients. God designed even decay to have a purpose. This teaches us something special: that order can come even out of things that look messy – when God is in charge.

Even in human design, we reflect the order of our Creator. When engineers design machines or architects build houses, they follow plans. They use measurement, timing, balance, and purpose. Why? Because we are made in the image of a God who creates with order and intention.

Earth is also incredibly protective. The **magnetic field** around the Earth shields us from harmful solar rays. The atmosphere burns up most meteors before they can hit the ground. The **ozone layer** blocks dangerous ultraviolet rays. These features are like a giant invisible shield, designed to keep life safe.

Let's not forget about **Earth's biodiversity** – the variety of life. There are millions of species of animals, plants, fungi, and bacteria, each doing a job in its environment. Some creatures clean up dead things. Some spread seeds. Some dig the soil to make it richer. It's like a giant orchestra, where every instrument plays its part at the right time.

Psalm 24:1 says, "The Earth is the Lord's, and everything in it, the world, and all who live in it." That means we are caretakers, not owners. We must respect creation, not waste it. When we recycle, clean up, plant trees, or learn about how nature works, we are doing God's work.

So next time you take a walk or look at a globe, remember: Earth is no accident. It is God's gift – a place of beauty, order, and life. And you have an important part to play in keeping it that way.

C) Narration

Parent/Tutor Says:
"Now it's your turn! Can you tell me what you remember about the story? What makes Earth special? How did God make it with order and purpose?"

Encourage responses such as:

- Earth has air to breathe and water to drink
- Seasons and night/day come from orbit and rotation
- God made everything with balance and interdependence

D) Teaching Skills

Parent/Tutor Says:
"Before we do our questions and activities, let's learn some scientific and design thinking skills."

Teach:

1. **Observation Skills** – How to notice patterns in weather, daylight, and nature (e.g. day/night, seasons, plant growth).
2. **Comparing Conditions** – Discuss what life would be like on Mars or the Moon (no water, air, or atmosphere).
3. **Systems Thinking** – Introduce the concept of systems working together: water cycle, food chain, seasons.
4. **Design Thinking** – Talk about sustainable ways we can help care for the Earth (e.g. recycling, conserving water).

Optional Visual Demonstrations:

- Use a globe and torch to demonstrate day/night
- Show a model of the solar system for Earth's orbit

E) Thinking Questions

i) Foundation to Year 2

1. What do we need to live on Earth?
2. Who made the Earth?
3. What happens when the sun goes down?
4. What's one thing you love about nature?
5. How can you help keep things in order at home or outside?

ii) Years 3 & 4

1. What does “interdependence” mean? Can you give an example from nature?
2. What would happen if Earth were tilted more or less?
3. Why do we have different seasons?
4. What does gravity do for us?
5. How can you help look after God’s world?

iii) Years 5 & 6

1. What patterns in nature help us understand time and seasons?
2. Why is Earth the only planet (so far) where life can survive?
3. What are some ways the Earth is sustainable by God’s design?
4. How can human choices disrupt the balance God created?
5. What systems work together to keep Earth healthy?

F) Practical Activities

Foundation to Year 2 (choose one):

1. **Build a Mini Earth** – Use blue and green playdough to make Earth and talk about land, air, and water.
2. **Nature Walk** – Go outside and find things that God made for life (air, plants, clouds). Draw or collect a few to show.

Years 3 & 4 (choose one):

1. **Orbit and Tilt Model** – Use a ball (Earth), stick (axis), and torch (Sun) to show rotation and orbit.
2. **Poster Project** – Make a “Why Earth is Perfect” poster with pictures and labels about air, water, distance from the sun, etc.

Years 5 & 6 (choose one):

1. **Systems Mapping** – Draw a diagram showing at least 3 systems (e.g. water cycle, seasons, food chain) and how they work together.
2. **Sustainability Design** – Create a plan for a sustainable garden, compost bin, or recycling system at home or school.

G) Optional Extension Research Activity

Choose one:

- Research a biome (desert, rainforest, ocean) and explain how plants and animals survive there.
- Compare Earth with another planet (e.g. Mars, Venus). Why can we live on Earth but not there?
- Interview a gardener or scientist about what makes Earth healthy and alive.

H) Biblical Connection & Wrap-up

Isaiah 45:18 – "For this is what the Lord says – He who created the heavens, He is God; He who fashioned and made the earth, He founded it."

Parent/Tutor Says:
"God didn't just throw things into space. He designed and built Earth like a wise Creator. Everything has its place, and everything works together. That's what orderliness means. God made a good home for us – and wants us to take care of it."

Ask:

- What is one thing you will do this week to care for God's Earth?
- How can we reflect His order in our home, classroom, and hearts?

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

Foundation–Year 2

Code	Full Description	Justification
AC9S1U02	describe daily and seasonal changes in the environment and explore how these changes affect everyday life	Lesson vocabulary and questions focus on day, night and seasons; students discuss "Why do we have different seasons?" and link patterns to everyday life.
AC9S2U01	recognise Earth is a planet in the solar system and identify patterns in the changing position of the sun, moon, planets and stars in the sky	Objectives and quiz emphasise Earth as our home within the solar system; vocabulary includes *orbit* and *rotation*; students compare Earth with other planets.
AC9S1I03	make and record observations, including informal measurements, using digital tools as appropriate	F–2 activity "Nature Walk" asks students to find and record things in the environment that support life (air, plants, clouds).
AC9TDE2P01	generate and communicate design ideas through describing, drawing or modelling, including using digital tools	F–2 activity "Build a Mini Earth" requires modelling and communicating ideas about land, air and water.
AC9TDE2P02	use materials, components, tools, equipment and techniques to safely make designed solutions	Same "Mini Earth" activity involves selecting simple materials and constructing a model.

Years 3–4

Code	Full Description	Justification
AC9S3U03	identify sources of heat energy and examine how temperature changes when heat energy is transferred from one object to another	The Sun as a source of heat
AC9S3I04	construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns	Students build an **Orbit and Tilt Model** to represent Earth's rotation/orbit; poster task organises information about Earth's suitability for life.
AC9S4I03	follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate	The Orbit/Tilt model activity requires following steps to set up and observe rotation/orbit effects (age-appropriate procedures).
AC9S3H02	consider how people use scientific explanations to meet a need or solve a problem	The "Why Earth is Perfect" poster and related discussion apply scientific reasons (air, water, distance from sun) to the problem of habitability/caring for environments.
AC9TDE4P03	select and use materials, components, tools, equipment and techniques to safely make designed solutions	Making the Orbit/Tilt physical model uses materials and tools safely to produce a working representation.

Code	Full Description	Justification
AC9TDE4P01	explore needs or opportunities for designing, and test materials, components, tools, equipment and processes needed to create designed solutions	Planning the poster/model tasks involves selecting suitable materials and testing layout/processes.

Note: Year 3–4 **Earth & Space** understanding in v9 emphasises soils/rocks (Y3) and the water cycle (Y4), which are not the focus of Lesson 8; therefore I've aligned Years 3–4 mainly to **Inquiry** and **D&T** skills that the lesson explicitly uses.

Years 5–6

Code	Full Description	Justification
AC9S6U02	describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation on its axis and revolution around the sun relate to cyclic observable phenomena, including variable day and night length	Lesson questions and tasks connect Earth's tilt/rotation/orbit with seasons and day/night; older students discuss patterns that explain time and seasons.
AC9S5I04	construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships	"Systems Mapping" task requires diagramming interacting systems (e.g., seasons, water cycle, food chains).
AC9S5H02	investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions	"Sustainability Design" asks learners to apply science to practical responses (e.g., garden/compost/recycling plan).
AC9TDE6K01	explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments	Sustainability design planning explicitly weighs needs and sustainability considerations.
AC9TDE6P03	select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions	Students plan and (as feasible) build elements of their sustainability solution (e.g., compost setup).
AC9TDE6P05	develop project plans that include consideration of resources to individually and collaboratively make designed solutions	The sustainability brief requires planning steps/resources to implement the solution at home/school.

Bonus Optional Round-up:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

Planets & the Solar System – Fun Quiz

Theme: God's Order in Creation
Grade Range: 1–6
Covers Lessons 5–8

Use this as a quiz game, review activity, or oral test. You can keep score, time each answer, or just use it as a fun recap!

Lesson 5: The Sun – God's Light in Space

1. What is the biggest light in the sky during the day?
2. What does the sun help plants do?
3. What are the three layers of the sun?
4. Does the sun shine because of a light bulb inside it? (Yes or No)
5. How does the sun help bring **order** to our day?

Lesson 6: The Planets in the Solar System

6. What is the name of the planet we live on?
7. Which planet has rings made of ice and rock?
8. Name three other planets in our solar system.
9. What keeps the planets from crashing into each other?
10. How do the planets show God's **orderliness**?

Lesson 7: The Moon and Its Phases

11. What does the moon reflect?
12. Name the four main phases of the moon.
13. Why does the moon look different each week?
14. What happens during a "new moon"?
15. What does the regular pattern of the moon teach us about God?

Lesson 8: The Earth – Our Special Home

16. Why is Earth the only planet where we can live?
17. What does Earth have that other planets don't (name 2 things)?
18. What would happen if Earth were a little closer to the sun?
19. What does Isaiah 45:18 say about how God made the Earth?

20. How can we show God's orderliness in how we care for our planet?

Bonus Round: Bible Match

Match the Bible verse to the correct lesson:

A. Genesis 1:16	1. The Moon and Its Phases
B. Psalm 136:9	2. The Sun – God's Light
C. Isaiah 45:18	3. The Earth – Our Home
D. Job 26:7	4. The Planets in Order

Answer Key:
A – 2
B – 1
C – 3
D – 4

Optional Reward Ideas:

- 1 point per correct answer
- 2 bonus points for naming all 8 planets in order
- Prize: planet sticker, star bookmark, a fun space snack, or picking the next Bible story

TOPIC 3	GEOLOGY (ROCKS, SOIL & VOLCANOES)

Bible Verse of the Week: Matthew 7:24 – "A wise man built his house on the rock."

Overview:

This week, children will learn **about the layers of the Earth, types of rocks, soil, and natural events like volcanoes and earthquakes.**

Lesson 9: Earth's Layers – God's Design for Our Planet

Theme: God Brings Order from the Inside Out
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will be able to:

- Identify and describe the Earth's four main internal layers and their composition and purpose.
- Understand the concept of structure and order in Earth's geology and how this supports life.
- Construct a visual model of Earth's layers using various materials.
- Reflect on how God's design of the Earth reflects His orderly character.
- Practise scientific inquiry and model-making skills.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn what's underneath our feet – not just soil and rocks, but the amazing layers that God placed inside the Earth when He created it. Did you know the Earth has four different layers, and each one does something important? Just like an orderly home has a foundation, walls, and a roof, the Earth has an orderly design too."

Vocabulary to Explain First:

- **Crust** – the outer layer of the Earth that we live on.
- **Mantle** – the thick, hot layer under the crust made of slow-moving rock.
- **Outer Core** – a layer of liquid metal that moves and creates Earth's magnetic field.
- **Inner Core** – the very centre of the Earth; a solid ball of metal.
- **Magnetic Field** – an invisible shield that protects Earth from harmful rays from space.

- **Geology** – the study of the Earth's physical structure and substances.

B) Informational Story – "The Earth's Secret Layers"

Imagine you're digging in the garden. You scoop some soil into a bucket. It's crumbly and brown. You go deeper – maybe a patch of clay appears, then stones. But have you ever stopped to wonder: how deep can we go? What's beneath the ground beneath our feet?

The answer is: a lot! The Earth isn't just a solid ball of rock. It's made up of **layers**, each with its own material, temperature, and job. Like a perfectly baked cake – or a cleverly built machine – God created the Earth with careful, beautiful **order** from the inside out.

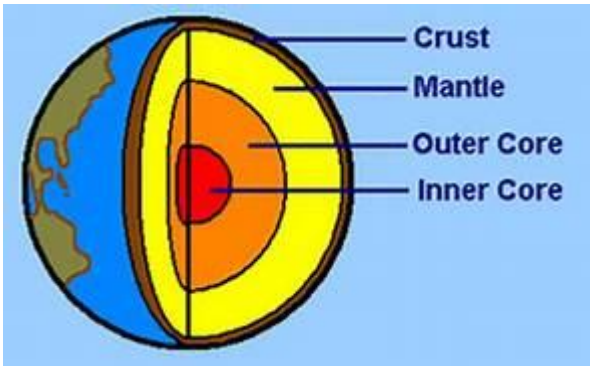
A World Designed with Layers

The Bible says in **Isaiah 45:12**, "I made the earth and created mankind upon it." God didn't just slap together a random planet. He crafted it with **intention**, layer by layer. Why? Because each layer has a role to play. And together, they make Earth the perfect place for life.

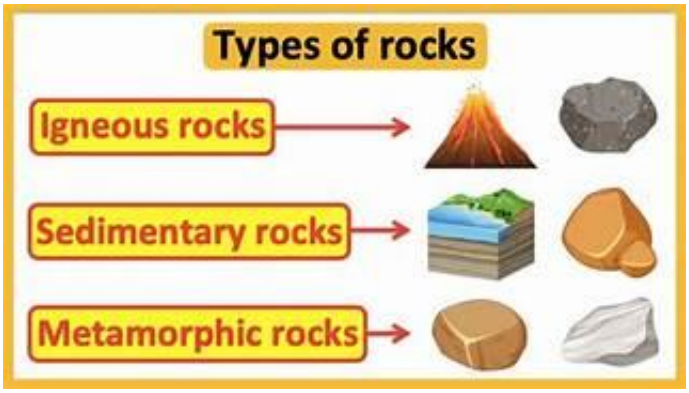
Let's go on a journey to the centre of the Earth.

We'll start where we live – on the outermost layer – called the **crust**.

The Crust – Earth's Living Blanket



The **crust** is where all living things exist. It includes the continents, oceans, soil, rocks, and mountains. But did you know the crust is only about **5 to 70 kilometres thick**? That's like the skin on an apple – so thin compared to the whole planet!



The crust is made of many types of **rocks** – igneous, sedimentary, and metamorphic – and is broken into **tectonic plates**. These plates float slowly on the layer beneath and sometimes bump into each other, causing **earthquakes** or forming mountains.

God made the crust to hold forests, lakes, animals, and people. It holds the soil we plant seeds in, the water we drink, and the land we build homes on. The crust is the **stage** for life – and it's also our **responsibility** to care for it.

The Mantle – Earth's Moving Middle

Beneath the crust is the **mantle**. This is the thickest layer – making up about **84% of Earth's volume**. The mantle is **solid rock**, but it's not like the crust. It's so hot that it **flows slowly**, like very thick syrup. Scientists call this **plasticity** – a state between solid and liquid.

The mantle is made of **silicate minerals** rich in iron and magnesium. It moves very slowly. This movement is important. It **pushes** the crust above, causing **continental drift** and **volcanic activity**.

God didn't just create the outside of the Earth to be beautiful. He designed the inside to be **active**, like a gentle engine that helps shape mountains, valleys, and even new land. The mantle is a reminder that God's world is **alive with motion** and not just sitting still.

The Outer Core – A Liquid Shield

Now we go deeper – to the **outer core**, about **2,900 kilometres** beneath the surface. Here, things get very interesting.

The outer core is made mostly of **molten iron and nickel** – that means metal that's so hot it has melted into liquid! The temperature here can reach up to **5,500°C**. That's as hot as the surface of the sun.

And here's the amazing part: as the liquid metal in the outer core moves, it creates **Earth's magnetic field**. This invisible shield protects our planet from the **solar wind** – dangerous charged particles that come from the sun. Without the magnetic field, life on Earth would be in serious trouble.

God gave the outer core this job. It doesn't look pretty – it's not full of flowers or forests. But it's **vital**. Just like every part of the body has a role, every layer of the Earth has a purpose.

The Inner Core – Earth's Fiery Heart

Finally, we reach the very centre: the **inner core**. It's a **solid ball of iron and nickel**, even though it's hotter than the outer core – maybe up to **6,000°C**!

Why doesn't it melt? Because the pressure is so intense – thousands of kilometres of rock press down on it. The atoms are squeezed tightly together, keeping it solid.

The inner core is about **1,200 kilometres across** – roughly the size of the moon. It helps balance Earth's rotation and may even play a role in the magnetic field's behaviour.

The inner core is like the **anchor** of the Earth. Even though we can't see it or touch it, it helps keep the whole planet functioning smoothly.

God's Order in Earth's Design

Now let's look at the big picture. The Earth has:

- A **crust** for living and growing.
- A **mantle** that moves and recycles rock.
- An **outer core** that protects us from space danger.
- An **inner core** that anchors it all.

It's like a four-layered machine – each part in the right place, doing the right job. Scientists spend their whole lives studying this system – and still don't know everything.

But we do know this: the Earth was not a cosmic accident. It was **ordered**, **designed**, and **balanced** by a wise and loving Creator. Each layer reveals God's attention to **detail**, **purpose**, and **function**.

Digging Deeper – The Tools of Science

You might be wondering: How do we know all this? No one has ever drilled to the centre of the Earth!

That's true. But scientists use clues from **earthquakes** (called **seismic waves**) to study the inside of the Earth. These waves behave differently when they move through solids or liquids. Like listening to a knock on a wall to find a hollow space, geologists "listen" to the Earth to discover what's inside.

They also study **volcanoes**, **rock layers**, and **mineral samples**. Over time, all these observations have helped create a model of the Earth's layers.

When we build models or draw diagrams, we're copying the idea of God's **design**. And when we study the Earth, we're exploring the mind of its Maker.

A Family Hike and a Discovery

Let's imagine a story now. The Smith family is out hiking through a rocky gorge. The sun is shining, and the kids are excited. They've brought a magnifying glass, some snacks, and their science notebooks.

As they walk along a path, they spot layers of coloured rock on the cliffside – orange, red, brown, grey.

"Dad," says Anna, "are those Earth's layers?"

"Good question," says Dad. "Those are layers in the **crust**, formed by rock types laid down over time."

"So, the crust has its own layers too?" asks Max, her younger brother.

"Yes!" says Mum. "And underneath those layers are the mantle, the core, and more."

They sit down for lunch on a boulder. Anna opens her notebook and starts sketching a model of the Earth.

“What would happen,” she wonders, “if God forgot to make the inner core?”

Her dad smiles. “We’d be in big trouble! But God doesn’t forget things. He’s a builder who finishes what He starts.”

They pray together, thanking God for making the Earth so carefully. Anna writes in her journal:

“Today I learned that God didn’t just make the mountains and rivers. He made what’s inside the Earth too. And it all works together like a big puzzle.”

What the Earth Teaches Us

The Earth’s layers teach us many things:

- **God loves order**, not chaos.
- **Every part has a role**, even the hidden ones.
- **Design and purpose** go all the way to the core.

And just like the Earth has structure inside, we can build our own lives with structure too. We can learn routines, care for creation, and live in ways that reflect God’s wisdom.

So next time you dig in the dirt, climb a hill, or see a volcano in a book – remember: there’s more under your feet than you think.

God’s orderliness goes all the way to the centre.

C) Narration

Parent/Tutor Says:
“Now it’s your turn! Can you tell me what you remember from the story? What are the names of the Earth’s layers? What are they made of? Why did God design them this way?”
Prompt gently as needed:

- “Which layer do we walk on?”
- “Which layer helps protect us from space rays?”
- “Why do you think the Earth has an inner core?”

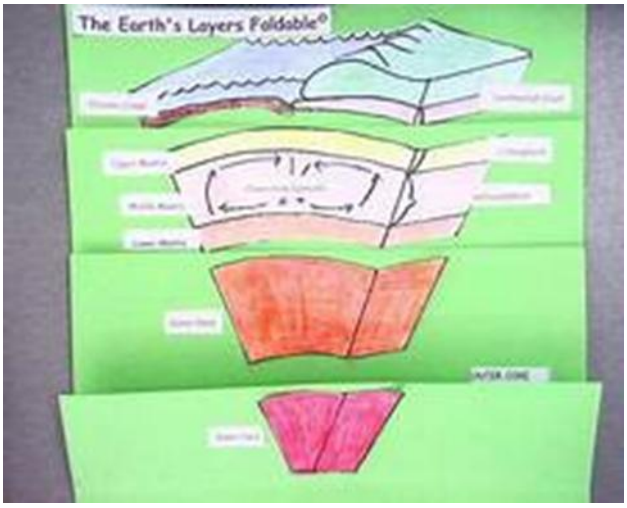
D) Teaching Skills

Parent/Tutor Explains:
“To understand Earth’s layers, scientists build **models**. A model shows what something looks like when we can’t see it directly. Since we can’t dig to the centre of the Earth, we make models to help us imagine and explain it.”

Show a diagram or cross-section image of Earth's layers. Teach the idea of **visual models** and how different materials can be used to represent the different layers.

For older students, introduce the idea of **investigating how structures affect function**. Ask:

- "What would happen if the mantle didn't move slowly?"
- "Why is it important that the outer core moves to make a magnetic field?"



E) Thinking Questions

Foundations to Year 2:

1. What is the name of the layer we live on?
2. Which part of the Earth is the hottest?
3. Why do you think God made the Earth with different layers?
4. What do you think would happen if the Earth had no core?

Years 3 & 4:

1. What are the four main layers of the Earth in order?
2. What materials make up each layer?
3. Why is the mantle important for the crust above it?
4. How does the outer core help keep life safe on Earth?
5. What does this ordered design teach us about God?

Years 5 & 6:

1. Why is the inner core solid even though it's so hot?
2. What does the magnetic field do for Earth and why does it matter?
3. How might Earth's layered structure relate to designing strong buildings or machines?
4. How does studying the Earth's layers grow our appreciation for scientific design?
5. How can you be more orderly in the way you care for God's creation?

F) Practical Activities

Foundations to Year 2:
Activity Option 1: Make a layered playdough model of the Earth using four colours. Cut in half to see the layers.
Activity Option 2: Use coloured paper to build a flap-book showing crust, mantle, outer core, inner core with labels.

Years 3 & 4:
Activity Option 1: Use coloured paper to build a flap-book showing crust, mantle, outer core, inner core with labels and short descriptions.
Activity Option 2: Use a printed diagram to colour and label Earth's layers and write a short paragraph explaining each part.
Activity Option 3: Build a 3D Earth cross-section using papier-mâché, balloons, or foam layers. Paint and label.

Years 5 & 6:
Activity Option 1: Design and present a visual model showing how the movement of the mantle causes tectonic plates to shift. Use clay or cardboard layers.
Activity Option 2: Write a report comparing Earth's layer structure to engineered systems (like a building or machine), explaining how structure supports function.

G) Optional Extension Research Activity

Students (Years 3–6) can choose one of the following:

- Research and report on **how volcanoes give clues about Earth's mantle and core**.
- Create a short digital presentation or poster on **how scientists use seismic waves to understand Earth's internal structure**.
- Compare Earth's layers to the internal structure of another planet (e.g., Mars or Jupiter).

H) Biblical Connection & Wrap-Up

Read Aloud Isaiah 45:12: "I made the earth and created mankind upon it."
Parent/Tutor Says:
"God made the Earth with perfect order – from the inside out. Each layer supports life and shows us God's amazing wisdom. The same God who made the Earth made you – carefully and with purpose. We can reflect His orderliness in how we learn, clean, build, and live."

Reflection Questions:

- How can we reflect God's order in our daily lives?
- What does the Earth's structure show us about God's power and care?

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATIONS – YEAR 2

Code	Full Description	Justification
AC9SFH01	Explore the ways people make and use observations and questions to learn about the natural world.	Students observe images/models of Earth's interior and talk about what they notice and wonder.
AC9S1I03	Make and record observations, including informal measurements, using tools and digital media where appropriate.	Students observe the Earth layer model and may draw, label, or describe what they see in words or pictures.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students build a simple Earth model (e.g., coloured dough layers) showing crust, mantle, and core.

Code	Full Description	Justification
AC9TDE2P02	Use materials, components, tools and techniques to safely make designed solutions.	The model-making activity requires safe handling of materials and following steps.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U04	investigate the observable properties of solids and liquids and how adding or removing heat energy leads to a change of state	Changes of state in the inner core & outer core of the earth
AC9S3I04	Construct and use visual or physical models to identify patterns, relationships and features.	Students construct a cross-section model showing distinct Earth layers and their relative order.
AC9S4I01	Pose questions and make predictions and observations when investigating natural features.	Students discuss why layers differ, what each layer does, and record observations from the demonstration/model.
AC9TDE4P02	Generate and communicate design ideas and decisions using appropriate visual representation techniques.	Students communicate understanding through labelled diagrams, cross-sections, or posters.
AC9TDE4P03	Select and use materials, components, tools and equipment to safely make designed solutions.	Students choose materials (e.g., paper, clay, plasticine) and construct the Earth layer model, using tools safely.

YEARS 5 – 6

Code	Full Description	Justification
AC9S5I04	Construct and use visual or physical models to describe patterns and relationships.	Students create more accurate or scaled representations of Earth's interior structure.
AC9S5H02	Investigate how scientific knowledge is used by individuals and communities to inform decisions.	Lesson discussion connects geological knowledge to building safety, mining awareness, and earth science study.
AC9TDE6K01	Explain how sustainability and human needs influence design of environments and systems.	Students reflect on how understanding Earth's structure influences resource use (metals, minerals, geothermal energy) and stewardship.
AC9TDE6P03	Select and use suitable materials, tools, equipment and techniques to safely make designed solutions.	Older students plan and build a layered cross-section model with attention to accuracy, safety, and clean construction techniques.

Lesson 10: Types of Rocks and Minerals

Theme: God's Order in Building Blocks of the Earth
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Identify and describe the three main types of rocks: igneous, sedimentary, and metamorphic.
- Understand how different rocks are formed and how they relate to the rock cycle.
- Explore the physical properties and uses of natural materials like minerals.
- Develop observation and classification skills in geology.
- Reflect on God's orderly design in the Earth's structure and relate it to character growth.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about the different types of rocks and how God created them with purpose and order. Rocks may seem simple, but they are part of a larger system God designed to support life on Earth. Let's start with some key words so we can understand our story better."

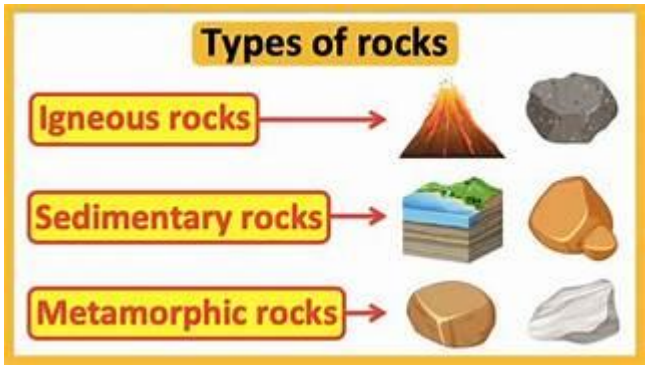
Key Vocabulary:

- **Igneous rock**: Rock formed from cooled magma or lava.
- **Sedimentary rock**: Rock formed from layers of sediments.
- **Metamorphic rock**: Rock that has changed form due to heat and pressure.
- **Minerals**: Natural substances that make up rocks.
- **Rock cycle**: The process of rock formation and transformation over time.

B) Informational Story: "The Secret Life of Rocks"

Have you ever noticed how different rocks are from each other? Some are rough, some are shiny, and some look like they've been squished into layers. These rocks aren't just lying around for no reason – they are part of something much bigger: God's amazing design for the Earth.

Let's start at the beginning. Genesis tells us that God created the Earth, and everything in it. In 1 Samuel 2:2, the Bible says, "There is no rock like our God." Rocks remind us of God's strength and reliability. And when we look at the science behind rocks, we can see that He also made them in a very orderly way.



There are three main types of rocks: **igneous, sedimentary, and metamorphic.** Each one forms

differently, but they're all part of a continuous cycle – the rock cycle. This is the way rocks are broken down, changed, and remade over time.

Igneous Rocks These are the "born in fire" rocks. Igneous rocks form when hot, melted rock from inside the Earth (called magma or lava) cools down and hardens. If the magma cools underground, it forms rocks like granite. If it erupts from a volcano and cools quickly above ground, it forms rocks like basalt or pumice.

You might be surprised to learn that the land under our feet is often made of igneous rocks! They are strong, durable, and beautiful. Some have large crystals inside them, which form when they cool slowly underground.

Sedimentary Rocks These are the "storytelling" rocks. Sedimentary rocks are formed from layers of small pieces – called sediments. These pieces can be sand, mud, shells, or even bits of other rocks. Water, wind, and ice move these sediments around until they settle in layers. Over a long time, the layers get pressed together and harden into rock.

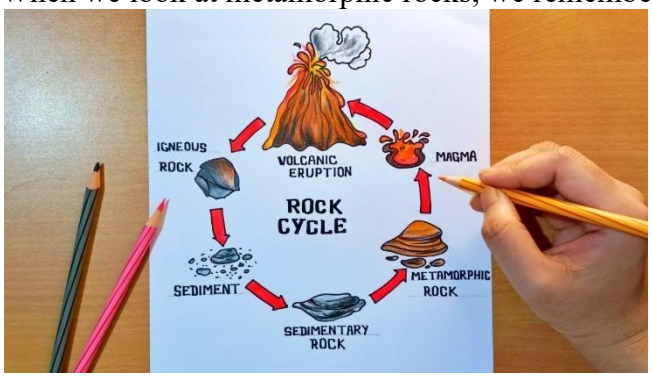
You can often see the layers in these rocks, like stripes in a pancake stack. Fossils are usually found in sedimentary rocks because the gentle layering preserves plants and animals.

Examples of sedimentary rocks include sandstone, shale, and limestone. These rocks are used to build things, make cement, and tell us the history of life on Earth.

Metamorphic Rocks These are the "changed" rocks. Metamorphic rocks form when existing rocks are changed by heat and pressure deep underground. The word "metamorphosis" means change – and that's exactly what happens.

For example, limestone can turn into marble, and shale can become slate. These rocks are often very hard and beautiful. Marble is used in statues and buildings. Slate is used for roofs and tiles.

When we look at metamorphic rocks, we remember that even when things are under pressure or change, God is still at work – making something strong and beautiful.



The Rock Cycle These three types of rocks don't stay the same forever. Through heat, pressure, weathering, and erosion, rocks can change type. Igneous rocks can become sedimentary. Sedimentary rocks can become metamorphic. Metamorphic rocks can melt into magma and become igneous again. It's a never-ending, orderly cycle.

Just like our lives go through seasons of change, the Earth's rocks are always being reshaped and renewed. God made a world where everything has a process and a place.

What Are Minerals? Minerals are the tiny building blocks of rocks. A rock is made of one or more minerals. You can think of it like a cookie – cookies are made from ingredients like sugar and flour. Rocks are made of minerals like quartz, mica, and feldspar.

Each mineral has its own properties. Some are shiny, some are rough, some are very hard. Scientists can test minerals to identify them – by checking hardness, streak (the colour of powder it leaves behind), and how it breaks.

Some minerals are used in jewellery, like diamonds and rubies. Others are used in tools, glass, and even the screen on your computer. God gave us minerals not just for beauty, but also for purpose.

Rocks in Everyday Life We build with them, decorate with them, and even study them to understand Earth's past. Bricks, roads, pavements, countertops – all come from rocks and minerals.

God didn't make random things – He made useful, beautiful, and strong materials. He filled the Earth with everything we need to live and learn.

And what do rocks teach us about God?

- God is our Rock – strong, unchanging, and reliable.
- He works through pressure and time to make things better.
- He made a world full of order, not confusion.

So next time you pick up a rock or see a mountain, remember: it's not just a lump of stone. It's part of God's great plan – designed with care, formed through time, and built to last.

C) Narration

Parent/Tutor Says:
"Can you tell me what you remember from the story? What are the three types of rocks? How are they formed? What do rocks teach us about God's order and strength?"

Encourage students to explain the rock types and the process of transformation between them. Guide them with prompts if needed.

D) Teaching Skills

Parent/Tutor Says:
"Now let's learn a science skill: how to observe and classify rocks. When scientists study rocks, they look at colour, hardness, layers, grain, and what the rock is made of. This helps us identify if a rock is igneous, sedimentary, or metamorphic. If you were a rock-scientist (geologist) trying to understand rocks, what questions would you like to find the answers for? What would you like to know or find out through observation and experiments?"

Activity:

- Give students a few rock samples or pictures.
- Help them create a simple chart with categories like: Colour | Texture | Layers | Shiny? | Rock Type.

E) Thinking Questions

i) **Foundations to Year 2**

1. What kind of rock comes from volcanoes?
2. What does God teach us through strong rocks?
3. Who made all the rocks and minerals?
4. Which rock type looks like layers?
5. What makes something orderly?

ii) **Years 3 & 4**

1. How does each type of rock form?
2. What is a mineral, and how is it different from a rock?
3. Why do you think God used different ways to make rocks?
4. How does the rock cycle show change over time?
5. What do rocks teach us about God's character?

iii) **Years 5 & 6**

1. What physical processes cause rocks to change type?
2. How does sediment become stone in sedimentary rock?
3. Describe the journey of a rock from magma to metamorphic.
4. How are minerals used in everyday life?
5. In what way is God like a rock?

F) Practical Activities

Foundations to Year 2

1. **Rock Painting** – Paint a rock to represent one of the types.
2. **Rock Sorting** – Use texture, colour, or size to sort rocks into groups.

Years 3 & 4

1. **Sugar Cube Sedimentary Rock** – Press sugar cubes into layers with water and observe how they hold shape.
2. **Rock Cycle Wheel** – Make a paper wheel showing rock types and transitions.

Years 5 & 6

1. **Rock Lab Investigation** – Examine real rock samples, record observations, classify types.
2. **Create a Rock Cycle Comic** – Use narrative and images to show a rock's journey through the cycle.

G) Optional Extension Research Activity

- Research one famous rock landmark (e.g., Uluru, Giant's Causeway).
- What kind of rock is it made of? How was it formed?
- How does it show God's creativity and order?

H) Biblical Connection & Wrap-up

Verse: 1 Samuel 2:2 – "There is no rock like our God."

Parent/Tutor Says:
"Rocks help us understand that God is strong, steady, and full of order. He didn't just make the Earth from the outside – He made it perfectly from the inside out, with layers and cycles and systems. Let's thank Him for His wisdom in creation and ask Him to help us build strong lives based on His truth."

Prayer: "Dear God, thank You for being our Rock. Help us to see Your order in creation and to live in an orderly way that pleases You. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU03	Recognise that objects can be composed of different materials and describe the observable properties of these materials.	Students examine and describe rocks using observable features (colour, texture, size, appearance).
AC9SFH01	Explore the ways people make and use observations and questions to learn about the natural world.	Students look closely at rocks, ask questions, and talk about similarities and differences.
AC9S1I03	Make and record observations, including informal measurements, using tools as appropriate.	Students record what they see by drawing, listing or verbally describing rock features.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students create simple visual representations, such as a rock sorting chart or labelled drawing.
AC9TDE2P02	Use materials, components, tools and techniques to safely make designed solutions.	Students handle real rocks and basic tools safely (e.g., magnifier, tray, plastic containers).

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U02	Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources.	Students identify and compare properties of different rocks and learn that minerals are used for practical purposes.
AC9S3I04	Construct and use visual or physical models to organise data and identify patterns.	Students sort and classify rocks using tables, grouping charts or labelled diagrams.
AC9S4H01	Examine how people use data to develop scientific explanations.	Students learn how scientists classify rocks based on repeated observable patterns (grain, hardness, layers).
AC9TDE4P02	Generate and communicate design ideas and decisions using graphical representation techniques.	Students create a classification poster or diagram clearly communicating groupings.

Code	Full Description	Justification
AC9TDE4P03	Select and use materials, components, tools and equipment to safely make designed solutions.	Students handle rocks, magnifiers and sorting materials safely when constructing the comparison chart or display.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U03	Investigate physical processes, such as weathering and erosion, that change Earth's surface over time.	Students learn how rocks change through heat, pressure and weathering when discussing igneous, sedimentary and metamorphic rock formation.
AC9S5I04	Construct and use visual or physical models to describe patterns and relationships.	Students create rock cycle diagrams showing transformation between rock types.
AC9S5H02	Investigate how scientific knowledge is used by individuals and communities to inform decisions.	Students learn how rock knowledge informs building, land use, and responsible resource use.
AC9TDE6K01	Explain how sustainability and human needs influence design of environments and systems.	Discussion touches on how mining and resource use must be balanced with environmental care.
AC9TDE6P03	Select and use suitable materials, tools and techniques to safely make designed solutions.	Students may build a 3-part rock cycle model, requiring appropriate material selection and safe construction steps.

Lesson 11: Soil and Its Importance

Theme: God Brings Life from the Ground Up
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand what soil is made of and why it is essential for life.
- Identify and describe the layers of soil and their functions.
- Explore how soil supports life through structure and nutrient cycling.
- Reflect on the biblical truth that God created people from the dust of the ground.
- Practice observing, investigating, and constructing soil models.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about something we walk on every day – soil! It might look like ordinary dirt, but soil is one of God's most amazing inventions. It supports all plant life, filters water, and even helps us grow food. God created the Earth with perfect order – even in the ground beneath our feet."

Key Vocabulary:

- **Soil**: A mix of broken rock, decayed plants and animals, water, and air.
- **Topsoil**: The top layer of soil, rich in nutrients.
- **Subsoil**: The layer beneath topsoil, less rich in organic material.
- **Bedrock**: Hard rock beneath the soil layers.
- **Decompose**: To break down into simpler parts.
- **Nutrient**: A substance that provides nourishment for growth.
- **Percolate**: To pass through a porous substance or small holes.
- **Organic matter**: Material from living things that has broken down.

B) Informational Story: "The Ground Beneath Our Feet"

We walk on it every day. We dig in it, grow plants in it, and sometimes even get it on our clothes. What is it? Soil!

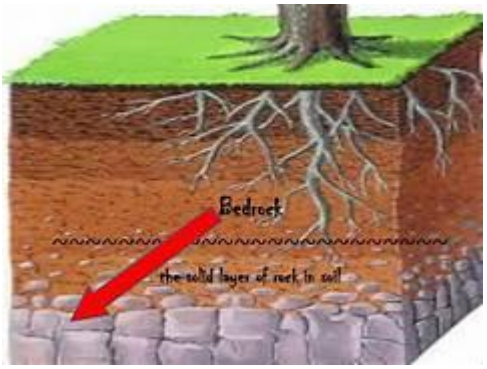
Soil might look like plain brown dirt, but it's a rich, complex world under our feet. It's a mixture of tiny pieces of rock, decayed plants and animals, water, air, and living organisms. Soil is alive – and without it, life on Earth couldn't exist.

Let's begin with where soil comes from. Soil forms when rocks slowly break down through a process called weathering. Wind, rain, ice, and temperature changes cause large rocks to crack, chip, and crumble into tiny grains. This is just the beginning. As time passes, dead plants and animals add nutrients to the mix. Worms,

beetles, fungi, and bacteria help break this material down further, turning it into what we call humus – rich, dark organic matter.

Over many years, this blend of mineral particles and organic matter becomes soil. But not all soil is the same. Soil comes in layers, each with its own role in supporting life:

1. **Topsoil**: This dark, soft layer is full of nutrients and living things like worms and microbes. It's where seeds sprout and roots take hold. It's also the most fragile layer – easily lost if not cared for.
2. **Subsoil**: Below the topsoil, this layer is lighter in colour and has fewer nutrients. It stores water and minerals that plant roots may reach.
3. **Parent Material**: A mix of broken-down rock pieces and minerals.
4. **Bedrock**: A solid layer of rock deep underground that slowly weathers to form the layers above.



Soil is God's design for life to flourish. God didn't just make random dirt. He created a system where each part has purpose. Soil holds plant roots in place, stores water, and provides nutrients. It even acts like a sponge, soaking up rainfall and filtering it so it can return clean to rivers, lakes, or underground reservoirs.

Without healthy soil, our world would look very different. No soil would mean no crops, no grasslands, no forests, and very few animals. Humans rely on soil for food, clothing (like cotton), and shelter (like clay bricks). Even today, scientists are still discovering how tiny soil creatures impact plant growth, fight disease, and keep the Earth in balance.

And what does the Bible say? In Genesis 2:7, we read, "Then the Lord God formed man from the dust of the ground." God chose to create us from soil – linking human life forever with the earth beneath us. It's a humbling and beautiful reminder.

Just as soil can look messy and broken but still support amazing life, God brings order and purpose out of the messy places in our lives. He turns dust into design, brokenness into beauty.

C) Narration

Parent/Tutor Says:
"Can you tell me what you remember from the story? What is soil made of? Why is it important? What did the Bible say about God making people from the ground?"

Let your child retell the story in their own words. Prompt if needed: "What are the layers of soil?" "How does soil help plants?"

D) Teaching Skills

Parent/Tutor Says:
"Before we explore activities and answer questions, let's learn two important skills: observing soil closely, and recording changes we see."

- Teach students how to observe soil texture, colour, and contents (sand, silt, clay, organic matter).
- Introduce the use of magnifying glasses to look at tiny parts of soil.
- Teach how to pour water gently over soil and watch how quickly it soaks in (percolation test).
- Practice recording data with words, drawings, or charts.

Older students can also:

- Compare soils from two locations and create a comparison chart.
- Predict how different soil types might affect plant growth.

E) Thinking Questions

i) **Foundations to Year 2**

1. What is soil made from?
2. Why do plants need soil?
3. Who made soil?
4. What do worms and bugs do in the soil?
5. How can you help keep things clean and orderly like soil helps the Earth?

ii) **Years 3 & 4**

1. What are the layers of soil called?
2. How does soil bring order to the ground?
3. Why is topsoil the best layer for plants?
4. What does it mean that God made people from the dust?
5. How can you be like soil – helping life grow around you?

iii) **Years 5 & 6**

1. How is soil made over time?
2. What role does order play in how soil supports life?
3. How does the Bible connect soil with people and life?
4. How does the design of soil show God's wisdom and planning?
5. What's one area of your life where you could "plant better habits" and grow more order?

F) Practical Activities

Foundations to Year 2

1. **Soil Sensory Bin** – Sort leaves, sand, soil, and small rocks by feel and color. Talk about what's in each.
2. **Soil Bug Hunt** – Search a patch of ground for worms, ants, beetles. Draw or name what you find.

Years 3 & 4

1. **Soil in a Jar** – Layer soil, sand, gravel, and organic material in a clear jar. Add water. Watch it settle.
2. **Soil Sort Chart** – Look at soil samples from different places. Draw or write what's in each.

Years 5 & 6

1. **Soil Percolation Test** – Compare how fast water drains through different soil types (sand, clay, topsoil).
2. **Design a Soil Infographic** – Use drawings or a digital tool to explain layers, uses, and biblical meaning.

G) Optional Extension Research Activity

- Research the role of decomposers (fungi, worms, bacteria) in the soil cycle.
- Investigate how soil erosion happens and what humans can do to prevent it. To 'investigate' something (like a scientist does), you would need to
  - firstly 'observe' soil (gardens, forest, bushland, different landscapes); then 'think of a question' – something you want to find out.
  - Then read more about the topic and do more observations.
  - Now think of a possible answer to your question (a 'hypothesis').
  - Then design an experiment to test your 'hypothesis'.
  - Conduct your experiment while measuring and recording what you see happening.
  - Then determine "was my hypothesis (my possible explanation) correct?"
  - If not, then think about another possible explanation that you could test, and do an experiment or observation and record your results/information (ie., data).
- Watch a short documentary or visit a garden or farm.

H) Biblical Connection & Wrap-up

Verse: Genesis 2:7 – "Then the Lord God formed man from the dust of the ground."

Parent/Tutor Says:
"This verse shows us something beautiful – God used the dust of the ground to form the very first person. It reminds us that we come from the Earth, and God gave us both life and purpose."

Discuss:

- What does it mean to be made from the dust?
- How does that help us stay humble?
- What are some ways we can care for the soil God gave us?

Prayer: "God, thank You for making the ground that gives us life. Help us care for it and remember that You bring good things from even the smallest, dustiest places. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU03	Recognise that objects can be made of different materials and describe the observable properties of those materials.	Students observe soil samples and describe texture, colour, and composition (e.g., grains, small pieces of organic matter).
AC9SFH01	Explore how people use observations and questions to learn about the natural world.	Students explore soil with curiosity, noticing what soil looks/feels like and wondering what is in it.
AC9S1I03	Make and record observations using informal measurements or images.	Students draw, sort, or describe soil samples in their journals.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students draw "What soil is made of" diagrams or model a simple soil layer display.
AC9TDE2P02	Use materials and techniques to safely make designed solutions.	Students safely handle soil and basic tools (scoops, containers, magnifiers).

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U02	Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources.	Students directly examine soil components and discuss why plants – and therefore people – rely on soil.
AC9S3I04	Construct and use visual or physical representations to organise information and identify patterns.	Students may create a soil composition diagram, layer jar, or comparison chart (sand vs clay vs loam).
AC9S4H01	Examine how people use data to develop scientific explanations.	Students learn how farmers and gardeners use soil knowledge to choose where and how to plant.
AC9TDE4P02	Generate and communicate design ideas with graphical representation techniques.	Students communicate findings in the form of labelled charts or illustrated soil layers.
AC9TDE4P03	Select and use materials and tools to safely make designed solutions.	Students handle soil samples, jars, scoops, and sorting trays safely and appropriately.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U03	Investigate physical processes, such as weathering and erosion, that change Earth's surface over time.	The lesson includes soil formation from rock weathering and the importance of protecting soil from erosion.
AC9S5I04	Construct and use visual or physical models to describe patterns and relationships.	Students create soil layer diagrams, or model how soil holds or drains water, describing functional differences.
AC9S5H02	Investigate how scientific knowledge is used to make decisions.	Students discuss why caring for soil is essential for farming, food production, and sustainability.
AC9TDE6K01	Explain how people consider sustainability when designing environments and systems.	Students consider how soil is protected, restored, or conserved in gardens and farming systems.
AC9TDE6P03	Select and use materials, tools, and techniques to safely make designed solutions.	Students carry out structured soil testing or build soil conservation demonstration models safely.

Lesson 12: Volcanoes and Earthquakes

Theme: God's Power and Order in Natural Events
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand how earthquakes and volcanoes are caused by movement in the Earth's crust.
- Describe the structure of the Earth and how its layers interact.
- Identify how God's power and order are shown in the natural processes of the Earth.
- Develop scientific observation and explanation skills using models and experiments.
- Reflect on God's control and presence even in powerful natural events.

A) Introduction

Parent/Tutor Says:
"Have you ever felt the ground shake or seen video of lava bursting from a volcano? These events are powerful reminders of how amazing and active God's creation is. Today we'll learn what causes these events, how they help the Earth, and how even these powerful forces follow the order God created."

Key Vocabulary:

- **Tectonic plates**: Huge sections of Earth's crust that move slowly.
- **Magma**: Melted rock beneath the Earth's surface.
- **Lava**: Magma that has reached the surface.
- **Crust**: The Earth's outer layer.
- **Mantle**: The layer beneath the crust where magma forms.
- **Volcano**: An opening in the Earth's surface that allows lava, ash, and gases to escape.
- **Earthquake**: The shaking of the ground due to movement of tectonic plates.
- **Fault line**: A crack where plates meet and earthquakes may happen.

B) Informational Story: "When the Earth Rumbles"

One afternoon, Daniel was building a tower with wooden blocks when the ground gave a sudden shake. His blocks tumbled down. "Whoa!" he cried. "Was that an earthquake?"

His mum smiled gently. "Yes, just a little one. But even a little shake reminds us how powerful God made the Earth."

Daniel had always been curious about the world, and now his curiosity had been shaken wide open. "Why does the Earth move?" he asked.

His mum pulled out a globe and a diagram. “Our planet isn’t just a big solid ball. It’s like a giant layered cake. The outside layer is called the crust. It’s made of huge slabs called tectonic plates, and they move slowly – about as fast as your fingernails grow.”

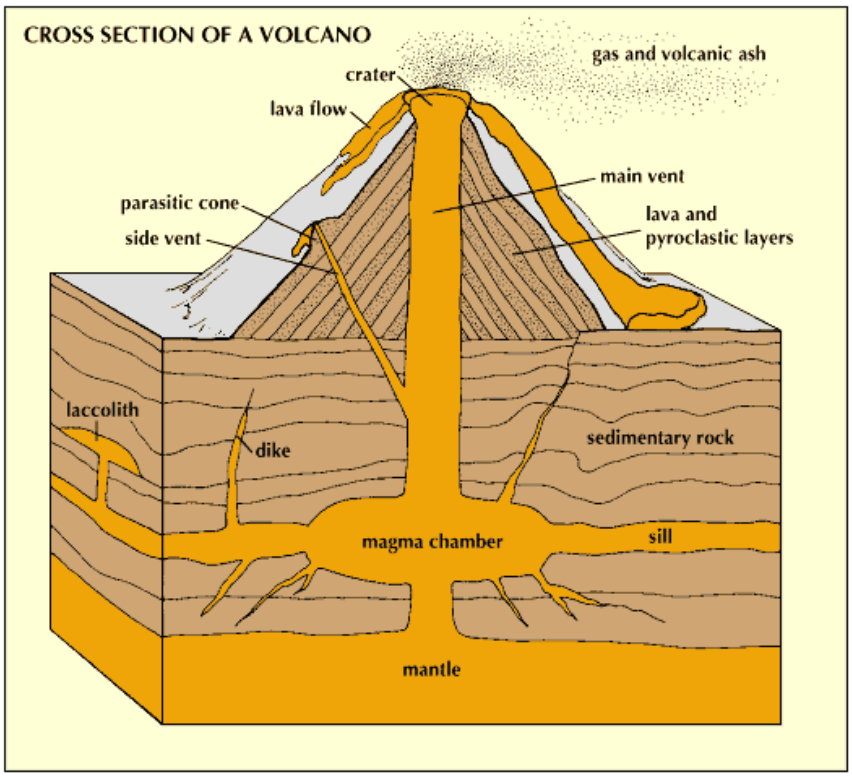
“But if they move so slowly,” Daniel asked, “why do they make earthquakes?”

“Great question,” said Mum. “The plates sometimes push against each other, or slide past. They get stuck, and pressure builds. When the pressure gets too strong – SNAP! The plates suddenly move, and that movement causes the ground to shake. That’s an earthquake.”

Daniel looked wide-eyed. “So, the Earth is alive?”

“In a way, yes,” said Mum. “It doesn’t breathe like people, but it changes and moves. That’s part of God’s order. He made a world that isn’t frozen in place, but active and renewing.”

Later that week, they studied volcanoes.



Mum showed Daniel a video of lava flowing from a volcano. “Volcanoes form when magma from the mantle builds up under the crust. When there’s too much pressure, it finds a way out – through a volcano!”

Daniel watched the glowing lava pour down the mountain. “Isn’t that dangerous?”

“Sometimes, yes. Volcanoes are part of how the Earth grows and changes. The lava cools into new rock. Some islands, like Hawaii, were formed completely from volcanoes. Even though they seem wild, they follow rules and patterns that God set in motion.”

Daniel remembered a Bible verse they had read: *Psalm 104:32* “He looks at the earth, and it trembles.”

He thought about how powerful God must be. “So even earthquakes and volcanoes obey God?”

Mum nodded. “Exactly. He knows every layer, every shake, every burst of lava. He isn’t surprised by these things. He created the world to change, but also to stay in balance. That’s real orderliness.”

Daniel smiled. “I guess even if things shake, I can trust that God is in control.”

Mum hugged him. “Yes, and when you build your life on God’s Word, it’s like building on solid rock.”

C) Narration

Parent/Tutor Says:
“Now it’s your turn! Can you tell me what you remember from the story? What causes earthquakes and volcanoes? Why do they happen? How do they show us God’s order?”

Encourage your child to explain tectonic plates, magma, eruptions, and how God uses these powerful events in orderly ways.

D) Teaching Skills

Parent/Tutor Says:
“Let’s practise a few science skills today: building models, making predictions, and recording observations.”

- Teach how to use diagrams to show Earth’s layers.
- Show a simple plate tectonics demonstration with crackers on peanut butter to mimic plates moving.
- Model safe observation and cause-effect recording using a volcano experiment.
- For older students: use charts to compare types of volcanoes or earthquake intensity scales.

E) Thinking Questions

i) **Foundations to Year 2**

1. What comes out of a volcano?
2. What makes the ground shake?
3. Who made the Earth and all its parts?
4. Are volcanoes and earthquakes part of God’s plan?
5. How can you stay calm and orderly when things feel wild?

ii) **Years 3 & 4**

1. What are tectonic plates?
2. Why do volcanoes erupt?
3. How do earthquakes happen?
4. What does it mean that God is in control, even when the Earth shakes?
5. How can we follow God's example of order when things feel uncertain?

iii) **Years 5 & 6**

1. How does plate movement show that Earth is active and alive?
2. Why do volcanoes and earthquakes reveal both God’s power and His order?
3. What’s something in your life that feels like it’s “shaking" – and how can you trust God in it?
4. What does Psalm 104:32 teach us about God's control over nature?
5. How can we reflect God's orderliness, even in unpredictable situations?

F) Practical Activities

Foundations to Year 2

1. **Paper Plate Earthquake** – Stack blocks or small boxes and shake a tray gently. Watch what happens.
2. **Paint a Volcano** – Create a colourful volcano picture and label magma, lava, and ash.

Years 3 & 4

1. **Cracker Plate Tectonics** – Use two crackers on peanut butter to model plate movement (collide, slide, pull apart).
2. **Simple Model Volcano** – Build a volcano with playdough. Pour in baking soda and vinegar to make it erupt.

Years 5 & 6

1. **Seismograph Craft** – Build a basic seismograph using a hanging marker over paper on a tray. Shake the tray.
2. **Map of Earthquake Zones** – Use an atlas or online map to locate real earthquake and volcano zones.

G) Optional Extension Research Activity

- Research famous volcanoes (like Mount Vesuvius or Mauna Loa).
- Watch a documentary or time-lapse of a volcanic eruption.
- Interview a geologist (or read a book) about earthquakes.

H) Biblical Connection & Wrap-up

Verse: Psalm 104:32 – "He looks at the earth, and it trembles."

Parent/Tutor Says:
"This verse reminds us that even the most powerful forces on Earth are under God's rule. He created the Earth with balance, power, and purpose. We don't have to be afraid because nothing is outside His care."

Discuss:

- What helps you remember God is in control when life feels shaky?
- What's one way you can stay calm and trust Him during surprises or changes?

Prayer: "Lord, thank You for the world You created with power and beauty. Help us trust You when life feels uncertain. Help us build our lives on You, our solid rock. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU03	Recognise that objects can be composed of different materials and describe observable properties of those materials.	Students observe rocks formed from eruptions (lava rock, pumice) and describe texture and hardness.
AC9SFH01	Explore the ways people make and use observations and questions to learn about the natural world.	Students discuss what they see in volcano images, videos, or teacher demonstration, and ask simple questions.
AC9S1I03	Make and record observations using informal measurements and tools as appropriate.	Students draw or describe what happens when a volcano erupts, based on observation.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students may create a simple volcano model (drawn or shaped) to show lava flow.
AC9TDE2P02	Use materials and techniques to safely make designed solutions.	Students use safe materials to construct a simple demonstration model (e.g., paper cone volcano).

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U02	Compare observable properties of rocks and examine why they are important Earth resources.	The lesson explains how heat and pressure change rock and create new rock types during eruptions.
AC9S4U02	Describe how natural processes and human activity can cause changes to Earth's surface.	Earthquakes and volcanoes are explicitly presented as natural processes that reshape land.
AC9S3I04	Construct and use visual or physical models to show patterns and relationships.	Students create volcano models or labeled diagrams showing magma–lava–crust relationships.
AC9TDE4P02	Generate and communicate design ideas using graphical representation techniques.	Students draw diagrams or labelled cross-sections of volcano structure.
AC9TDE4P03	Select and use materials and equipment to safely make designed solutions.	Students safely handle materials during a volcano demonstration (vinegar/bicarb or model clay).

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U03	Investigate physical processes, such as weathering, erosion, and plate movement, that change Earth's surface over time.	The lesson directly teaches plate movement, eruptions, and earthquake-caused landform changes.
AC9S5H02	Investigate how scientific knowledge informs decisions.	Students discuss how communities prepare for volcanic and earthquake risk.
AC9S5I04	Construct and use visual or physical models to describe patterns and relationships.	Students create tectonic plate models, rock cycle additions, or seismic wave diagrams.
AC9TDE6K01	Explain how sustainability and human needs influence design of environments and systems.	When discussing settlement near volcanoes and earthquake zones, students consider risk, agriculture benefits, and safety.
AC9TDE6P03	Select and use suitable materials, tools, equipment and techniques to safely make designed solutions.	Students handle materials for a more detailed model – layered cross-section volcano or tectonic plate demonstration.

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

Geology Fun Quiz – God's Order in the Earth

Covers Lessons 9–12 | Grades 1–6
Theme: God brings order from the inside out!

You can do this quiz aloud as a review game, assign it in writing, or turn it into a family competition.

Lesson 9: Earth's Layers

1. What are the four main layers of the Earth, starting from the outside?
2. Which layer do we live on?
3. What is the hottest layer deep in the centre of the Earth?
4. What does the mantle do?
5. How does the Earth's layered structure show God's order?

Lesson 10: Types of Rocks and Minerals

6. What are the three main types of rocks?
7. Which type forms from lava or magma?
8. What kind of rock forms in layers, like pressed-together dirt?
9. What do we call the tiny parts that make up rocks?
10. What does it mean that "There is no rock like our God"?

Lesson 11: Soil and Its Importance

11. What is soil made of?
12. Name two things soil helps do.
13. What is the best top layer of soil called?
14. Why is soil important for plants and people?
15. What does Genesis 2:7 say about the dust of the ground?

Lesson 12: Volcanoes and Earthquakes

16. What comes out of a volcano?
17. What causes earthquakes to happen?
18. What are tectonic plates?
19. True or False: Earthquakes and volcanoes are random accidents.
20. What does Psalm 104:32 say about God and the trembling Earth?

Bonus Round: Match the Bible Verses!

Match the verse to the correct lesson:

	A. Isaiah 45:12		1. Types of Rocks and Minerals
	B. Genesis 2:7		2. Volcanoes and Earthquakes
	C. 1 Samuel 2:2		3. Earth’s Layers
	D. Psalm 104:32		4. Soil and Its Importance

Answer Key:
A – 3
B – 4
C – 1
D – 2

Optional Scoring & Rewards

- 1 point per correct answer
- 2 bonus points for matching Bible verses
- Reward ideas: earth-tone snacks, a nature walk, a rock-painting craft, or a "Junior Geologist" certificate

TOPIC 4	THE WATER CYCLE

Bible Verse of the Week: Job 36:27-28 – "He draws up the drops of water, which distil as rain from the mist."

Overview:

This week, children will learn **how water moves through the Earth in a cycle, providing life for plants, animals, and people.**

Lesson 13: What is the Water Cycle?

Theme: God Keeps the Waters in Order
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand and explain the stages of the water cycle using correct scientific terminology.
- Describe the physical processes of evaporation, condensation, precipitation, and collection.
- Identify how the water cycle sustains life on Earth.
- Make predictions and observations related to water processes.
- Reflect on God's wisdom in creating an orderly system for renewing water.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about one of God's most amazing systems on Earth – the water cycle! This cycle keeps our rivers flowing, plants growing, and clouds forming, all in a beautiful pattern that repeats again and again. Let's explore the journey that a drop of water might take, and how God designed it all to work perfectly in order."

Key Vocabulary:

- **Evaporation**: The process where water changes from a liquid to a gas (water vapor) due to heat.
- **Condensation**: When water vapor cools and turns back into liquid droplets, forming clouds.
- **Precipitation**: Rain, snow, sleet, or hail that falls from clouds to the Earth.
- **Collection**: Water gathers in oceans, rivers, lakes, or soaks into the ground.
- **Water cycle**: The continuous movement of water through evaporation, condensation, precipitation, and collection.
- **Atmosphere**: The layer of gases surrounding Earth where weather occurs.
- **Orderliness**: A state of being neat, well-arranged, and following a pattern or plan.

B) Informational Story: "The Journey of Wally the Water Drop"

High in the misty mountains, nestled in a quiet stream, a tiny droplet of water named Wally lay resting. Wally had already had quite an adventurous life. He'd been part of a snowflake, swum in the vast blue sea, floated high in clouds, and even watered a daisy in someone's backyard. But this morning, as the sun rose over the hills, he felt the tug of a new journey beginning.

The sunlight warmed the surface of the stream. Wally, tucked near the top, began to wiggle. His temperature rose, and suddenly – whoosh! He transformed into a gas. He had evaporated!

"Wow!" Wally shouted, rising into the air. "This is evaporation! Heat from the sun changed me from a liquid into vapor. I'm not even visible anymore!"

Wally floated higher and higher into the sky, joining other invisible water molecules. As they rose into cooler air, something amazing happened – the tiny vapor particles began to join together. Wally stuck to a few others, then a few more, and before long, they became a visible water droplet inside a fluffy white cloud.

"Now we're condensing," Wally whispered. "This is called condensation. We're turning back into liquid water, and forming a cloud!"

More and more water vapor joined them. The cloud grew darker and heavier. Wally felt himself getting squeezed tighter between his droplet friends. Suddenly, the cloud could hold no more.

Plop! Down Wally fell.

He had become rain.

"This is precipitation!" he cried as he tumbled down toward the earth, joining millions of other drops. Some became snowflakes, some icy sleet, but Wally was plain, refreshing rain. He landed with a splash in a quiet forest puddle.

But the journey didn't stop there.

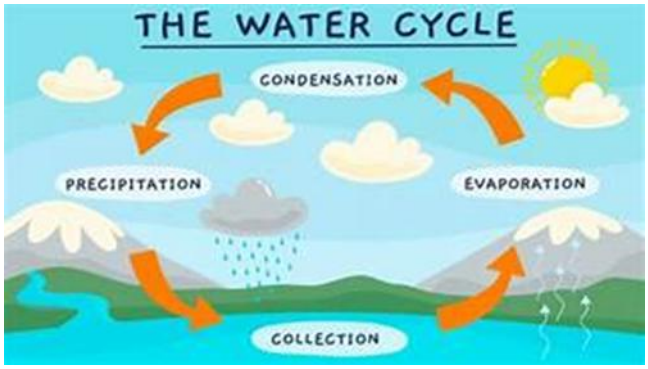
From the puddle, Wally sank into the soil and travelled underground. He joined an underground stream and eventually made his way to a mighty river. That river carried him back to the ocean – his biggest home of all. In the salty waves, Wally rested for a while, then began his journey all over again.

Sometimes Wally was drawn up from a plant's leaf in a process called transpiration. Other times he was pulled from a puddle by the sun's warmth. He visited icy mountain tops, became part of fog in the rainforest, or even turned into sleet in a winter storm.

Each time, no matter where he went, he noticed something: there was a pattern. A rhythm. A system.

Evaporation. Condensation. Precipitation. Collection. Repeat.

Nothing in God's water cycle was wasted. Every drop had purpose. Rain watered plants. Rivers fed animals.



Snow became rivers. Lakes stored water for dry times. It was all in order. Even when humans polluted or used too much, the cycle tried to balance things again.

Wally smiled (in his watery way). He felt small, but important. Every part of the water cycle needed him to keep going. And best of all, it reminded him that God made even tiny droplets like him with care and design.

One day, Wally found himself inside a clear glass of water. A child picked it up and drank. Wally had now become part of someone's body, helping them live and grow.

God, Wally thought, you are amazing. You take care of everything. Even me.

C) Narration

Parent/Tutor Says:
"Now, can you retell Wally's journey in your own words? Where did he go? What did he do? What words do you remember: evaporation, condensation, precipitation, collection?"

Help children remember the four steps in the water cycle. Encourage use of vocabulary and sequence.

D) Teaching Skills

Parent/Tutor Says: "Let's learn some important science skills to help us understand and explore the water cycle."

- Model how to draw a labelled diagram of the water cycle with arrows showing the direction of flow.
- Use a clear container with a small amount of water to observe evaporation over time.
- Teach how to make predictions (e.g., What will happen to the water if the sun comes out?)
- Older students can keep observation charts or measure water changes.

E) Thinking Questions

i) **Foundations to Year 2**

1. Where did Wally the Water Drop go first?
2. What made him float into the air?
3. What is rain called in the water cycle?
4. Who made the water cycle?
5. What part do we drink or use?

ii) **Years 3 & 4**

1. What are the four main stages of the water cycle?
2. How does the water cycle help plants and animals?
3. Why is the water cycle called a system?
4. What does this show us about God's planning and order?
5. What might happen if part of the cycle broke down?

iii) **Years 5 & 6**

1. Describe how evaporation and condensation are connected.
2. Why is precipitation important for Earth's ecosystems?
3. How does the water cycle reveal both change and balance?
4. What does the Bible say about water returning to the sea (Ecclesiastes 1:7)?
5. How can we act with orderliness in how we use and protect water?

F) Practical Activities

Foundations to Year 2

1. **Water Cycle in a Bag**: Draw the water cycle on a zip-lock bag. Add a little water. Tape to a window and watch evaporation and condensation.
2. **Cloud in a Jar**: Warm water in a jar, spray hairspray, and add ice on the lid. Watch a mini cloud form!

Years 3 & 4

1. **Mini Water Cycle Model**: Use a clear container with soil, a cup of water, and a plastic cover. Place in sunlight. Observe droplets on the cover.
2. **Evaporation Race**: Place equal water in different containers (plate, cup, bowl) and observe which evaporates fastest.

Years 5 & 6

1. **Create a Water Cycle Diagram Poster**: Include labels, arrows, and an explanation of each step.
2. **Investigate Local Water Use**: Interview someone (or research) how local farms or councils manage water.

G) Optional Extension Research Activity

- Research different forms of precipitation (hail, sleet, snow, drizzle).
- Explore how climate affects the water cycle in deserts vs. rainforests.
- Write a story of a water drop's journey in a new setting (e.g., Antarctica or the Sahara).

H) Biblical Connection & Wrap-up

Verse: Ecclesiastes 1:7 – "All streams flow into the sea, yet the sea is never full."

Parent/Tutor Says: "This verse reminds us that water is always moving, always returning, never wasted. That's the water cycle! It shows us that God created the world with care and order. We can trust Him to care for the Earth and for us."

Discussion:

- What do you think God is teaching us through the water cycle?

- How can we be careful and orderly with our water use?

Prayer: "Dear God, thank You for making the water cycle. Thank You for clean rain, clouds, and rivers. Help us see Your order in nature, and help us take care of Your world. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

Foundations–Year 2

Code	Full Description	Justification
AC9S1U02	describe daily and seasonal changes in the environment and explore how these changes affect everyday life	Students recognise that evaporation and rain are repeating natural patterns that happen regularly.
AC9SFH01	explore ways people make and use observations and questions to learn about the natural world	Students ask questions about clouds, rain, puddles drying, and where water goes when it disappears.
AC9S1I03	make and record observations using informal measurements and tools as appropriate	Students observe water evaporating or condensing on a cold surface and describe what they see.
AC9TDE2P01	generate and communicate design ideas through describing, drawing or modelling	Students draw or assemble a simple water cycle diagram showing sun → evaporation → clouds → rain.
AC9TDE2P02	use materials and techniques to safely make designed solutions	Students handle water, containers, or art supplies safely during the demonstration or craft cycle model.

Years 3–4

Code	Full Description	Justification
AC9S4U02	describe how natural processes such as evaporation and condensation cause changes to matter and affect water availability	The lesson directly teaches evaporation, condensation, and precipitation as parts of the cycle.
AC9S4I04	construct and use visual or physical models to show simple relationships and identify patterns	Students construct water cycle diagrams or physical models (jar condensation model).
AC9S3H02	investigate how scientific knowledge is used by people to meet needs or solve problems	Students discuss how understanding rain cycles helps with gardening, water supply, and farming decisions.
AC9TDE4P02	generate and communicate design ideas using graphical representation techniques	Students create labelled diagrams with arrows showing process flow (evaporation → condensation → rain).
AC9TDE4P03	select and use materials, tools and techniques to safely make designed solutions	Students handle jars, warm water, ice or craft materials safely to construct models.

Years 5–6

Code	Full Description	Justification
AC9S6U01	investigate how the Earth's surface processes and human activity shape landscapes and environments	The lesson connects the water cycle to river formation, erosion, water movement and landscape effects.
AC9S5I04	construct and use visual or physical models to describe patterns and relationships	Students may build a more detailed water cycle system model or diagram showing interactions (runoff, groundwater).
AC9S5H02	investigate how scientific knowledge informs decisions	Students discuss how water conservation and catchment planning depend on understanding the water cycle.
AC9TDE6K01	explain how sustainability and human needs influence design of environments and systems	Students connect water cycle understanding to sustainable gardening, irrigation, and land care.

Code	Full Description	Justification
AC9TDE6P03	**select and use materials, components, tools and techniques to safely make designed solutions**	**Students carefully assemble structured models (plastic box terrarium cycle, covered evaporation dish) ensuring safe material use.**

Lesson 14: Clouds and Rain

Theme: God Provides in Perfect Timing
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Identify and describe types of clouds and their role in the water cycle.
- Understand how rain forms through condensation and precipitation.
- Observe how God's timing and provision are shown through natural patterns.
- Conduct a model-based investigation of how clouds hold water.
- Reflect on biblical truths using Isaiah 55:10.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about clouds and rain. Did you know that God uses clouds to care for the Earth? We'll learn how clouds are made, how they give rain, and how even the sky follows God's orderly plan."

Key Vocabulary:

- **Clouds**: Groups of tiny water droplets floating in the sky.
- **Condensation**: Water vapour turning into liquid water (how clouds form).
- **Precipitation**: Rain, snow, sleet or hail falling from clouds.
- **Atmosphere**: The air that surrounds the Earth.
- **Cumulus**: Fluffy, white clouds.
- **Stratus**: Flat, grey clouds.
- **Cirrus**: High, wispy clouds.
- **Cumulonimbus**: Tall, stormy clouds that produce rain or lightning.

B) Informational Story: "Clara the Cloud Learns to Share"

Clara was a small cloud drifting high in the sky. She loved her peaceful place above the fields and towns below. Clara was light and puffy, and she often played by changing her shape – sometimes into a cat, sometimes a camel, and once even a doughnut!

But Clara had more than just fun in the sky – she had a purpose.

One warm morning, Clara noticed that the ground below looked thirsty. The riverbeds had shrunk. The trees looked tired. The flowers drooped like they were ready for a nap.

Clara whispered to herself, "Maybe it's time to rain."

She looked around. She wasn't big enough on her own, so she called out to her cloud friends. "Come help!" she cried. "God made us to water the Earth!"

Cumulus was the first to arrive, soft and full.

Stratus followed, flat and quiet.

Cirrus floated in like delicate feathers.

Then came big, booming Cumulonimbus.

Together, they began to gather more and more moisture. Water vapour in the air rose up and joined them. As the water droplets stuck together, they grew heavier. Clara felt herself change. She wasn't just puffy and light anymore. She was full.

The air grew cooler. The sunlight dimmed. The sky turned grey.

Then – plop. One raindrop fell.

Then another. And another. Drip! Drop! Splash!

The rain fell gently onto the Earth below. Animals lifted their heads. Trees stretched their branches. Rivers widened. Farmers smiled.

Clara felt joy bubble up inside her. She had done what she was made to do.

From above, Clara heard the Lord whisper, “As the rain and the snow come down from heaven… so is my word that goes out from my mouth.” (Isaiah 55:10)

She paused.

God was saying that just as clouds give rain to refresh the Earth, His words go out to refresh people’s hearts. Both have purpose. Both bring life.

Clara was just one cloud in the great sky, but she was part of God’s plan. She followed an orderly pattern – collect, condense, release. She gave rain exactly when it was needed. And she was glad.

From then on, Clara continued to do her job with joy. She watched the cycle repeat again and again – water rising, clouds forming, rain falling. It was never random. It was always just right.

C) Narration

Parent/Tutor Says:
“Now it’s your turn to tell the story back to me. What happened to Clara the Cloud? What did she do? Who helped her? What did she learn?”

Prompt younger students with questions: “Who joined Clara? What happened when she got full of water?”

D) Thinking Questions

i) **Foundations to Year 2**

1. What made Clara the Cloud start to rain?
2. Who helped her?
3. Who made the clouds and the rain?
4. What happens to the land when it rains?
5. How does rain show us God’s order?

ii) **Years 3 & 4**

1. What are some types of clouds and what do they look like?
2. How does water get into a cloud?
3. What is condensation?
4. How is rain like God’s Word?
5. Why is rain important for life on Earth?

iii) **Years 5 & 6**

1. How do clouds form? Explain condensation in your answer.
2. Why do clouds rain only when they’re full?
3. What does Isaiah 55:10 teach us about God’s Word and rain?
4. How do clouds and rain follow an orderly system?
5. What can we learn about God’s timing by watching nature?

E) Learning Activities

Foundations to Year 2

1. **Cotton Ball Cloud Types**: Make cloud models using cotton balls for cumulus, stratus, and cirrus.
2. **Rainy Day Art**: Use blue watercolour to create a rain painting. Talk about how God made rain.

Years 3 & 4

1. **Cloud Watch Journal**: Spend 10 minutes outside observing clouds. Draw and label them.
2. **Condensation Jar**: Fill a jar with warm water. Cover with a lid and ice. Watch the cloud form inside.

Years 5 & 6

1. **Cloud Classification Chart**: Research the four main cloud types and make a labelled chart.
2. **Create a Skit**: Act out the roles of water vapour, condensation, and precipitation.

F) Optional Extension Activity

- Research why it rains more in some places than others.
- Explore how humans measure rainfall (e.g. rain gauges).
- Make a diagram showing the link between clouds, rain, and rivers.

G) Biblical Connection & Wrap-up

Verse: Isaiah 55:10 – “As the rain and the snow come down from heaven… so is my word that goes out from my mouth.”

Parent/Tutor Says:
"This verse teaches us that rain brings life to the earth, and God’s Word brings life to our hearts. He sends both at the right time. God’s creation is full of order – even the clouds follow His plan."

Discussion:

- What does rain help us remember about God?
- When have you seen God’s perfect timing in your life?

Prayer:
“Thank You, Lord, for sending rain to the earth and Your Word to our hearts. Help us to listen to You and trust that You know the right time for all things. Amen.”

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S1U02	describe daily and seasonal changes in the environment and explore how these changes affect everyday life	Students learn that clouds and rain are regular weather patterns linked to seasons and daily changes.
AC9SFH01	explore how people make and use observations and questions to learn about the natural world	Students look at clouds and rainfall and ask simple "why" and "how" questions.
AC9S1I03	make and record observations using informal measurements and tools as appropriate	Students observe clouds and rain (real or pictured) and record observations through drawings or simple descriptions.
AC9TDE2P01	generate and communicate design ideas through drawing or modelling	Students may draw different types of clouds or create a simple cloud–rain picture sequence.
AC9TDE2P02	use materials and techniques to safely make designed solutions	Students safely use cotton balls, paper, or craft materials to represent clouds and rainfall.

YEARS 3 – 4

Code	Full Description	Justification
AC9S4U02	describe how natural processes such as evaporation and condensation cause changes to matter and affect water availability	The lesson explicitly teaches condensation in the water cycle and how clouds form.
AC9S4I04	construct and use visual or physical models to show simple relationships and identify patterns	Students perform the condensation experiment (warm water + cold surface / bag / jar) and observe cloud formation.
AC9S4H01	examine how people use data to develop scientific explanations	Students describe what they observe (e.g., "water droplets appear on the cold surface"), and link this to the explanation of clouds forming.
AC9TDE4P02	generate and communicate design ideas using graphical representation techniques	Students create labelled cloud formation diagrams showing water rising, cooling, condensing, and falling as rain.
AC9TDE4P03	select and use materials, components, tools and equipment to safely make designed solutions	Students safely handle warm water, containers, and simple tools during the condensation demonstration.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U01	investigate the processes of evaporation, condensation and precipitation and how they relate to weather and climate	The lesson links condensation and rain to weather systems and how clouds form under specific conditions.
AC9S5I04	construct and use visual or physical models to describe patterns and relationships	Students create more detailed diagrams or sequence flow charts showing the movement of water through clouds to rain.
AC9S5H02	investigate how scientific knowledge informs decisions	Students discuss how understanding cloud formation helps with predicting weather and making daily planning decisions.
AC9TDE6K01	explain how sustainability and human needs influence design of environments and systems	Lesson connects rainfall patterns to agriculture, water storage, irrigation, and drought planning.
AC9TDE6P03	select and use suitable materials, tools and techniques to safely make designed solutions	Older students may design a miniature closed water cycle container or expanded condensation model, requiring careful selection and handling of materials

Lesson 15: Rivers, Lakes, and Oceans

Theme: God Designed Water to Bring Life
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Identify and describe the unique features of rivers, lakes, and oceans.
- Understand how each type of water body supports ecosystems and human life.
- Reflect on how water systems display God's orderliness in creation.
- Investigate natural water filtering as part of Earth's systems.

A) Introduction

Parent/Tutor Says:
"Today we're going to explore three amazing water places that God made: rivers, lakes, and oceans. These water systems all have a special role in creation. We'll learn about each one, and how they bring life to people, animals, and plants. Then we'll hear a story about a little beaver who goes on a journey to see them all."

Key Vocabulary:

- **River**: Flowing water that moves from mountains to oceans.
- **Lake**: A large body of water surrounded by land.
- **Ocean**: The biggest body of salty water that covers most of the Earth.
- **Ecosystem**: A community of living things and their environment.
- **Filter**: Something that cleans or removes unwanted parts from water or air.
- **Orderliness**: When things are arranged in a proper and working pattern.

B) Informational Story: "Benji and the Big Water Adventure"

Benji the Beaver was no ordinary beaver – he was curious, adventurous, and loved anything to do with water. His dam was built beside a gentle river that flowed through the heart of a thick green forest. Benji spent every morning splashing in the current, chewing on willow branches, and tidying up the mud walls of his cosy home.

But one sunny morning, as the birds chirped and the mist lifted from the river, Benji's Grandpa came paddling up in a wooden canoe.

“Benji!” Grandpa called. “Today’s the day. Are you ready for your Big Water Adventure?”

Benji’s eyes widened. “Really? Today?! I’m ready! Where are we going?”

“We’re going to follow the path of water,” Grandpa said, with a twinkle in his eye. “From our river to a great lake, and all the way to the mighty ocean!”

With excitement bubbling like a stream, Benji packed some apples, nuts, and a notebook to sketch what he saw. They climbed into the canoe, Grandpa took the back seat to steer, and Benji sat up front, eager and wide-eyed.

The river curved gently, winding past tall reeds and sunlit stones. Grandpa explained, “Rivers are like God’s moving hands. They bring fresh water to animals, to people, and to the land. They start up in the mountains and travel all the way to the sea.”

Benji leaned over the side and let his paw trail through the current. It was cool and clear. Fish darted below. Birds soared above. A family of ducks paddled by.

After hours of drifting and paddling, the river suddenly widened. The trees grew more spaced out, and ahead of them sparkled a massive body of calm water.

“Wow!” Benji gasped. “Is that a lake?”

Grandpa nodded. “That’s right. This is Lake Serene. Lakes are like giant bowls of water. They don’t flow much, but they hold life – fish, frogs, and even turtles. Look over there.”

On the far side, a deer stepped softly through the grass to take a drink. A flock of herons circled and landed. Water lilies bloomed on the still surface.

Benji reached into the water and noticed how deep and still it felt. “It’s so peaceful here,” he whispered.

Grandpa smiled. “God made lakes as places of refreshment. They hold rainwater and river water, and they store it for dry seasons.”

They stayed at the lake a while, enjoying lunch on the shore, then pushed off again. The lake had a small stream flowing out of it. They followed it. As they paddled, the trees became shorter, the breeze stronger, and the air smelled different.

Salty.

Benji sniffed. “What’s that smell?”

“That,” said Grandpa, “is the smell of the sea.”

Before long, the small stream joined a mighty river. And that river grew wider, noisier, and deeper. Eventually, the trees vanished, and the sky opened wide.

Before them stretched an endless blue.

“The ocean!” Benji breathed.

Grandpa pulled in the paddle and let the canoe bob gently. Waves lapped the sides. Seagulls called. The horizon was so far away it looked like it touched the sky.

“This is amazing,” said Benji. “It goes on forever!”

“Almost,” chuckled Grandpa. “The ocean is the biggest part of the water cycle. It holds most of Earth’s water. Even though it’s salty, it feeds the clouds with evaporation.”

As they sat there, Grandpa opened his Bible and read Psalm 93:4: “Mightier than the waves of the sea is His love for you.”

Benji leaned against Grandpa and watched the waves. “God must really love us to make something this beautiful.”

“He does,” Grandpa said. “He made every drop with care. Rivers, lakes, oceans – they all have their purpose. Just like you.”

As the sun began to set, painting the sky with oranges and pinks, Benji felt small but special. He knew the world was big, the waters were wide, and God's love was even bigger.

C) Narration

Parent/Tutor Says:
“Now I’d like you to tell the story back to me in your own words. What happened to Benji and his Grandpa on their adventure? Where did they go? What did they learn about rivers, lakes, and oceans?”

Encourage all children to retell the story.

- Prompt younger students with: “Where did Benji go first?” or “What did he see at the ocean?”
- Ask older students to include descriptions of how water moves and changes.

D) Thinking Questions

i) **Foundations to Year 2**

- What is a river?
- What did Benji see at the lake?
- Who made all the water places?
- How do rivers help animals and people?
- What do oceans look like?
- What other questions about rivers and oceans would you like to find out about?

ii) **Years 3–4**

- How are rivers, lakes, and oceans different?
- What jobs do rivers and lakes do in God's creation?
- Why do we need water to stay healthy and alive?
- How does the ocean help make rain?
- What other questions about rivers, lakes & oceans would you like to find out about?

iii) **Years 5–6**

- Why is the movement of water through rivers important for ecosystems?
- What would happen if lakes dried up or rivers stopped flowing?
- How does Psalm 93:4 help us understand God's greatness using nature?
- How do Earth's water systems show God's orderliness?
- What other questions about rivers, lakes and oceans would you like to find out about?

E) Learning Activities

Foundations to Year 2

1. **Draw and Label Water Places**:
   Children draw a simple picture showing a river, lake, and ocean. Label each one.
2. **Water Pouring Play**:
   Use cups and bowls to mimic water moving from a high place (river) into a bowl (lake) and then into a large container (ocean).

Years 3–4

1. **Create a Water Map**:
   Use blue paper or draw a map showing a river flowing into a lake and then reaching the ocean. Label each part.
2. **Cloud Connection Poster**:
   Draw arrows showing how evaporation from lakes and oceans forms clouds, linking back to previous lessons.

Years 5–6

1. **Filtering Model**:
   Create a water filter using layers of rocks, sand, and soil in a jar. Pour water through it and observe how it's filtered.
2. **Design a Water System**:
   On paper, sketch a system where rain collects into rivers, flows to lakes, and ends in oceans. Include animal habitats and human use areas.

F) Optional Extension Activity

- **Local Water Research**:
  Research a local river, lake, or beach. What is it called? What animals live there? Is it used for farming, recreation, or drinking water?
- **Psalm Art**:
  Write out Psalm 93:4 and decorate the page with waves, water droplets, or ocean animals.

G) Biblical Connection & Wrap-up

Bible Verse: Psalm 93:4 – "Mightier than the waves of the sea is His love for you."

Parent/Tutor Says:
"God's love is bigger and stronger than anything in nature – even the waves of the ocean. When we see rivers moving, lakes resting, or waves crashing, we can remember that God made it all – and His love flows to us like water."

Reflect Together:

- What part of the water journey shows God's care?
- How can we thank God for water in our daily life?
- Have you ever seen a river or ocean and felt amazed/ Did it make you full of questions?
- What kind of questions would you like to ask God when you get to heaven?

Prayer:
"Dear God, thank You for making rivers, lakes, and oceans. Thank You for the water that gives life and for Your love that never runs dry. Help us remember how powerful and kind You are, just like You showed Benji in the story. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU03	Recognise that objects can be made of different materials and describe their observable properties	Students compare fresh water vs salt water and identify basic differences (taste described, colour, clarity).
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life	The lesson explains how rainwater collects in rivers/lakes and flows to the sea – a repeating natural pattern.
AC9SFH01	Explore how people make and use observations and questions to learn about the natural world	Students observe pictures/maps and ask questions like "Where does the river water come from?"
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling	Students draw a simple river system or create a clay/paper model showing water flow.
AC9TDE2P02	Use materials, components and techniques to safely make designed solutions	Students safely assemble a simple river–lake model using sand/dirt/water in a tray.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U02	Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources	The lesson highlights how soil erosion and rock/sediment movement shape riverbeds and lake environments.
AC9S4U01	Examine how natural processes cause changes to Earth's surface	Students learn that rivers shape the land, carve valleys, and carry sediment.
AC9S3I04	Construct and use visual or physical representations to identify patterns and relationships	Students create river system diagrams, showing source → stream → river → ocean.
AC9TDE4P02	Generate and communicate design ideas using graphical representation techniques	Students produce labelled diagrams/posters showing water movement and landforms.
AC9TDE4P03	Select and use materials, components, tools and equipment to safely make designed solutions	Students build a small-scale water flow model (sand + water tray) and observe erosion patterns safely.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U01	Investigate interactions and cycles within and between Earth's systems, including the water cycle	The lesson traces how rivers, lakes and oceans are connected by continuous water movement.
AC9S6U03	Investigate how physical processes such as weathering and erosion shape Earth's surface over time	The lesson explains river erosion, deposition, delta formation, and valley shaping.
AC9S5H02	Investigate how scientific knowledge informs decisions	Students discuss how water management affects communities, farming, and ecosystems.
AC9S5I04	Construct and use visual or physical models to describe patterns and relationships	Students may create scaled diagrams, river system flow maps, or erosion demonstration models.
AC9TDE6K01	Explain how sustainability and human needs influence design of environments and systems	The lesson addresses responsible water use, river protection, and managing water catchments.
AC9TDE6P03	Select and use suitable materials and techniques to safely make designed solutions	Students work with water flow models or mapping resources, requiring planned material use and careful setup.

Lesson 16: Water in Our Daily Lives

Theme: God Provides for Our Needs Through Water
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Recognise the many ways water is used in daily life.
- Understand how water is essential to health, hygiene, and sustainability.
- Identify habits for wise and ordered use of water.
- Reflect on how Jesus is the Living Water and how His gift is greater than any physical resource.

A) Introduction

Parent/Tutor Says:
"Today we're going to think about something we use every single day: water! We drink it, wash with it, clean with it, and more. But have you ever imagined what would happen if it suddenly disappeared? Let's listen to a story about a day when that actually happened – and what one girl learned from it."

Key Vocabulary:

- **Water supply**: Where water comes from before it reaches your home.
- **Thirst**: The feeling of needing to drink.
- **Resources**: Things we use to live and survive.
- **Essential**: Something very important or necessary.
- **Living Water**: A term Jesus used to describe the life He gives.

B) Informational Story: "The Day the Water Stopped"

Stillwater was usually a very ordinary little town – neither too big nor too small. People lived in neat houses, gardens bloomed with colour, and children laughed as they played in parks or walked to school with their backpacks bouncing behind them. Life was peaceful, predictable, and very...wet. Not because it rained all the time, but because everything in Stillwater seemed to run with water.

That's why no one was expecting what happened one quiet Tuesday morning.

Nine-year-old Ellie stood at the bathroom sink, humming to herself as she brushed her teeth. She had the minty taste of toothpaste in her mouth when suddenly – nothing. The water had stopped mid-stream. The tap made a few hiccupping gurgles and then went dry.

"Mum!" Ellie called, spitting into the sink. "The tap stopped working!"

Her mother came to check and tried the kitchen tap. Same result. Then the laundry. No water. “Maybe it’s a problem with the plumbing – maybe the pipes are blocked,” she said.

But as they walked to school, Ellie and her mum passed house after house with people scratching their heads, looking at empty watering cans and dry sinks. The bakery on the corner had a sign: “No water. Closed today.” The fountains weren’t running. The school bubbler was dry. By lunchtime, it was clear – there was no water anywhere in Stillwater.

The town’s mayor made an announcement: “There’s been a failure at the water treatment plant. The entire town’s supply is temporarily shut off. We are working hard to fix the problem.”

People did their best. Neighbours shared bottled water. Buckets were placed under trees to collect rain. Schools and shops adjusted. But life had changed in an instant.

At school, Ellie’s teacher Ms Carter asked the class, “Can you think of all the ways we use water every day?”

Ellie raised her hand. “To brush teeth.”

“Very good. What else?”

Soon the chalkboard was covered in words: washing hands, flushing toilets, cooking, drinking, watering gardens, cleaning dishes, showering, washing clothes, swimming, washing pets.

Ms Carter said, “Wow! Water is involved in almost everything we do. It’s easy to forget how precious it is.”

That evening, Ellie watched her mum carefully pour a bottle of water to cook pasta. Her little brother cried because he couldn’t have his bath. Ellie started to feel something new: grateful. She thought about all the times she’d left the tap running or splashed for fun without thinking.

That night she prayed, “God, thank-you for water. I didn’t realise how much we need it. Please help our town. And help me not to waste this gift.”

The next day, the repair teams were still working. The day after that, too. People grew more patient and creative. Ellie’s family used wipes to wash hands. People had a sponge bath instead of a shower.

Finally, on the third day, the mayor made a joyful announcement: “The water has been restored. Thank you for your patience.”

When Ellie turned on the tap and watched the clear stream pour out, she laughed with joy. She cupped her hands, took a sip, and whispered, “Thank You, God.”

Later that evening, Ellie read a verse in her Bible that said: “Whoever drinks the water I give them will never thirst.” She thought about Jesus, who promised living water – not for brushing teeth or watering gardens, but for hearts that needed Him.

That Sunday, Ellie shared her story at church and encouraged everyone to thank God for water – and even more, to thank Him for Jesus.

“Water runs out,” she said, “but Jesus never does.”

C) Narration
Parent/Tutor Says:
“Can you tell me the story back in your own words? What happened in Stillwater when the water stopped? What did Ellie learn?”

Encourage storytelling from each student.

- For younger children, help them remember key points like the broken tap and the list of water uses.
- For older students, ask them to include the spiritual lesson too.

D) Thinking Questions

i) Youngest Students (Years F–2)
• What happened when Ellie’s tap stopped working?
• Can you name three ways we use water every day?
• Who gives us water?

ii) Middle Primary Students (Years 3–4)
• How did the people in Stillwater react when they had no water?
• Why do you think God made water such a big part of life?
• How can we be more careful with the water we use?

iii) Older Primary Students (Years 5–6)
• What does this story teach us about being grateful for everyday things?
• In what ways is Jesus like “living water”?
• What habits can you start to help use water more wisely and reflect God’s order in creation?

E) Learning Activities

F–2 Learning Activities:

1. **Water Use Picture Chart** – Draw 4 things you do each day that need water (e.g. brushing teeth, watering plants).
2. **Water Use Matching Game** – Cut out pictures of water-related actions and match them to places they happen (bathroom, kitchen, garden).

Years 3–4 Learning Activities:

1. **Create a Water Diary** – Record every time you use water in one day. At the end, count how many times you used water and discuss.
2. **Thankfulness Poster** – Make a colourful poster that says, “Thank You God for Water!” Include drawings and short phrases.

Years 5–6 Learning Activities:

1. **Water Conservation Plan** – Write a plan for your household with five specific ways to save water. Present it to your family.
2. **Living Water Devotional** – Write a short reflection or devotional on what it means that Jesus gives us "Living Water." Include John 4:14 and how it applies to your life.

Activity for All Ages:
Create a "Water is a Gift" Wall Display
On a large poster board or wall space, invite everyone in the family or group to contribute one picture or sentence about why water is important. Add a Bible verse (John 4:14) in the centre.

F) Optional Extension Activity
Water Around the World Research Project (Years 4–6)
Research how people get clean water in different parts of the world. Compare that to your daily experience. Present what you learn using a poster, slide presentation, or short report.

G) Biblical Connection & Wrap-Up
Bible Verse: John 4:14 – "Whoever drinks the water I give them will never thirst."

Parent/Tutor Says:
"This verse reminds us that while we need water to live, we also need Jesus to have life forever. He gives our hearts and souls what they need most. When we feel thankful for water, we can also be reminded to thank God for the gift of Jesus."

Discussion:
• What do you think it means to 'never thirst' if we have Jesus?
• How can remembering this verse help us be grateful even when life is hard or when things run out?
• What are some ways you can share God's 'living water' with others?

Closing Prayer:
"Dear Lord, thank You for the water we use every day. Help us to use it wisely and never take it for granted. Thank You even more for sending Jesus, the Living Water, who satisfies our hearts forever. Amen."

Summary of Australian Curriculum Content Descriptions Used:

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFH01	explore how people make and use observations and questions to learn about the natural world	Students notice and discuss how they use water and why it matters.
AC9S1I03	make and record observations using informal measurements and tools as appropriate	Students **draw** or **list** daily water uses (simple recorded observations).
AC9TDE2P01	generate and communicate design ideas through drawing or modelling	Students create a **Water Use Picture Chart** to communicate ideas.
AC9TDE2P02	use materials and techniques to safely make designed solutions	Students use art materials safely while producing their chart or matching activity.

YEARS 3–4

Code	Full Description	Justification
AC9S4H01	examine how people use data to develop scientific explanations	Students **collect and count** instances of water use in their **Water Diary**, then discuss patterns.
AC9S3H02	investigate how scientific knowledge is used by people to meet needs or solve problems	Students discuss how communities depend on water systems and choose how to use water wisely.
AC9TDE4P02	generate and communicate design ideas using graphical representation techniques	Students create a **Thankfulness Poster** clearly communicating meaning and visual design.
AC9TDE4P03	select and use materials, components, tools, equipment and techniques to safely make designed solutions	Students construct posters or diaries using appropriate materials safely.

YEARS 5–6

Code	Full Description	Justification
AC9S5H02	investigate how scientific knowledge is used by individuals and communities to inform decisions	Students create a **Water Conservation Plan**, applying knowledge to real decisions.
AC9S5I04	construct and use representations to describe patterns and relationships	Students may organise water use information in lists, tables, or flow planning.
AC9TDE6K01	explain how sustainability and human needs influence design of environments and systems	Students evaluate water use and propose changes toward **sustainable household habits**.
AC9TDE6P05	develop project plans that include consideration of resources to individually and collaboratively make designed solutions	The **Water Conservation Plan** is a structured, step-based improvement proposal.

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

Here's a **Water Cycle Unit Quiz** designed for students in **Grades 1–6**, with three tiers of questions (younger, middle, older) and a mix of multiple choice, short answer, and Christian worldview reflections.

Water Cycle Unit Quiz

Covers Lessons 13–16
Bible Memory Verse: Job 36:27–28 – "He draws up the drops of water, which distil as rain from the mist."

Section A – For Younger Students (Grades 1–2)

Circle the correct answer or draw a picture if you like!

1. Where does rain come from?
   a) The ground
   b) The clouds
   c) Trees
2. What do we call it when the sun heats water and turns it into steam?
   a) Freezing
   b) Evaporation
   c) Melting
3. What did Clara the Cloud do?
   a) Flew to the moon
   b) Gave rain to the earth
   c) Turned into a rainbow
4. Name two ways we use water every day:
   - _____
   - _____
5. Who gave us water to enjoy and care for?

   _____

Section B – For Middle Students (Grades 3–4)

Answer the questions below in a sentence or two.

1. What are the three main steps of the water cycle?

   _____

   _____

   _____

2. Why do clouds let go of rain?

3. Match the cloud with its description:
   - Cumulus: _____
   - Cirrus: _____
   - Cumulonimbus: _____
   - Stratus: _____

   a) Dark and stormy
   b) Thin and wispy
   c) Gray and spread out
   d) Fluffy and white

4. Why should we not waste water?

5. What does Isaiah 55:10 teach us about God's Word and rain?

Section C – For Older Students (Grades 5–6)

Write thoughtful answers. You can talk about both science and faith.

1. Explain how water travels from the earth to the clouds and back down again.

2. How do rivers help clean water naturally?

3. Give two examples of how the water cycle shows God's order and wisdom.
   a) _____
   b) _____
4. What lesson did Ellie learn in "The Day the Water Stopped"?

5. Jesus said in John 4:14 that He gives "living water." What do you think He meant by that? How is Jesus like water for our hearts?

Bonus (For All Ages)

Draw a picture of the water cycle or your favourite kind of water (like a waterfall, ocean, or raincloud). Label what you can!

TOPIC 5	PLANTS

Bible Verse of the Week: Genesis 1:11 – "Let the earth bring forth grass, herbs, and fruit trees."

Overview:

This week, children will learn **how plants grow, the importance of trees, pollination, and how plants provide food for people and animals.**

Lesson 17: How Plants Grow

Theme: God's Design in Growth and Life Cycles
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand the basic stages of plant growth from seed to flower.
- Recognise the parts of a plant and their roles.
- Appreciate the importance of sunlight, water, soil, and care for healthy growth.
- Reflect on God’s orderly design in nature and spiritual growth.

A) Introduction

Parent/Tutor Says:
"Today we’re going to learn about how plants grow. Have you ever seen a seed turn into a flower or a tree? It takes time, sunlight, water, soil, and care. God has a special way of making plants grow in a beautiful, ordered process. Let's listen to a story about a little seed named Sammy and what happened when someone planted him."

Key Vocabulary:

- **Seed**: A tiny part of a plant that can grow into a new plant.
- **Root**: The part of the plant that grows underground and takes in water.
- **Stem**: The part that holds the plant up and carries water to the leaves.
- **Leaf**: The flat part that catches sunlight and helps make food for the plant.
- **Flower**: The colourful part that helps the plant make new seeds.

B) Informational Story: "Sammy the Sunflower Seed"

Sammy the Sunflower Seed had never seen the sky. For as long as he could remember, he had been tucked inside a brown paper envelope in the corner of a garden shed. He lay among dozens of other seeds, all waiting. It was dark and dry, but Sammy wasn't scared. He had hope in his heart. He had heard the whispers of the wind blowing through cracks in the shed, telling stories of tall green stalks and golden petals reaching toward the sun.

One breezy spring morning, the door creaked open. A little girl named Lily skipped into the shed with her mum. She picked up the envelope and opened it carefully. Sammy tumbled into her hand.

"Look, Mum! I'm going to plant a sunflower!"

Lily filled a little cup with soft soil and made a small hole with her finger. She placed Sammy in it gently, covered him with soil, and watered the spot with a teaspoon of water.

"There you go, little seed. Grow big and strong," she whispered.

At first, Sammy felt unsure. It was even darker in the soil than in the envelope. "Will I really grow?" he wondered. Days passed. Rain came. The sun warmed the earth. The soil hugged him close.

One day, something inside Sammy stirred. With a tiny stretch, he split open. From his body came a small white root that pushed down into the earth. It wriggled past pebbles, searching for water. Then came a shoot – green, soft, and determined – rising up, pushing him up, up until...

Pop!

It broke through the surface and felt the sunshine for the first time. Sammy had sprouted!

"Hello, world!" he thought joyfully.

As days turned into weeks, Sammy grew taller. His root system spread deep and wide, drawing water from the soil. His stem thickened and straightened, carrying that water up to his growing leaves.

Each leaf stretched toward the light, opening wide. Sammy learned that the leaves worked hard to make food using the sunlight and air. He was doing what God had designed him to do.

Before long, a small bud formed at the top of his stem. It grew bigger every day. Then, on a sunny morning, the bud burst open into a bright, yellow flower. Bees came to visit, collecting pollen. Birds sang nearby. Sammy stood tall and proud.

He wasn't just a seed anymore. He was a sunflower! And inside his centre, new seeds were beginning to grow – seeds that could one day become sunflowers, too.

Lily came outside and gasped. "Wow! You really grew!"

Sammy felt the warmth of the sun and the joy of being what he was created to be. He whispered a prayer of thanks to God, the Master Gardener who had given him everything he needed: soil, water, sunlight, and care.

Just like Sammy, all living things grow best when they are in the right place, with the right care. And just like Sammy had a purpose, so do we. God made everything with order and beauty – even tiny seeds.

C) Narration

Parent/Tutor Says:
"Now it's your turn. Can you tell me what happened to Sammy the Sunflower Seed? How did he grow? Try to remember as much as you can!"

Encourage children to narrate in their own words. Allow younger children to share simple retellings, and invite older children to include details like the roles of roots, stems, leaves, and flowers.

D) Thinking Questions

i) **Youngest Students (Grades 1–2)**

- What did Lily do with Sammy the seed?
- What helps plants grow?
- Who made plants grow from tiny seeds?
- Can you think of any other questions you want to find out about plants?

ii) **Middle Primary Students (Grades 3–4)**

- What are the four main parts of a plant, and what does each part do?
- Why do you think God made plants that grow in such an orderly way – from seed to flower?
- How can we help care for the plants God made?
- Can you think of any other questions you would like to research?

iii) **Older Primary Students (Grades 5–6)**

- How do the roots, stem, leaves, and flower work together to help a plant grow?
- What would happen if a plant had no sunlight or water?
- What can we learn about God's design and order from the way plants grow?
- If you were a scientist (botanist) what things would you want to find out about through observation and experiments?

E) Biblical Connection

Verse: Mark 4:8 – "Other seed fell on good soil. It came up, grew, and produced a crop."

Parent/Tutor Says:
"In this verse, Jesus tells a parable about seeds. Some seeds didn't grow because they landed in the wrong places, but the seed in the good soil grew and produced lots of food. That's like our hearts! When we listen to God's Word and let it grow in us, we become strong and fruitful."

Ask:

- What kind of "soil" do you think your heart is like right now?
- How can we make our hearts good soil for God's Word to grow?
- What does it mean to produce "a crop" in our lives?

F) Activity – Planting a Seed

Materials Needed:

- Bible
- Small plastic or paper cups (1 per student)
- Potting soil
- Seeds (e.g., sunflower, beans, or peas)
- Water
- Sunny windowsill or outdoor space

Instructions:

1. Give each child a cup and help them fill it ¾ full with soil.
2. Let each child plant one seed about 1–2 cm deep.
3. Gently cover the seed with soil and water it just enough to moisten the soil.
4. Label the cups with the child's name and place them in a sunny spot.
5. Over the coming days, observe the growth and record changes.

Parent/Tutor Says:
"Let's plant our seeds and remember: just like Sammy needed sunlight, water, soil, and care – so do we need God's Word, love, and time to grow strong in faith. Let's watch our seeds grow and see what God can do!"

Optional Extension Activity:

- Start a plant growth journal with daily or weekly entries.
- Measure plant height, draw pictures, or write reflections about spiritual growth.

G) Wrap-Up & Reflection

Parent/Tutor Says:
"God made every plant with a purpose and a pattern. From seed to flower, each part works together in order – just like how He made us to grow in wisdom, kindness, and faith. When we stay close to Him, we bloom!"

Encourage children to:

- Share what they're most excited about seeing as their plant grows.
- Thank God in prayer for the way He created both plants and people to grow.

Australian Curriculum Content Descriptions Used in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S1U01	identify what plants need to grow and survive	The lesson directly teaches that plants need sunlight, soil, water, and air.
AC9SFH01	explore how people use observations and questions to learn about the natural world	Students look closely at a plant/seedling and ask simple questions about how it grows.
AC9S1I03	make and record observations using informal measurements and tools	Students observe changes (new leaf, sprout height) and record drawings or simple notes.
AC9TDE2P01	generate and communicate design ideas through drawing or modelling	Students draw and label parts of the plant (root, stem, leaves).
AC9TDE2P02	use materials and techniques to safely make designed solutions	Students safely plant seeds or water seedlings during the activity.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U03	describe the key stages of the life cycle of plants	The lesson explains seed → sprout → plant → reproduction (e.g., seeds or flowers).
AC9S3I04	construct and use visual or physical models to organise information and identify patterns	Students make growth charts, labelled diagrams, or plant observation journals.
AC9S4H01	examine how people use data to develop scientific explanations	Students compare plant growth under different conditions (sun vs shade, more vs less water).
AC9TDE4P02	generate and communicate design ideas using graphical representation techniques	Students create posters or diagrams showing what plants need to grow.
AC9TDE4P03	select and use materials, components, tools and equipment to safely make designed solutions	Students handle soil, seeds, containers, and water safely.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U01	investigate how the Earth's systems, including water and air, support and sustain life	The lesson explains how soil, water, air and sunlight supply what plants require to live and grow.
AC9S5I04	construct and use visual or physical models to describe patterns and relationships	Students create structured observation tables, growth comparisons, or diagram plant systems.
AC9S5H02	investigate how scientific knowledge informs decisions	Students discuss how understanding plant needs affects gardening, farming, and food production.
AC9TDE6K01	explain how sustainability and human needs influence design of environments and systems	Students consider responsible watering, soil care, and resource protection when growing plants.
AC9TDE6P03	select and use suitable materials, components, tools and techniques to safely make designed solutions	Students handle gardening materials or seed-growing setups safely and purposefully.

Lesson 18: The Importance of Trees

Theme: God's Orderly Provision through Creation
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand the roles trees play in ecosystems and daily life.
- Identify and describe how trees contribute to air, soil, food, and shelter.
- Recognise God's intentional design and order in how trees function.
- Reflect on how being 'rooted' in God brings strength and stability.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about trees! Have you ever sat in the shade of a tree, climbed one, or picked fruit from a tree? Trees are not just useful; they are part of God's orderly world. He made them to provide so many things – clean air, food, homes for animals, and more. Let's listen to a story about a special talking tree named Toby."

Key Vocabulary:

- **Oxygen**: A gas we breathe that trees help produce.
- **Roots**: The part of a tree that grows underground and holds the tree in place.
- **Soil**: The ground that gives trees nutrients and support.
- **Habitat**: A home or environment where living things live.
- **Shade**: Coolness made when something blocks the sunlight.

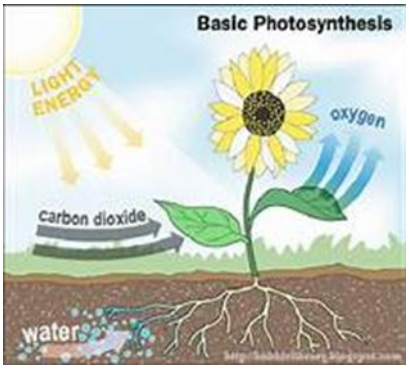
B) Informational Story: "Toby the Talking Tree"

In the middle of a peaceful park stood a tall old oak tree named Toby. Toby had stood in that very spot for more than 100 years. Children had climbed his branches, birds had built nests in his limbs, and squirrels had played tag up and down his trunk.

But Toby wasn't just any tree – he was a talking tree! He only spoke when someone asked a really good question. One warm afternoon, a curious boy named Jimmy leaned against Toby's trunk and sighed, "Why are trees so important anyway?"

Toby's leaves rustled, and his deep voice gently answered, "Ah, young one. That's a good question."

He continued, “Trees are a gift from God. We do many things without saying a word. Let me tell you what I do each day.”



“First,” he said, “I clean the air you breathe. My leaves take in something called carbon dioxide and give out fresh oxygen. Every breath you take might be thanks to a tree like me.”

Jimmy’s eyes widened. “Really?”

“Yes,” Toby said. “And when it rains, my roots hold the soil in place so it doesn’t wash away. I keep the earth strong and steady – just like the Lord’s love.”

Jimmy leaned closer. “What else?”

“I give food!” said Toby proudly. “Apple trees give apples. Orange trees give oranges. Nut trees give walnuts and almonds. Even trees that don’t make fruit help by giving homes to birds, bugs, and animals.”

“I never thought of that,” Jimmy said.

Toby bent a branch lower and whispered, “And let’s not forget the shade I give on hot days, the wood used to build homes, and even the beauty I bring each season.”

As the wind blew through his branches, Toby added one more thing. “But most of all, I remind people to stay rooted in God. Like the verse says – those who trust in the Lord are like trees planted by water. Strong, steady, and full of life.”

Jimmy looked up into Toby’s green leaves and smiled. “Thank you, Toby. You’re not just a tree – you’re one of God’s amazing creations!”

And as Jimmy walked home, he promised to take better care of trees – because he now understood they were much more than just leaves and bark.

Content Descriptions: AC9S1U01, AC9S3U01, AC9S3U02, AC9S5U01, AC9SFI01

C) Narration

Parent/Tutor Says:
“Now it’s your turn to tell me what happened in the story. What did Toby the tree say? Why are trees important?”

Let students retell the story. Younger children might focus on just one or two things Toby does. Older students can recall several points or repeat his lessons in their own words.

D) Thinking Questions

i) **Youngest Students (Grades 1–2)**

- What did Toby the tree do for people?

- What do trees give us to breathe?
- Who made the trees?

ii) **Middle Primary Students (Grades 3–4)**

- How do trees help the environment and animals?
- Why do you think God made trees to do so many things at once?
- What would happen if people cut down too many trees?

iii) **Older Primary Students (Grades 5–6)**

- Explain how trees clean the air and protect the soil.
- How can trees show us what it means to stay "rooted" in God?
- What is one way you can take care of trees and the earth around you?

E) Biblical Connection

Verse: Jeremiah 17:8 – "They will be like a tree planted by the water that sends out its roots by the stream."

Parent/Tutor Says:
"This verse compares a person who trusts God to a tree planted by water. That kind of tree never dries up and always has what it needs – because its roots are in the right place."

Ask:

- What do you think it means to have your roots in God?
- How do people who trust God grow strong like trees?
- What can we do to stay rooted in God every day?

F) Activity – Leaf Rubbing Art

Materials Needed:

- Bible
- Paper
- Crayons (remove paper covering so they can be rubbed sideways)
- A variety of leaves collected from outside

Instructions:

1. Go outside together and collect a few different kinds of leaves (large, small, smooth, jagged, etc.).
2. Place a leaf under a sheet of paper.
3. Gently rub the side of a crayon over the paper to reveal the leaf's shape and vein patterns.
4. Try different colours and leaf types. Talk about how each one is unique.

Parent/Tutor Says:
"Every leaf is different – just like every person. God made all of creation, including trees and you, with care and purpose. Just as trees are part of His good design, so are we."

Optional Extension for Older Students:

- Create a labelled diagram of a tree and write out how each part helps creation.
- Write a short reflection on what it means to be 'planted' in God.

G) Wrap-Up & Reflection

Parent/Tutor Says:
"God created trees for beauty, shelter, food, air, and more. When we care for trees, we are taking part in God's plan for a healthy and beautiful world. Let's thank Him today for every leaf and every tree. And let's be like trees planted by the water – strong and full of life because our roots are in Him."

Encourage children to:

- Share one thing they learned about trees today.
- Say a prayer of thanks for trees and for God's care in their lives.

Australian Curriculum Content Descriptions Used in This Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU02	identify and describe the observable features of living things and how they meet their needs	Students observe tree structure (roots, trunk, branches, leaves) and describe what trees need to grow.
AC9SFH01	explore how people make and use observations and questions to learn about the natural world	Students are encouraged to observe nearby trees and ask simple questions about their purpose and design.
AC9S1I03	make and record observations using informal measurements or images	Students draw or describe a tree and record what they notice (shapes, colours, leaf types).
AC9TDE2P01	generate and communicate design ideas through drawing or modelling	Students create drawings, nature-journal pages, or simple "Tree Importance" posters.
AC9TDE2P02	use materials, components, and techniques to safely make designed solutions	Students safely use paper, glue, natural materials, or simple craft items to make the poster or model.

YEARS 3 – 4

Code	Full Description	Justification
AC9S3U03	describe the key stages in the life cycle of plants and how they reproduce	Trees are discussed as living plants that grow, mature, produce seeds, and continue life cycles.
AC9S4H01	examine how people use scientific knowledge to develop explanations	Students learn why trees produce oxygen, how they support ecosystems, and how humans rely on them.
AC9S3I04	construct and use visual or physical models to organise information and identify patterns	Students create diagrams or charts showing ways trees provide resources (shade, fruit, timber, oxygen).
AC9TDE4P02	generate and communicate design ideas using graphical representation techniques	Students make clear, labelled posters communicating the benefits of trees.

Code	Full Description	Justification
AC9TDE4P03	select and use materials, tools and equipment to safely make designed solutions	Poster-making / collage construction requires safe use of scissors, glue, and drawing tools.

YEARS 5 – 6

Code	Full Description	Justification
AC9S6U01	investigate interactions and cycles within and between Earth's systems, including water and air, that sustain life	Students learn that trees play a role in producing oxygen and maintaining air and water cycles.
AC9S5H02	investigate how scientific knowledge is used by individuals and communities to inform decisions	Students discuss reforestation, resource management, and community-level decisions about tree care.
AC9S5I04	construct and use visual or physical models to describe patterns and relationships	Students create structured charts, diagrams, or written explanations of how trees support ecosystems.
AC9TDE6K01	explain how sustainability and human needs influence design of environments and systems	Students evaluate how deforestation, urban planning, and agriculture impact forests and environmental health.
AC9TDE6P05	develop project plans that consider resources to individually and collaboratively make designed solutions	Students may develop a Tree Planting Plan or Backyard/Garden Shade Improvement Plan, with steps and resource consideration.

Lesson 19: Flowers and Pollination

Theme: God's Beautiful Systems in Nature
Character Trait: Orderliness

Learning Objectives
By the end of this lesson, students will:

- Understand the role of pollination in the life cycle of flowering plants.
- Recognise how God designed flowers and pollinators to work together in an orderly way.
- Identify the process and importance of pollen transfer in nature.
- Reflect on how we can trust God, who takes care of creation with beauty and order.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about flowers and pollination. Did you know that flowers aren't just pretty to look at? They are designed by God with an important job. And He made little helpers – like bees – to help them do that job! Let's listen to a story about a bee named Buzz who explains it all."

Key Vocabulary:

- **Pollination**: The movement of pollen from one flower to another so new plants can grow.
- **Pollen**: A yellow powder that helps plants make seeds.
- **Pollinator**: An animal that carries pollen between flowers.
- **Petals**: The colourful part of a flower that attracts pollinators.
- **Nectar**: A sweet liquid inside flowers that bees and butterflies like to drink.

B) Informational Story: "Buzz and the Mystery of the Flowers"

Buzz the bee was on a very important mission. Every morning, he flew out of the hive and searched for flowers. Not just any flowers – the best flowers, with bright colours and sweet smells.

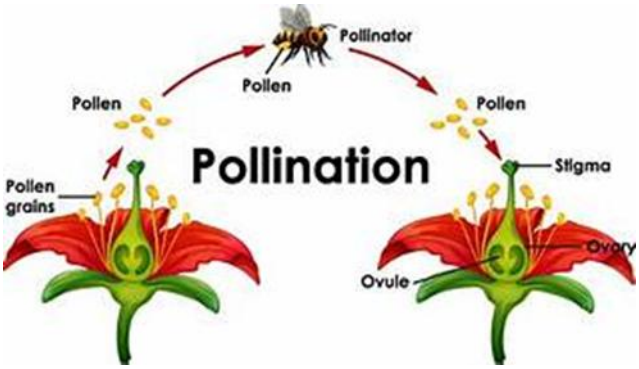
Buzz loved his job. He zipped from one flower to the next, collecting golden dust called pollen on his legs. "I'm just a little bee," he'd hum to himself, "but I help the world in a big way!"

One day, his little bee sister, Dot, followed him. "Buzz, why do you always go to flowers? What's so special about them?"

Buzz smiled and said, "I'm glad you asked!"

He led Dot to a patch of daisies and explained, "Flowers are more than pretty. God made them with a special purpose. Inside each flower is pollen. When I visit, some pollen sticks to me. When I go to the next flower, I leave a little pollen behind."

Dot blinked. “So… you’re helping flowers to grow?”



“Exactly!” said Buzz. “It’s called pollination. When flowers are pollinated, they can make seeds. And seeds grow into new plants, fruits, and vegetables. Without pollinators like me, many plants wouldn’t grow to give fruit with seeds to make new plants!”

Dot was amazed. “So, God uses bees to help plants grow and reproduce more plants”.

Buzz nodded. “He sure does. God made flowers bright and beautiful to attract bees and butterflies. He made us to be tiny helpers that keep everything working in order.”

Just then, a butterfly fluttered by. “Hi Buzz! I’m off to help the lavender today!” she sang.

Buzz and Dot waved. “Let’s keep working,” Buzz said. “We may be small, but God gave us a big job!”

And as they danced from flower to flower, Dot whispered a little prayer: “Thank you, God, for making flowers, bees, and the beautiful order of your creation.”

C) Narration

Parent/Tutor Says:
"Now it’s your turn. Can you tell me what happened in the story with Buzz and Dot? What did the bees do? Why are flowers and pollination important?"

Encourage children to retell the story in their own words. Prompt as needed: What is pollen? What happens when bees move from flower to flower? How did God design this system?

D) Thinking Questions

i) **Youngest Students (Grades 1–2)**

- What do bees do when they visit flowers?
- What does pollen help flowers do?
- Who made bees and flowers?

ii) **Middle Primary Students (Grades 3–4)**

- What is pollination, and how does it happen?
- Why do you think God made bees so small, but with such an important job?
- What would happen if there were no pollinators?

iii) **Older Primary Students (Grades 5–6)**

- How does pollination show us that God created the world to work in a system of order?
- How are flowers designed to attract pollinators?
- How can we help care for pollinators like bees and butterflies in our gardens and community?

E) Biblical Connection

Verse: Matthew 6:28 – "Consider the lilies of the field, how they grow."

Parent/Tutor Says:
"Jesus used flowers to teach us something important. He said we should look at how the lilies grow – without worrying, without working – and yet God clothes them in beauty. That means He takes care of creation and He takes care of us."

Ask:

- What does this verse show about God's love for His creation?
- Do flowers worry or try to grow on their own?
- How can we learn to trust God like the flowers do?

F) Activity – Pollination Game

Materials Needed:

- Bible
- Paper flower cutouts (or real/artificial flowers)
- Flour or sugar (to represent pollen)
- Small cotton balls (1 per student)
- Optional: Pipe cleaners or toy bees

Instructions:

1. Place a little flour or sugar in the centre of each paper flower.
2. Give each child a cotton ball or toy bee.
3. Have them pretend to be bees: press their "bee" onto the centre of one flower, then fly to another flower and press down again.
4. Observe how the "pollen" transfers between flowers.

Parent/Tutor Says:
"This is just like what Buzz did! Bees don't even know how important they are – but God uses them to keep the world growing. He uses us too, even when we feel small!"

Extension for Older Students:

- Diagram the parts of a flower (stamen, pistil, petals) and explain pollination with labels.
- Research a real-life pollinator (bee, butterfly, bat, or bird) and make a mini-report or drawing.

G) Wrap-Up & Reflection

Parent/Tutor Says:
"God created flowers with a job to do, and He gave bees and other pollinators a role in His creation, too. Everything works together in a beautiful system of order. And just like flowers and bees, we each have a purpose!"

Encourage children to:

- Share something they learned about flowers or bees.
- Thank God for His care in both creation and their own lives.

Australian Curriculum Content Descriptions Used in This Lesson

FOUNDATION – YEAR 2

Code	Full AC v9 Description	Justification Evidenced in Lesson
AC9SFU01	Observe external features of plants and animals and describe ways they can be grouped based on these features.	Students identify petals, pollen, nectar, and pollinator features in the story and introduction vocabulary.
AC9SFI02	Engage in investigations safely and make observations using their senses.	During the Pollination Game, students handle flowers and pollen substitute, observe transfer, and describe what they notice.
AC9TDE2P01	Generate and communicate design ideas through describing, drawing or modelling.	Students model pollination using objects to represent real structures and explain what each part represents.
AC9TDE2P02	Use materials, components, tools and techniques to safely make designed solutions.	Students assemble a working model flower system and use tools (glue, cotton-bud, cut-outs) safely in the activity.

YEARS 3–4

Code	Full AC v9 Description	Justification Evidenced in Lesson
AC9S3U01	Compare characteristics of living and non-living things and examine plant life cycles.	Lesson explicitly teaches pollination → seed formation → new plant growth.
AC9S3I04	Construct and use visual or physical models to organise data and identify patterns.	In the Pollination Game, students use physical models to represent flower structures and pollen transfer, identifying patterns in how pollination happens.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	Students build and use a functional model demonstrating pollination with materials and tools safely.
AC9TDE4P05	Sequence steps to individually and collaboratively make designed solutions.	The Pollination Game requires students to follow steps: gather materials, “collect pollen,” “transfer pollen,” observe effect, discuss.

YEARS 5–6

Code	Full AC v9 Description	Justification Evidenced in Lesson
AC9S5U01	Examine how structural features and behaviours enable survival in habitats.	Students analyse how petal colour, nectar scent, and bee foraging behaviour support mutual survival of both plant and pollinator.
AC9S5I04	Construct and use representations (tables, graphs, diagrams, or models) to describe patterns and relationships.	The pollination model acts as a representation of biological relationships and interdependence.

Code	Full AC v9 Description	Justification Evidenced in Lesson
AC9TDE6P03	**Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions.**	**Older students may create more refined or labelled flower models and demonstrate technique accuracy.**
AC9TDE6K03	**Explain how and why food and fibre are produced in managed environments.**	**Discussion question: *"What would happen if there were no pollinators?"* connects pollination directly to food production systems.**

Lesson 20: Fruits and Vegetables

Theme: God's Goodness in Food and Growth
Character Focus: Orderliness

Learning Objectives

By the end of this lesson, students will:

- Identify different types of fruits and vegetables and how they grow (underground, on vines, trees, or bushes).
- Understand the basic needs of plants and the natural processes that allow fruits and vegetables to grow.
- Describe how food is selected and prepared for healthy eating.
- Appreciate God's order and design in providing nourishing food for people and animals.
- Recognise the symbolic and spiritual meaning of "fruit" in the Bible.

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about fruits and vegetables – things we eat every day that grow in the garden or on farms. But have you ever wondered *how* they grow? What do they need? And why did God make such a colourful variety of foods for us to enjoy?

We'll start with some new vocabulary, then hear a story that helps us think about both physical food and something the Bible calls the 'fruit of the Spirit' – a different kind of fruit that grows in our hearts when we walk with God."

Key Vocabulary:

- **Vegetable**: A part of a plant used for food, such as the root, stem, or leaves.
- **Fruit**: The part of a plant that holds seeds and is often sweet or juicy.
- **Harvest**: The time when crops are picked and gathered for eating or storing.
- **Soil**: The dirt or earth in which plants grow.
- **Nutrition**: The process of taking in and using food for health and growth.
- **Healthy eating**: Choosing foods that give the body the right nutrients to grow and stay strong.
- **Fruit of the Spirit**: Qualities that God grows in us when we follow Him – like love, joy, peace, and patience.

B) Informational Story: "The Garden That Gave Good Gifts"

In a quiet, green valley surrounded by gentle hills and slow-moving creeks, there was a small but carefully tended garden. It wasn't the biggest garden in the land, but it was known by all who visited as the most beautiful, fruitful, and peaceful. The air always smelled faintly of herbs and blossoms. Bees buzzed contentedly among the flowering vines, and the soil was rich and dark – a deep chocolate colour that seemed to hum with life.

This garden belonged to a kind woman named Grace. Grace was not a young woman, but her eyes sparkled and her hands were strong. She had been a gardener all her life, and still loved gardening with her husband. Her parents had taught her the names of plants, how to dig and compost, when to sow and harvest. But over the years, she had learned something even deeper – how to talk to God while she gardened.

Each morning, Grace woke early. Before the sun had fully risen over the hills, she would kneel by her garden gate, bow her head, and whisper a prayer: "Lord, bless this garden. May it grow food to nourish and love to share."

Then she would begin her work – watering, weeding, pruning, harvesting, always with care. She knew each plant as if it were a friend. She could tell by the droop of a leaf whether the tomato needed water, or by the shade of green in a zucchini whether it was ready to pick.

In Grace's garden, rows of fruits and vegetables grew in neat order. Bright red tomatoes climbed up string trellises, their juicy bodies glistening in the sun. Orange carrots pushed their green tops above the soil. Bunches of purple grapes hung heavy on the vines. There were patches of strawberries that sparkled like rubies and corn stalks that whispered secrets in the breeze.

Each plant had a job to do. "Tomatoes give vitamins for our eyes and hearts," Grace would explain. "Carrots help us see well. Spinach makes us strong. And fruit – well, fruit is God's dessert!"

Grace believed every plant in her garden was a gift. Not just a gift *to* her, but a gift *through* her – something God had given her to grow so that others could be fed and blessed.

One sunny afternoon, Grace's grandchildren came to visit. They were city kids – used to buildings and buses, not bugs and beetroot. But as they stepped into the garden, their mouths dropped open.

"Whoa!" cried Eli, the eldest, staring at a lemon tree heavy with yellow fruit.

"Look at all the colours!" said Sarah, his younger sister. "Red, orange, green, purple... it's like a rainbow!"

Grace smiled and waved them over. "Come and see," she said. "Let me show you something special."

She led them to a wide tree in the centre of the garden. Its bark was golden-brown and rough, and its branches were strong and leafy. Hanging from the limbs were hand-carved wooden fruits, each painted with a different word.

"This," she said, "is the Fruit of the Spirit Tree."

The children blinked. "Is this a real fruit tree?" Sarah asked.

Grace chuckled. “Not the eating kind, no. This tree doesn’t grow food for your belly. I’ve put pretend fruit on it as reminders for your heart.”

Eli read the words aloud. “Love. Joy. Peace. Patience. Kindness. Goodness. Faithfulness. Gentleness. Self-control.”

“These are the fruits God wants to grow in *us,*” said Grace. “Just like the plants need good soil, sunlight, and rain to grow strong, our hearts need God’s Word, prayer, and time with Jesus to grow this kind of fruit.”

Sarah frowned thoughtfully. “So… if we’re kind to someone, that’s like a spiritual fruit growing?”

“Exactly!” said Grace. “The Fruit of the Spirit isn’t something you hold in your hand – it’s something others can see in your actions. When you forgive someone, that’s peace. When you wait patiently instead of complaining, that’s self-control. When you help a friend, that’s goodness.”

The children sat on a bench under the tree, quietly looking at the words. After a while, Sarah asked, “How do you grow this kind of fruit? Can we *choose* it, like picking apples?”

Grace picked up a watering can and handed it to her. “Come with me,” she said.

They walked back to the garden rows. Grace knelt beside a young broccoli plant. “To grow healthy food,” she explained, “you need four things: good soil, sunlight, water, and care.”

She pointed to the soil. “This is like our heart. If the soil is full of rocks, the seed can’t grow. If our heart is hard or full of anger, love won’t grow.”

Then she lifted the watering can. “Water is like God’s Word. It keeps our soul fresh.”

She tilted her head toward the sky. “Sunlight is like prayer. When we stay close to God, we feel His warmth and guidance.”

“And the care,” she finished, gently removing a weed from the base of the plant, “is choosing to remove the things that don’t belong – bad habits, mean words, selfishness.”

The children nodded slowly. “So, growing good fruit in our hearts takes time,” said Eli.

Grace beamed. “Just like in a garden. You don’t plant a seed today and eat the fruit tomorrow. God works in us slowly, carefully, but always faithfully.”

After their lesson, Grace gave each child a basket and sent them into the garden to harvest. They picked cucumbers, pulled carrots, filled bowls with blueberries and cherry tomatoes. As they worked, they began to name the Fruit of the Spirit aloud with each plant they picked.

“A cucumber for kindness!”

“Carrot for patience!”

“Blueberries for joy!”

Back at the table, Grace helped them prepare a big tray of vegetables for dinner. As they chopped and peeled and sliced, she reminded them how different parts of a plant are used for food – roots like carrots, stems like celery, leaves like lettuce, flowers like broccoli, and fruits like apples and cucumbers.

“God could have made us eat grey mush for nutrients,” she said with a grin. “But instead, He made crunchy, sweet, colourful, juicy food. That’s part of His goodness!”

That night, around the dinner table, they prayed together: “Thank you, God, for food that helps our bodies grow strong – and for your Spirit who helps our hearts grow to be good.”

C) Narration

Parent/Tutor Says:
“Now it’s your turn. Can you retell the story to me in your own words? Start by telling me about Grace and her garden. What kinds of fruits and vegetables did she grow? What was special about the Fruit of the Spirit Tree?”

Encourage students to include both the physical foods and the spiritual lessons in their retelling. Allow creativity in responses, and prompt with questions like:

- What did Grace teach about how plants grow?
- What do the fruits of the Spirit mean?
- How did the children learn about God’s orderly design?

D) Teaching Skills

Parent/Tutor Says:
“Before we explore questions and activities, let’s learn some useful skills.”

Teach the following concepts based on the story:

Science – Parts of Plants We Eat:

- Root: Carrot, beetroot
- Stem: Celery, rhubarb
- Leaf: Lettuce, spinach
- Flower: Broccoli, cauliflower
- Fruit: Tomato, cucumber, pumpkin
- Seed: Corn, peas
  Explain that “fruit” in science means the part of a plant that has seeds.

Design and Technology – Selecting and Preparing Healthy Food:

- Talk about how we choose foods to make meals healthy (e.g., combining fruits, veggies, grains, proteins).

- Explain how simple tools like knives or peelers are used to prepare food safely with adult supervision.

E) Thinking Questions

i) Foundation to Year 2

- Can you name some fruits or vegetables that grow under the ground?
- Which part of the plant do you think lettuce is?
- Why do you think God made food colourful and tasty?

ii) Years 3 & 4

- Why is it important to understand where our food comes from?
- What do fruits and vegetables need to grow well?
- How can we design meals that help us grow strong?

iii) Years 5 & 6

- What systems are involved in growing food in order (e.g., planting, watering, harvesting)?
- How do we use design skills to prepare food in healthy ways?
- How can you see God's order in how food nourishes both body and spirit?

F) Practical Activities

Foundation to Year 2 (Choose one):

1. **Fruit Sorting Game:**
   Provide real or toy fruits and vegetables. Ask children to sort them into “grows above ground” and “grows below ground.”
2. **Paint a Fruit of the Spirit Tree:**
   On a poster or paper, draw a tree and write the 9 fruits of the Spirit on painted fruit shapes. Stick them on the tree.

Years 3 & 4 (Choose one):

1. **Grow a Vegetable in a Jar:**
   Place a bean seed against a glass jar wall with a wet paper towel. Watch it sprout and record its progress.
2. **Design a Healthy Lunchbox:**
   Using pictures or drawings, plan a lunchbox with fruits, veggies, grains, and protein. Label which parts of the plant the foods come from.

Years 5 & 6 (Choose one):

1. **Create a Garden-to-Table Flowchart:**
   Diagram the steps from planting a seed to preparing food on a plate. Include roles like farmers, transport, shops, and kitchens.

2. **Meal Design Challenge:**
   Plan a dinner meal using at least 3 plant-based foods. Consider nutrients, preparation method, and visual appeal. Present as a poster or slideshow.

G) Optional Extension Research Activity

Research Task for Upper Primary:
Investigate one unusual fruit or vegetable (e.g., dragon fruit, okra, taro, or Romanesco).

- Where does it grow?
- What part of the plant is it?
- How is it eaten in different cultures?
- Why is it healthy?

Create a fact sheet or presentation to share.

H) Biblical Connection & Wrap-Up

Verse: Galatians 5:22–23 – "The fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control."

Parent/Tutor Says:
"Just like plants grow fruit when they're healthy and well cared for, our lives grow the Fruit of the Spirit when we stay close to God. We become more loving, patient, and kind – not because we try hard, but because God works in us."

Ask students:

- "Which Fruit of the Spirit do you see growing in your life?"
- "Which one do you want to grow more in this week?"
  Pray together:
  "Thank you, God, for giving us delicious fruits and vegetables for our bodies, and beautiful spiritual fruit for our hearts. Help us grow in kindness, joy, and love."

Australian Curriculum (v9) Content Descriptions Addressed

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU01	Observe external features of plants and describe ways they can be grouped.	Students describe and sort fruits vs vegetables by visible characteristics (roots, leaves, stems, seeds).
AC9SFI02	Engage in investigations safely and make observations using their senses.	Children handle, smell, observe, and compare fruits and vegetables during the sorting activity.
AC9TDE2K03	Explore how plants are grown for food.	Lesson explains where different foods grow (underground, vine, tree, bush).
AC9TDE2P04	Sequence steps for making designed solutions cooperatively.	Students follow steps: gather produce → observe → sort → discuss → reflect.

YEARS 3–4

Code	Full Description	Justification
AC9S3U01	Examine plant life cycles and how food plants grow.	Lesson explains how fruits are formed after flowering and contain seeds for new plants. (Story + vocabulary)
AC9S3I04	Construct/use visual or physical models to show relationships & identify patterns.	Students create sorting charts showing growth location patterns (root crops vs vine fruit, etc.).
AC9TDE4K03	Describe ways of producing food and fibre.	Lesson explains gardens, orchards, and farms as managed food production systems.
AC9TDE4P03	Select and use materials/tools to safely make designed solutions.	Students safely handle fresh produce and tools (e.g., safe cutting tools for older students).

YEARS 5–6

Code	Full Description	Justification
AC9S5U01	Examine how structural features of plants enable survival.	Lesson teaches why fruits contain seeds and protective coverings, and why vegetables store nutrients in roots.
AC9S5I04	Construct/use representations to describe relationships.	Students create diagrams or comparison tables of fruits vs vegetables and seed distribution.
AC9TDE6K03	Explain how and why food and fibre are produced in managed environments.	Lesson discusses gardens, farms, and orchards as intentional production systems under human care.
AC9TDE6P03	Select and use suitable materials/tools to safely make solutions.	Optional extension includes cutting fruit to examine seed structures, requiring safe tool selection & handling.

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

Here is a **Plants Unit Quiz** designed for **Grades 1–6**, with three levels of questions (younger, middle, older) and a mix of multiple choice, short answers, and Bible-based reflection. It reviews **Lessons 17–20** on how plants grow, the importance of trees, pollination, and fruits & vegetables.

Plants Unit Quiz

Bible Verse of the Week: Genesis 1:11 – "Let the earth bring forth grass, herbs, and fruit trees."

Section A – For Younger Students (Grades 1–2)

Circle the correct answer or draw your answers!

1. What do plants need to grow?
   a) Cake and juice
   b) Sunlight, water, soil, and air
   c) Shoes and backpacks
2. What part of the plant holds it in the ground?
   a) Stem
   b) Root
   c) Leaf
3. What do bees do when they visit flowers?
   a) Take a nap
   b) Spread pollen
   c) Plant seeds
4. Name one fruit and one vegetable that God gave us:
   - Fruit: _____
   - Vegetable: _____
5. Who made all the plants and helps them grow?

Section B – For Middle Students (Grades 3–4)

Answer the questions in a sentence or two.

1. What are the four main parts of a plant, and what does each part do?
   - _____
   - _____
2. Why are trees important for people and animals?
   - _____
3. What is pollination and why is it important?
   - _____

4. What does Galatians 5:22 mean when it talks about the “fruit of the Spirit”?
    - _____
5. What is one way you can take care of God’s creation this week?
    - _____

Section C – For Older Students (Grades 5–6)

Write complete answers using what you’ve learned.

1. Explain how a seed grows into a full plant. Include the words: seed, roots, stem, leaves, sunlight, and water.
    - _____
    - _____
2. How do trees help clean the air and keep the earth healthy?
    - _____
3. Describe how bees and butterflies help flowers. What would happen if pollinators disappeared?
    - _____
4. The “Fruit of the Spirit” is a picture of how we grow in our faith. Pick **two** fruits of the Spirit and explain how you can show them in your life.
    - Fruit 1: _____ – How I can show it: _____
    - Fruit 2: _____ – How I can show it: _____
5. How does this unit show that God brings **order out of chaos** in His creation?
    - _____

Bonus Activity (For All Ages)

Draw or label a plant. Include:

- Seed
- Roots
- Stem
- Leaves
- Flower or fruit

TOPIC 6	ANIMALS

Bible Verse of the Week: Genesis 1:24 – "Let the earth bring forth living creatures."

Overview:

This week, children will explore **the variety of animals God created, the differences between farm and wild animals, animals in the Bible, and how we can care for God's creatures.**

Lesson 21: Animal Classification – God's Variety

Theme: Variety and Order in God's Creation
Character Focus: Orderliness
Bible Verse: Genesis 1:25 – *"God made the wild animals according to their kinds."*

Learning Objectives
By the end of this lesson, students will be able to:

- Observe and describe external features of animals that allow them to be grouped (F–2)
- Compare the structural features of animals and how they help them survive in habitats (Years 3–6)
- Understand the purpose of classification and reflect on its usefulness in understanding God's creation (All)
- Pose questions, make observations, and sort animals based on features (All)
- Use visual models to represent classification systems (All)
- Use appropriate vocabulary to communicate findings (All)

A) Introduction

Parent/Tutor Says:
"Today, we're going to explore how animals can be grouped into different kinds based on their features – just as God made them. In the Bible, Genesis 1:25 says God made animals 'according to their kinds.' That means animals are designed to reproduce (have baby animals) that are the same kind as their parents – there is order in how animals were created – and scientists use this order to study animals more carefully."

Vocabulary Words:

- **Classification** – the way scientists group things by their features
- **Habitat** – the natural home of a living creature
- **Features** – things we can observe about an animal (like fur, feathers, or gills)
- **Mammal** – an animal with fur or hair, that gives birth to live babies
- **Bird** – an animal with feathers and wings, most of which lay eggs
- **Fish** – an animal that lives in water, breathes through gills, and has scales
- **Reptile** – an animal with dry, scaly skin (like lizards and snakes)

- **Amphibian** – animals that live in water when young and on land as adults (like frogs)
- **Insect** – a small animal with six legs, often wings, and a hard body covering

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B) Informational Story

"Aria's Amazing Animal Adventure"

Aria was a curious and bright-eyed girl who loved nothing more than animals. Her room was filled with books about wild creatures, plastic animal models, nature posters, and drawings of everything from penguins to platypuses. Every evening, she would line up her toy animals and pretend she was a zoologist at her very own wildlife sanctuary.

One rainy morning, something incredible happened.

As Aria rolled out of bed, a shimmer of golden light spread across her floor. Before she could blink, her room transformed. The walls melted away and were replaced by trees, waterfalls, deserts, and oceans. Her bed had turned into a little observation platform, and all her toy animals were now alive – walking, swimming, flying, or crawling all around her.

Perched on her bookshelf, now a tall wooden branch, sat a wise-looking owl. He wore reading glasses and had a satchel made of leaves.

"Good morning, Aria," the owl said in a warm, deep voice. "Welcome to God's Amazing Animal Adventure! My name is Professor Feather, and I'm here to teach you about the order and variety in the animal kingdom – just as your Bible says, 'God made them according to their kinds.' Shall we begin?"

Aria, still stunned, nodded eagerly.

"First, let's meet the **mammals**," said Professor Feather, flapping to a tree nearby. A lion strolled out from behind a bush, followed by a kangaroo, an elephant, a bat, and a humpback whale that swam through a river beside them. "Mammals have hair or fur, breathe air, and feed their babies milk. Most give birth to live young."

The elephant gently blew water toward Aria with its trunk, making her giggle. She stroked the soft fur of a baby kangaroo that hopped into her arms.

Next, a burst of colour filled the air – **birds**! Parrots squawked, eagles soared overhead, and penguins waddled by. "Birds are warm-blooded animals with feathers and beaks," Professor Feather explained. "They lay eggs and many of them fly, though some like penguins and ostriches don't."

Aria watched as a hummingbird hovered near a flower, drinking nectar with its long tongue.

Suddenly, the river bubbled, and out popped a school of **fish** – shimmering with every colour of the rainbow. “Fish live in water, use gills to breathe, and have fins and scales,” said the owl.

Aria knelt down and touched the water, seeing the tiny gills flutter on a trout’s neck.

Just then, the ground rustled beneath her feet. A **snake** slithered by and a turtle crawled up next to her. “These are **reptiles**,” said Professor Feather. “They have scaly skin, are cold-blooded, and most lay eggs. They live in warm places and move slowly to conserve energy.”

The turtle blinked slowly at Aria, and the snake hissed politely.

Then came the **amphibians** – frogs hopping, newts swimming, and toads croaking. “These creatures live part of their lives in water and part on land,” the owl explained. “They start life as tadpoles breathing with gills, then grow lungs and legs.”

Aria remembered the tadpoles she had once collected from a pond in spring.

The air filled with a soft buzzing, and Aria turned to see bees, butterflies, ants, and grasshoppers. “These are **insects**. They have six legs, some have wings, and they often play important roles in pollination or decomposition.”

The bees flew in formation, spelling the word “ORDER” in the air. Aria laughed aloud.

“Do you see how God made animals with different features?” the owl said. “Each group, or classification, has a purpose and place. Scientists study these features to help care for animals, protect habitats, and discover more about how the world works.”

As Aria looked around at the beautiful variety, she whispered, “God really made the animals with so much care.”

Professor Feather nodded. “Indeed, and now that you know how to observe and classify, you’re ready to care for God’s creation in an even deeper way.”

Suddenly, the light shimmered again. Aria was back in her room. Her toys were still on the shelf, her books still stacked high – but her heart was full of wonder.

Every time she saw a creature from then on, whether ant or elephant, she would smile and say softly, “You are wonderfully made.”

C) Narration

Parent/Tutor Says:
“Can you tell me the story of Aria’s adventure back in your own words? What animals did she meet? What were the different groups called? What special features helped her group the animals?”

Encourage:

- F–2: name 2–3 animals and say what's special about them
- Y3–4: list 3 or more animal groups and give at least one difference between them
- Y5–6: summarise classification concepts and God's purpose for variety

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D) Teaching Skills

Parent/Tutor Says:
"Let's learn the skill of classifying. Scientists observe animals and group them based on their physical features, such as skin covering (fur, feathers, scales), number of legs, how they breathe, and where they live. These features are called 'observable characteristics.'"

Show how to:

- Observe and describe features (size, skin, limbs, habitat)
- Think of questions that help you tell one animal from another
- Sort animals using charts
- Create a classification key or simple branching diagram
- Record findings using labelled diagrams or models

Model how to do this using 2–3 animal toys or pictures.

E) Thinking Questions

F–2:

- What do all insects have in common?
- How can you tell a fish from a reptile?
- Which animal group do you like best? Why?

Years 3–4:

- Why do you think God made animals to be so different?
- How does classifying animals help us protect them?
- Can you name one feature that would help you identify a bird?

Years 5–6:

- Compare amphibians and reptiles. How are they different?
- What happens when scientists find a new animal? How do they decide its group? What type of questions do they have to ask?
- How does studying classification help us understand God's order in nature?

F) Practical Activities

F–2:

1. **Animal Sort and Match** – Sort toy animals or printed pictures into groups (mammals, reptiles, birds, etc.) using a visual chart.
2. **Animal Feature Poster** – Draw or collage one animal and label its key features.

Years 3–4:

1. **Make a Classification Key** – Create a simple yes/no question tree to classify animals (e.g., "Does it have feathers?" → Bird).
2. **Design a Habitat Diorama** – Choose an animal group and create its natural environment in a shoebox using drawings and materials.

Years 5–6:

1. **Animal Investigation Report** – Research one animal from each group and write a short report explaining its classification and adaptations.
2. **Invent a New Creature** – Design an imaginary animal with mixed features and decide which group it would belong to. Justify your decision.

G) Optional Extension Research Activity

Research Project – Find out about Carl Linnaeus and how he created the modern system of classification. Present your findings with a diagram or timeline.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Genesis 1:25 says God made animals 'according to their kinds.' That tells us something important: God made the world with order and purpose. Each animal is uniquely designed to play a part in God's creation. Classification helps us understand and appreciate that order."

Ask:

- How can we show care for the animals in God's creation?
- What can we learn about God by studying animal variety?
- In what ways do you think the work of scientists (observing, asking questions, experimenting, recording their findings) could help identify problems in the world and make decisions to make the world a better place?

End with a prayer:
"Heavenly Father, thank You for making animals so wonderfully. Help us to see Your order and beauty in creation. May we care for all living things with respect and wonder. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full AC v9 Description	Justification (Evidence from Lesson 21)
AC9SFU01	Observe external features of plants and animals and describe ways they can be grouped based on these features.	Students look at pictures/models of animals and group them using observable features such as fur, feathers, wings, scales. Sorting activity explicitly requires classification based on visible traits.
AC9SFI02	Engage in investigations safely and make observations using their senses.	During the sorting activity, children observe, compare, and discuss animal features in a hands-on process. The lesson directs students to look closely and describe what they notice.

YEARS 3–4

Code	Full AC v9 Description	Justification (Evidence from Lesson 21)
AC9S3U01	Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals.	The lesson compares groups such as mammals, birds, reptiles, amphibians, insects, and fish, highlighting structural features and how they connect to life patterns.
AC9S3I04	Construct and use representations, including simple tables, graphs and visual or physical models, to organise information and identify patterns.	Students create or use classification charts to represent animal groups and recognise patterns in features that define those groups.

YEARS 5–6

Code	Full AC v9 Description	Justification (Evidence from Lesson 21)
AC9S5U01	Examine how particular structural features and behaviours of living things enable their survival in specific habitats.	Lesson discussion explicitly connects animal features (fur, feathers, gills, scales) to habitat and survival, particularly in the “older students” reflection.
AC9S5I04	Construct and use representations (tables, diagrams, or models) to describe patterns and relationships.	Years 5–6 students are expected to create or interpret classification diagrams, showing how features relate to groupings and survival.

Lesson 22: Animal Habitats

Theme: God's Wisdom in Animal Homes
Character Focus: Orderliness
Bible Verse: Psalm 104:24 – “How many are your works, Lord! In wisdom, you made them all; the earth is full of your creatures.”

Learning Objectives: By the end of this lesson, students will be able to:

- Identify different types of habitats and the animals that live in them (F–2)
- Describe how the features of different habitats help meet the needs of the animals that live there (Y3–4)
- Explain how the structural features and behaviours of animals support survival in specific habitats (Y5–6)
- Make and record observations about animal environments and represent them using labelled models (All)
- Ask questions and explore patterns between animals and their habitats (All)
- Communicate findings using appropriate scientific vocabulary (All)

A) Introduction

Parent/Tutor Says: "Today, we are going to explore animal habitats! A habitat is the natural home or environment of an animal or plant. God created many kinds of environments all around the world – and He designed animals to live in those places with special features and behaviours to help them survive."

Vocabulary Words:

- **Habitat**: the natural home or environment of a living thing
- **Adaptation**: a feature or behaviour that helps an animal survive in its environment
- **Desert**: a very dry habitat with little rain
- **Ocean**: a large body of salt water
- **Forest**: a place with many trees and animals
- **Grassland**: a flat area covered mostly with grasses
- **Arctic/Tundra**: a very cold place with ice, snow, and few trees

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B) Informational Story: “Zara’s Trip Around the Animal World”

Zara was a curious girl with a heart full of wonder. She loved animals, adventures, and especially maps. Her bedroom walls were decorated with world maps, nature posters, and little sticky notes marking places she dreamed of visiting – jungles in South America, deserts in Africa, frozen Arctic lands, and the deep, blue oceans.

Every night, before drifting off to sleep, Zara would trace her finger across her favourite map. “I wonder what it’s really like there,” she would whisper. “What animals live in the places I can only see on paper?” One night, as she prayed quietly, she added something new: “God, I want to see Your amazing world and the creatures You made. I want to understand where they live and how You take care of them.”

As soon as she shut her eyes, something incredible began to happen.

The map on her wall began to shimmer. A soft glow lit up each continent. Zara opened her eyes and sat up in bed, wide awake. The room was quiet except for the whisper of the wind outside. Suddenly, the map began to move. A golden thread spiralled out from the centre and wrapped around her gently. A calm and gentle voice spoke: “Come, Zara, and see the habitats I have created – the homes of My creatures. Each place is filled with wisdom and wonder.”

Before she could speak, Zara felt herself being lifted into the air.

She landed softly on warm, golden sand. The sun shone brightly overhead. Around her were towering dunes and clusters of rocks. A camel approached, its padded feet silent on the sand. It knelt before her and blinked slowly.

“Welcome to the desert,” said the voice.

Zara looked around. “It’s so dry here,” she said, rubbing her eyes from the glare.

The voice explained, “Yes, deserts receive very little rain, but I gave My creatures special features so they could live here. Look at the camel – it stores fat in its hump for energy and has thick eyelashes to keep sand out of its eyes. Its wide feet stop it from sinking into the sand.”

Zara smiled as she watched a lizard dart under a rock and a snake slither across the ground. “So even in a hard place like this, the animals can survive?”

“Yes,” the voice replied, “because I made them with care.”

Suddenly, a cool mist surrounded her.

Zara found herself underwater. She gasped, but she could breathe! Her hair floated around her face as schools of shimmering fish darted past. Coral reefs in every colour lined the seafloor. Dolphins clicked and leaped in the distance, and a sea turtle glided by, its flippers moving gracefully.

“The ocean,” the voice said. “Deep, vast, and filled with life. I made fish with gills to breathe underwater. I gave them fins to swim and tails to steer. Even the smallest creatures here have important jobs.”

Zara giggled as a curious octopus peeked out from behind a rock. “This is amazing! So much life under the sea!”

“Yes,” the voice replied. “And each creature plays a part in keeping the ocean balanced.”

Without warning, the water disappeared, and Zara stood in a lush, green forest. Tall trees reached toward the sky, their branches thick with leaves. Sunlight filtered down through the canopy. Birds chirped high above, and the scent of damp earth filled the air.

“This is the forest,” the voice said. “Full of shelter, shade, and sound.”

A squirrel darted past Zara’s feet, climbing up a tree. A family of deer grazed nearby, and in the distance, a bear lumbered through the undergrowth.

“Forests are layered,” the voice continued. “Some animals live in the treetops, some on the forest floor, and others burrow underground. Each has a role, and each knows its place.”

Zara tilted her head to listen to the chorus of birds. “I never knew so many creatures could live in one place.”

“Yes,” said the voice, “and I gave them what they needed to thrive.”

The trees faded away, and Zara was standing in a wide-open plain that stretched as far as she could see. Tall grass waved in the wind, and herds of zebras grazed in the distance. A group of lions rested under a tree. Elephants plodded along a dusty trail, their ears flapping slowly.

“Welcome to the grasslands,” the voice said. “These open spaces are home to fast runners, strong protectors, and gentle grazers.”

Zara watched as gazelles bounded through the grass. “They’re so fast!”

“They have to be,” the voice replied. “In this habitat, survival often depends on speed and awareness. Predators and prey both play a part in maintaining balance.”

A giraffe lowered its long neck to nibble at some leaves. “Everything has a reason, doesn’t it?”

“Yes,” said the voice. “Order and design are woven into every part of creation.”

The warm sun disappeared, and suddenly Zara was shivering. She looked around. Snow covered everything. The ground was hard and icy. A cold wind whipped across the frozen tundra. But even here, life moved.

She saw polar bears trudging through the snow. They paused and sniffed the air. In the distance, a group of penguins huddled together, their feathers thick and waterproof. Arctic foxes dashed over the snow, their white coats blending in perfectly.

“This is the Arctic,” said the voice. “It may seem empty, but even here I have placed creatures that are perfectly designed.”

Zara wrapped her arms around herself. “But how do they stay warm?”

“Thick fur, layers of fat, and special behaviours help them survive,” the voice explained. “They were not forgotten. Even in the coldest places, I provide.”

Zara stood still for a long time, watching the snow fall quietly.

Then, in the blink of an eye, she was back in her room. Her map was on the wall, her bed was soft beneath her, and the only sound was the ticking of her clock.

But everything looked different now.

She got up and touched the map. Each continent reminded her of the animals she’d seen: the camel in the desert, the dolphin in the sea, the bear in the forest, the elephant in the grasslands, the penguin in the cold.

“Thank You, Lord,” she whispered. “Your world is full of wisdom and wonder. Every creature has a place. Every home You made is perfect.”

From that day on, Zara didn’t just look at her map as a chart of countries and cities. She saw it as a canvas of life – a tapestry of God’s design. She would often say to her family, “God is the greatest builder. He not only made the animals, but He built their homes too.”

And whenever she learned something new about an animal or a faraway place, she would smile, because she had seen it with her own eyes – in the most amazing adventure of all.

C) Narration

Parent/Tutor Says: “Now it’s your turn. Can you tell me the story back in your own words? Where did Zara go? What animals did she see? What did she learn about their homes?” Encourage:

- F–2: name places and animals
- Y3–4: explain at least two habitats and matching animals
- Y5–6: summarise adaptations and God's design in nature

D) Teaching Skills

Parent/Tutor Says: "Let’s practise some science skills. When scientists study habitats, they ask questions, make observations, and record what they find. They also sort animals into groups based on where they live and how they survive there. Let’s practise asking questions and observing animal features."

Model how to:

- Pose questions like, "Why do penguins have feathers?"
- Observe features in photos or toys (e.g., fins, fur, paws)
- Use charts or labelled drawings to record where animals live

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E) Thinking Questions

F–2:

- Can you name a place Zara visited?
- What animal lives in the desert or ocean?
- Who gave animals what they need to live?

Y3–4:

- How are forests and grasslands different?
- Why do animals live in different habitats?
- What does Zara's story show us about God's care for creation?
- In what ways do you think the work of scientists (observing, asking questions, experimenting, recording their findings) could help identify problems in the world and make decisions to make the world a better place?

Y5–6:

- Describe two habitats and how animals are specially designed to live in them.
- Why is it important to keep animal homes clean and safe?
- How does the variety and balance of animal homes reflect God's order and wisdom?
- In what ways do you think the work of scientists (observing, asking questions, experimenting, recording their findings) could help identify problems in the world and make decisions to make the world a better place?

F) Practical Activities

F–2:

1. **Habitat Match Game** – Match animal pictures or toys to habitat cards and explain why they belong there.
2. **Draw My Habitat** – Choose an animal and draw a picture of its habitat.

Y3–4:

1. **Create a Habitat Diorama** – Make a mini-scene inside a shoebox showing one habitat and its animals.
2. **Habitat Sorting Chart** – Create a table that lists animal features and matches them to the correct habitat.

Y5–6:

1. **Research an Endangered Habitat** – Choose a real-life habitat and research threats and how to protect it. Present findings in a short report.
2. **Design-an-Animal** – Invent a new animal that lives in a specific habitat. Draw and label its special adaptations.

G) Optional Extension Research Activity

Research Project: Pick one of the habitats Zara visited. Find out what other animals live there and what problems they face. Create a short slideshow or poster with pictures, facts, and ways we can help.

H) Biblical Connection & Wrap-up

Parent/Tutor Says: “Psalm 104:24 says, ‘How many are your works, Lord! In wisdom, You made them all.’ That means God didn’t just make animals – He made the earth and all the places animals live. He thought about what each animal would need. That’s true wisdom and orderliness.” Ask:

- What do you love most about animal homes?
- How can we help care for the homes of God’s creatures? Close in prayer: "Dear God, thank You for making so many different places on earth. Thank You for giving animals just what they need to live and grow. Help us to take care of Your creation. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full AC v9 Description	Justification
AC9SFU01	Observe external features of plants and animals and describe ways they can be grouped based on these features.	Students sort animals into habitat groups based on visible body features.
AC9S1U01	Identify the basic needs of plants and animals and describe how the places they live meet those needs.	Lesson explicitly teaches that habitats provide food, water, shelter, etc.
AC9SFI02	Engage in investigations safely and make observations using their senses.	Students observe and discuss animals and their environments during sorting activities.

YEARS 3–4

Code	Full AC v9 Description	Justification
AC9S3U01	Compare characteristics of living things and examine differences between life cycles.	Lesson stories compare animals across multiple habitats, highlighting features and needs.
AC9S3I04	Construct and use visual or physical models to organise information and identify patterns.	Students create classification keys and group animals by habitat, showing pattern recognition.
AC9TDE4P03	Select and use materials, components, tools and techniques to safely make designed solutions.	Students build a habitat diorama using chosen materials.
AC9TDE4P05	Sequence steps to collaboratively make designed solutions.	The diorama requires choosing, arranging, constructing, and finalising in steps.

YEARS 5–6

Code	Full AC v9 Description	Justification
AC9S5U01	Examine how structural features and behaviours enable survival in habitats.	Lesson focuses on adaptations and how they support survival (fur for cold, fins for water, etc.).
AC9S5I04	Construct and use representations (tables, diagrams, models) to describe patterns and relationships.	Students create reports and classification charts showing relationships between habitat and survival.

No D&T codes apply here because the Year 5–6 tasks are written / conceptual, not construction tasks.

Lesson 23: Australian Animals – God's Wonder Down Under

Theme: Unique Designs in God's Creation
Character Focus: Orderliness
Bible Verse: Job 12:7–10 – "Ask the animals, and they will teach you… In His hand is the life of every creature."

Learning Objectives: By the end of this lesson, students will be able to:

- Observe and describe the unique features of iconic Australian animals (F–2)
- Understand how physical and behavioural features help animals survive in Australia's varied environments (Y3–4)
- Examine how the specialised structures and adaptations (design features) of native animals reflect design and order in nature (Y5–6)
- Make and record observations about Australian animals using scientific vocabulary (All)
- Communicate ideas through drawing, writing, and verbal retelling (All)
- Reflect on God's wisdom and creativity seen in uniquely Australian creatures (All)

A) Introduction

Parent/Tutor Says: "Today we're going to learn about animals that live right here in Australia. Many of them can't be found anywhere else in the world. God designed each of these animals with amazing features to live in our forests, deserts, rivers, and backyards."

Vocabulary Words:

- **Marsupial**: a type of animal that carries its baby in a pouch (e.g., kangaroo)
- **Design Feature (some people call them 'adaptations')**: a feature or behaviour that helps an animal survive
- **Nocturnal**: active at night
- **Burrow**: a hole or tunnel an animal digs to live in
- **Native**: living naturally in a certain area

B) Informational Story: "Ellie Explores the Outback"

Ellie was a curious girl who loved two things: exploring and animals. One school holiday, her family set out on a journey around Australia. Her dad called it an "outback adventure," and Ellie carried a small notebook wherever they went. She had decided that on this trip, she would become a little scientist – observing, recording, and marvelling at every creature God placed in her path.

On the first morning, Ellie woke to a rhythmic *thump, thump, thump* outside the tent. She poked her head out and gasped. A group of kangaroos bounded across the red earth, their strong back legs propelling them high into the air. Ellie scribbled quickly, *"Kangaroo – powerful legs for hopping, pouch for baby (joey). Can go long distances without much water."* Her mum added, "Did you know kangaroos can't walk backwards? Their tails act like a

third leg for balance. God designed them perfectly for this land." Ellie marvelled. It was like each feature was part of a thoughtful plan.

Later that day, while exploring near some bushes, Ellie spotted a small, round animal that looked almost like a rock – until it moved. It was a wombat! She watched as it pushed dirt aside with its sturdy claws and wriggled into the soil. "Wombats dig burrows to keep cool and safe," her dad explained. "And look – its pouch faces backwards so dirt doesn't bury the baby." Ellie chuckled. "That's really clever! God thought of everything." She jotted down, *"Wombat – strong claws, backward pouch, burrows for shelter."*

The next stop was a eucalyptus forest. High in the trees, Ellie spotted a fluffy grey ball clinging to a branch. A koala! It opened its mouth in a big yawn and then slowly munched on gum leaves. "Koalas only eat eucalyptus leaves," Ellie's mum explained, "and those leaves aren't very nutritious. That's why koalas sleep so much – to save energy. God gave them a special stomach to digest the toxins." Ellie thought about how tiring it would be if humans only ate lettuce. "Koalas are like sleepy little reminders that God equips every creature with exactly what they need," she wrote.

That night, Ellie stayed up with a torch and walked quietly near the campsite. Suddenly, she spotted a hopping shape with long ears. At first, she thought it was a rabbit, but then she noticed its long pointed nose and silky fur. "That's a bilby," whispered her mum. "It's nocturnal, meaning it comes out at night to search for insects and seeds." Ellie scribbled, *"Bilby – long ears to hear danger, nocturnal to stay cool, digs burrows."* She thought about how God designed some animals for daytime and others for night, balancing the whole system beautifully.

The next day, Ellie's family visited a river. She kept watch, her eyes scanning the water. Then, she saw it – something extraordinary gliding just above the surface. A platypus! Its flat bill bobbed as it searched for food. Its webbed feet paddled gracefully, and its furry body gleamed in the sunlight. Ellie almost dropped her notebook in excitement. "This one is amazing," her dad said. "It lays eggs but also feeds its babies milk. It looks like it's made of spare parts, but it works perfectly. When scientists first saw it, they thought it was a fake stitched together!" Ellie wrote with wide eyes, *"Platypus – bill for sensing food, webbed feet, egg-laying mammal."* She couldn't stop staring. To her, it looked like God's way of saying, "See? I can make creatures you'd never dream of."

On the way back to their campsite, Ellie nearly tripped over something spiky on the ground. She froze, then leaned closer. An echidna was waddling slowly across the track, its long snout sniffing the earth. Suddenly, it paused and curled into a ball of sharp spines. "Wow," Ellie whispered. "It's protecting itself!" Her dad explained, "Echidnas eat ants and termites using a sticky tongue. They're also egg-laying mammals, like the platypus." Ellie couldn't believe it. She added another note:

"Echidna – spikes for defence, long tongue for ants, lays eggs." She loved how God gave even small animals powerful protection.

The following afternoon, Ellie's family stopped at a wide, grassy plain. From the distance came a loud drumming sound – *thump-thump-thump*. A tall, powerful bird raced across the ground. "An emu!" Ellie cried. She watched in awe as the bird stretched its long legs, covering ground quickly. "Emus can't fly," her mum explained, "but they can run faster than almost any other bird – up to 50 kilometres an hour. And the father bird looks after the eggs and chicks!" Ellie wrote, *"Emu – runs fast, flightless, father cares for babies."* She thought that was unusual and wonderful – God had given even male animals the instinct to nurture.

By the final evening of the trip, Ellie's notebook was nearly full. She sat by the campfire, reading over her entries: kangaroo, wombat, koala, bilby, platypus, echidna, emu. Each creature had its own special features, its own way of surviving, and its own place in the world. None of them were alike, but together they showed how detailed and orderly God's creation really was.

Her dad opened his Bible and read aloud from Job 12:7–10: *"Ask the animals, and they will teach you… In His hand is the life of every creature."* Ellie looked up at the starlit sky, her heart full of wonder. She realised her notebook was more than a science record. It was a testimony – a collection of lessons from God's creatures about His wisdom and creativity. Smiling, she whispered, "Thank You, Lord, for kangaroos that hop, wombats that dig, koalas that munch, bilbies that sneak, platypuses that puzzle us, echidnas that protect themselves, and emus that run. You filled Australia with wonders, and they all show how great You are."

C) Narration

Parent/Tutor Says: "Now it's your turn. Can you tell me what happened on Ellie's trip? What animals did she see in Australia? What made them special?" Encourage:

- F–2: name one or two animals and describe what they do
- Y3–4: retell the story and explain one animal's behaviour or feature
- Y5–6: include discussion about how 'design features' suit the habitat

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D) Teaching Skills

Parent/Tutor Says: "Let's think like scientists. How do scientists learn about animals? They observe their features and behaviours, ask questions, and record what they find. Let's practise doing that with Australian animals."

Model how to:

- Ask a question (e.g., "Why does the wombat dig burrows?")
- Observe images or videos of native animals
- Record observations in drawings or labelled diagrams
- Use correct vocabulary to describe animals (e.g., pouch, bill, claws)

E) Thinking Questions

F–2:

- What animal carries its baby in a pouch?
- What kind of animal sleeps in a tree and eats leaves?
- Who made all these amazing animals?

Y3–4:

- What makes the platypus different from other animals?
- Why did God give koalas and wombats such different ways of living?
- What does this show about God's imagination and design?

Y5–6:

- How are Australian animals specially adapted to their environments?
- What can we learn about God's character by studying animals only found in Australia?
- How does the uniqueness of these animals reflect God's order and creativity?

F) Practical Activities

F–2:

1. **Animal Sort & Describe** – Use printed pictures or toys of Australian animals. Have children sort them (e.g., into land/tree/water animals) and describe a special feature.
2. **Australian Animal Collage** – Create a poster of 3 animals using drawings or cut-outs, and write one thing God designed them to do.

Y3–4:

1. **Field Notes Booklet** – Make a mini-book with a page per animal. Include its name, habitat, behaviour, and one adaptation.
2. **Design Feature Matching Game** – Match animal names to their survival features (e.g., wombat → digging burrows).

Y5–6:

1. **Australian Animal Research Poster** – Research one lesser-known native animal (e.g., bilby, quokka) and present its adaptations and conservation status.
2. **Invent-a-Marsupial** – Design a new marsupial suited to a specific Australian environment. Draw it and explain its special features.

G) Optional Extension Research Activity

Research Project: Choose one of the following:

- Research the conservation efforts for an endangered Australian species.
- Interview a local ranger, zoo worker, or wildlife carer (or research online) to find out how people protect native wildlife.
- Create a display showing how God cares for animals and how we can help.

H) Biblical Connection & Wrap-up

Parent/Tutor Says: "Job 12:7–10 reminds us that animals can teach us about God's wisdom. When we look closely at their design and how they live, we see that He made each one with a purpose. God didn't just create animals to be interesting – He made them to be part of a wonderful, working world." Ask:

- Which animal showed you something new about God today?
- How can we be good stewards of Australia's animals and environment? Close in prayer: "Thank You, Lord, for the animals of Australia. You made each one with care and creativity. Help us to learn from them and to protect Your creation with respect. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9SFU01	**Observe external features of plants and animals and describe ways they can be grouped.**	**Students look closely at features of Australian animals (fur, pouch, claws, tail) and describe what they see.**
AC9SFI03	**Represent observations in provided formats and identify patterns with guidance.**	**Students draw and label an animal to record observed features.**
AC9SFI06	**Share observations and ideas using everyday and scientific vocabulary.**	**Students verbally and visually communicate what they learned about the animal.**

YEARS 3–4

Code	Full Description	Justification
AC9S3U01	**Compare characteristics of living things and examine differences in life cycles.**	**Lesson contrasts marsupials, monotremes, and placental mammals – highlighting biological differences.**
AC9S3I04	**Construct and use representations (tables/charts/models) to organise information and identify patterns.**	**Students create a fact card or simple comparison chart, showing features patterns (e.g., "pouch," "nocturnal," "burrow").**
AC9S3I06	**Communicate findings using scientific vocabulary and labelled representations.**	**Students present their findings through labeled drawings and written sentences using terms like *marsupial*, *nocturnal*.**

Code	Full Description	Justification
AC9S5U01	**Examine how structural features and behaviours enable survival in specific habitats.**	**Lesson explicitly teaches adaptations (e.g., kangaroo legs for jumping, koala claws for climbing, platypus bill for sensing).**
AC9S5I04	**Construct and use representations to describe patterns and relationships.**	**Students analyse how features relate to survival and explain those relationships in written or oral form.**
AC9S5I06	**Communicate scientific ideas for specific purposes using relevant scientific language.**	**Students express adaptation-based reasoning using correct terms (e.g., *insulation*, *nocturnal*, *camouflage*).**

Lesson 24: Caring for God's Creatures

Theme: Responsibility and Kindness in God's Creation
Character Focus: Orderliness
Bible Verse: Proverbs 12:10 – "The righteous care for the needs of their animals."

Learning Objectives: By the end of this lesson, students will be able to:

- Identify practical ways to care for animals in homes and environments (F–2)
- Understand the responsibilities humans have in caring for animals (Y3–4)
- Reflect on the biblical purpose of stewardship and compassion in relation to animals (Y5–6)
- Observe, ask questions, and record ways to support animal welfare (All)
- Communicate care and concern through spoken responses, projects, and written reflection (All)

A) Introduction

Parent/Tutor Says: "Today we are learning what it means to take care of animals – the ones we know and the ones we don't see every day. God gave people a special job to look after creation, and that includes every creature with feathers, fur, fins, or scales."

Vocabulary Words:

- **Creature**: a living thing made by God, especially animals
- **Stewardship**: looking after something that belongs to someone else
- **Compassion**: kindness and care for someone who needs help
- **Domesticated**: animals that live with or depend on humans
- **Wildlife**: animals that live in nature without human help

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B) Informational Story: "Kindness for Feather, Fur, and Fin"

Lana loved animals – every kind, every size. Her pet cat Tilly always slept at the foot of her bed, and every morning, Lana would open her curtains and sprinkle seed for the sparrows that came to visit the garden. Even the lizards that sunned themselves on the backyard fence made her smile. But as much as she loved watching animals, she sometimes wondered how to truly care for them.

"Am I doing enough, God?" she whispered one day as she watched a noisy magpie chase another bird away. "How do I really take care of the creatures You made?"

That weekend, her parents took her to visit Grandpa's farm in the country. Lana always loved those visits – fresh air, wide spaces, and so many animals! Chickens, sheep, working dogs, and even a sleepy old horse named Banjo.

When they arrived, Grandpa was already by the gate, waving. "Lana!" he called. "You came at just the right time. I could use a helper with the animals today."

Lana grinned. "I'd love to help. Can you teach me how to care for them properly?"

Grandpa nodded. “Of course. Today, I’ll teach you what it means to care for God’s creatures – not just feeding them, but loving them the way He does.”

They started at the henhouse. Inside were six clucking hens scratching at the straw. The water tray was almost empty, and feathers were scattered about.

“Chickens need clean water every day,” Grandpa explained, handing Lana a small bucket. “And they like soft, dry straw to lay their eggs.”

Lana gently poured fresh water into the tray and fluffed up the bedding. One hen hopped into a nest box and cooed softly.

“They’re happy now,” Grandpa said. “A little effort from us means a lot to them. That’s what Proverbs 12:10 means: ‘The righteous care for the needs of their animals.’”

Lana thought about that. “So, God wants us to help animals, even chickens?”

“Especially chickens,” Grandpa said with a wink. “Jesus once said God notices every sparrow. If God watches over sparrows, then we can take care of hens.”

Next, they walked out to the paddock where the sheep were grazing.

“Do sheep need much help?” Lana asked.

“Oh yes,” Grandpa replied. “They need water, food, protection from predators, and someone to guide them. That’s why the Bible often talks about shepherds. Even King David started out as a shepherd.”

They filled troughs with grain and water. The sheep trotted over, baaing softly. One lamb nuzzled Lana’s hand.

Grandpa smiled. “Animals trust us to meet their needs. It’s a big responsibility. But it’s not just about doing jobs – it’s about showing care.”

As they walked toward the orchard, Lana saw something fluttering near the fence.

“Grandpa! A bird – it’s not flying properly!”

Sure enough, a small wren sat in the grass, one wing drooping. Lana rushed over but remembered not to touch it too quickly.

“Let’s help gently,” Grandpa said. “We’ll take it to the barn. I have a soft box we can keep it in while it rests.”

They lined a small box with cloth and placed the bird inside. It blinked up at Lana, but didn’t flutter.

“Will it get better?” she asked.

“Maybe,” Grandpa said. “But even if it doesn’t, we’ve shown God’s love. Remember – when God gave Adam dominion over the animals in the garden, it wasn’t to boss them around. It was to care for them, like God cares for us.”

Lana stroked the edge of the box. “I want to be someone who looks after animals like that.”

After lunch, Grandpa brought out some supplies: a cardboard toilet paper roll, peanut butter, seeds, and string.

“What’s this for?” Lana asked.

“We’re making a bird feeder,” he said. “Even wild animals can benefit from our help.”

Together, they spread peanut butter over the roll and rolled it in birdseed. Then they tied it with string and hung it from a tree near the barn.

“That will feed birds even after we go inside,” Lana said, proud of her creation.

“That’s right,” Grandpa said. “Sometimes our kindness is quiet, but God still sees it.”

Later, as the sun began to dip below the hills, Lana sat outside on the porch. The rescued bird slept quietly in the barn. The sheep were safe in their pen. A kookaburra laughed in the gum tree above, and Banjo the horse gave a slow snort from his stable.

“Grandpa?” she asked, watching the fading sky.

“Yes, dear?”

“Why do you think God made so many different animals?”

Grandpa thought for a moment. “Each one teaches us something. The ant shows us hard work. The dove shows us peace. The sheep reminds us that we need a shepherd. And every time we care for them, we’re reminded to be gentle, patient, and humble.”

Lana was quiet. “Do you think animals can teach us to be better people?”

Grandpa nodded. “Absolutely. And if we listen, we’ll hear the lessons God built into them.”

That night, Lana curled up in bed with Tilly, her soft grey cat. She whispered a prayer before sleep: “Thank You, God, for feathers and fur and even scales. Help me to care for Your creatures with love and responsibility, like You care for us.”

C) Narration

Parent/Tutor Says: "Now, can you tell me what happened in Lana’s story? What did she learn about how to care for animals? What did Grandpa teach her?" Encourage:

- F–2: focus on what Lana did (e.g., helped chickens, rescued a bird)

- Y3–4: describe the meaning behind her actions (e.g., kindness, care)
- Y5–6: relate story actions to broader ideas of stewardship and godly responsibility

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D) Teaching Skills

Parent/Tutor Says: "Let's think like animal helpers. When we want to take care of a creature, we need to look, listen, and ask questions. What does this animal need? Is it safe? Is it healthy? Scientists and carers learn by observing, asking, and recording."

Model how to:

- Ask questions ("What do chickens need each day?")
- Observe an animal's features and behaviours (even a pet or bird outside)
- Record what you see in a chart, photo, or drawing
- Discuss how people help or harm animals through actions

E) Thinking Questions

F–2:

- What did Lana do to help the chickens or the bird?
- How can you take care of a pet?
- Who wants us to be kind to animals?

Y3–4:

- Why is it important to take care of animals, even if they're not our pets?
- What did Grandpa mean when he said caring for animals shows God's love?
- How does being careful and kind show order in creation?

Y5–6:

- What does the Bible say about caring for animals? Why do you think that matters to God?
- How can we balance being in charge of animals and still being humble and loving?
- How does caring for animals reflect God's design for creation – where everything works together in peace and purpose?

F) Practical Activities

F–2:

1. **Feed & Care Role Play** – Set up a pretend animal care centre with soft toys. Children feed, clean, and comfort the animals.
2. **Kindness Poster** – Draw or collage ways to be kind to animals: feeding pets, leaving water out, not littering.

Y3–4:

1. **Pet Needs Chart** – Make a chart of what a pet needs each day. Include food, water, love, space, exercise, and clean shelter.
2. **Rescue Story** – Write a story or comic about helping a wild or domestic animal, showing care and responsibility.

Y5–6:

1. **Design a Wildlife Support Station** – Sketch a birdhouse, insect hotel, or frog pond. Include materials, purpose, and care plan.
2. **Creation Care Journal** – Keep a 5-day journal of how you interacted with nature and animals. Reflect on your habits and improvements.

G) Optional Extension Research Activity

Choose one:

- Research a local animal rescue organisation. What do they do and why?
- Interview a pet owner, vet, or ranger about how they care for animals.
- Create a brochure titled "Kindness to Creatures" with tips for families.

H) Biblical Connection & Wrap-up

Parent/Tutor Says: "Proverbs 12:10 says, 'The righteous care for the needs of their animals.' God notices how we treat the living things He made. When we show kindness to animals, we reflect God's own loving heart." Ask:

- What kind of person does this verse describe?
- How can you show God's care to the animals around you?
- What will you do differently this week? Close in prayer: "Dear God, thank You for every creature You made. Help us to care for animals, to protect them, and to be kind like You are. May our love for creation honour You. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full AC v9 Description	Justification
AC9S1U01	Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs.	Discussion centres on **what animals need to be cared for** and how we meet those needs in homes and environments.
AC9SFI05	Share questions, predictions, observations and ideas with others.	Students share ideas about **how we care for animals** and discuss personal experiences.
AC9SFI06	Communicate observations, findings and ideas using everyday and scientific vocabulary.	Students **express and explain care practices** through speaking or poster-making.

YEARS 3–4

Code	Full AC v9 Description	Justification
AC9S3H02	Consider how people use scientific explanations to meet a need or solve a problem.	The lesson teaches how humans **apply knowledge to care well for animals** and act responsibly.
AC9S3I01	Pose questions to explore observed patterns and relationships and make predictions based on observations.	Students ask reflective questions about **what animals need and how people should treat them**.
AC9S3I06	Write and create texts to communicate findings and ideas for identified purposes and audiences.	Students create **posters, messages, or writing** encouraging responsible care.

YEARS 5–6

Code	Full AC v9 Description	Justification
AC9S5H02	Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions.	Students examine **ethical stewardship**, community care (zoos, sanctuaries), and responsibility.
AC9S5I04	Construct and use representations to organise and process data and describe patterns and relationships.	Students may arrange **care actions, needs charts, or behaviour-responsibility links**.
AC9S5I06	Write and create texts to communicate ideas and findings for specific purposes and audiences.	Students produce **reflections, care guidelines, or stewardship statements**.

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

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Animals Unit Quiz

Bible Verse of the Week: Genesis 1:24 – "Let the earth bring forth living creatures."

Section A – For Younger Students (Grades 1–2)

1. What animal carries its baby in a pouch?
   a) Elephant
   b) Kangaroo
   c) Giraffe

2. Where did Noah take the animals to keep them safe?
   a) A boat (ark)
   b) A zoo
   c) A barn

3. Which of these animals might live in the ocean?
   a) Camel
   b) Dolphin
   c) Kangaroo

4. Can you name a pet that people take care of?

   _____

5. Who made all the animals?

   _____

Section B – For Middle Students (Grades 3–4)

1. Match each animal to its group:
   - Frog: _____
   - Parrot: _____
   - Tiger: _____
   - Butterfly: _____
   (Choices: Mammal, Bird, Amphibian, Insect)

2. Why do animals live in different habitats?

   _____

_____

3. What did the fish do in the story of Jonah?

_____

4. Name one way we can show kindness to animals:

_____

5. What does Proverbs 12:10 teach us about animals?

_____

_____

Section C – For Older Students (Grades 5–6)

1. Describe how the platypus is an example of God's creativity:

_____

_____

2. Explain the role of animals in the Bible stories of Noah, Jonah, and Balaam:

_____

_____

3. How does the variety of habitats reflect God's wisdom and order?

_____

_____

4. What are some responsibilities we have in caring for God's creatures?

_____

_____

5. Choose one animal from Australia and explain how it is suited to its environment:

_____

_____

Bonus Activity (For All Ages)

Draw your favourite animal from the unit and write one sentence about what makes it special.

TOPIC 7	WEATHER, SEASONS & CALENDARS

Bible Verse of the Week: Ecclesiastes 3:1 – "To everything, there is a season."

Overview:

This week, children will learn **how weather works, why we have seasons, how the sun and moon help us track time, and how we measure days, months, and years.**

Lesson 25: Types of Weather – God's Control Over the Skies

Theme: God's Order in the Natural World
Character Focus: Orderliness
Bible Verse: Matthew 8:27 – "Even the winds and the waves obey Him!"

Learning Objectives: By the end of this lesson, students will be able to:

- Identify types of weather and describe their impact on the environment (F–2)
- Explain how different weather patterns affect plants, animals, and people (Y3–4)
- Understand how weather systems display God's design and control over nature (Y5–6)
- Observe and record weather patterns using basic tools and sensory information (All)
- Communicate ideas about weather through discussion, hands-on activities, and journaling (All)

A) Introduction

Parent/Tutor Says:
"Today we are going to learn about weather! Weather is one of the amazing ways God looks after the world. The Bible tells us that even the winds and waves obey Jesus. That means He has complete control over the skies!"

Vocabulary Words:

- **Weather:** what the sky and air are like each day (sunny, rainy, windy, etc.)
- **Rain:** water that falls from clouds
- **Wind:** moving air
- **Sunshine:** light and warmth from the sun
- **Snow:** frozen water that falls from the sky in cold weather

B) Informational Story: "Sky Watchers at Sunrise Hill"

Every Friday morning, a small group of homeschool families would gather at Sunrise Hill – a grassy knoll that overlooked fields, hills, and a wide stretch of ever-changing sky. It had become their tradition: blankets, backpacks, binoculars, and weather journals in hand, ready to learn together. The children in the group proudly called themselves the **Sky Watchers Club**.

That morning, the sun had just begun peeking over the horizon when the children arrived. The sky was pale orange at the edges and deep blue above. There was a soft breeze in the air and a gentle rustling in the gum trees nearby.

Their leader, Mr. Ben – a former science teacher and longtime Christian – smiled as he greeted them. “Good morning, Sky Watchers! Are your journals ready?”

A chorus of voices responded with eager yeses and the rustle of notebooks being opened.

“Today’s mission,” he said, “is to observe and learn how different kinds of weather show God’s design and care for the earth.”

He pointed upward. “What do you see?”

Elliot, a keen 8-year-old with binoculars around his neck, answered first. “Some white, fluffy clouds. And a lot of blue.”

Mr. Ben nodded. “Good. That type of cloud is called a **cumulus** cloud. It’s usually a sign of good weather.”

“I feel wind!” said Hannah, spinning around with her arms out. “It’s not strong, just soft.”

“That’s right,” said Mr. Ben. “A gentle breeze. Wind helps move the clouds, carry seeds, and even change the weather.”

The children sat down on a big picnic blanket, journals open and pencils ready.

“Let’s start with **sunshine**,” Mr. Ben said, holding up a small flashlight. He shone it on a patch of green grass and asked, “Why is the sun important?”

“It makes plants grow!” said Mia, age six.

“It helps us see,” added Tyler. Mr. Ben nodded. “Yes! The sun gives light, warmth, and energy. Without it, there would be no life on earth. God placed the sun at just the right distance – not too hot, not too cold. That’s not an accident. That’s design.”

Next, he pulled out a spray bottle filled with water. “Now for **rain**.” He sprayed mist into the air, and the children reached out their hands to catch the tiny droplets.

“Rain gives water to plants and fills our lakes, rivers, and underground reservoirs,” Mr. Ben explained. “God sends it in just the right amount – sometimes more, sometimes less – but always with purpose.”

He pointed to the hill behind them, where earlier rains had turned the grass green again. “See that? Even after dry times, rain brings life.”

Just then, the breeze picked up.

“Here comes our friend **wind**,” Mr. Ben said, reaching for a small battery-powered fan. He switched it on and moved it slowly across the blanket. The children giggled as their papers fluttered.

“Wind can be strong or gentle. It spreads seeds, brings clouds, and helps cool the earth. It can also carry rain to where it’s needed. God uses wind to refresh the world.”

Jenna, a thoughtful 10-year-old, raised her hand. “What about snow? We don’t really get snow here.”

“Good question!” Mr. Ben said. “Snow happens when the air is very cold. It’s just frozen rain. It may look quiet and soft, but it has a purpose too.”

He held up some cotton balls. “Pretend these are snowflakes.” He passed them around. “Snow covers the earth and protects the soil underneath from freezing too hard. And when it melts, it gives water back to the land.”

“It’s like God gave every kind of weather a job!” said Max, amazed.

Mr. Ben smiled. “Exactly! Sunlight, rain, wind, snow – each has a role in keeping the world healthy and balanced.”

The group continued exploring. They looked at the shapes of clouds, drew weather symbols in their journals, and talked about the different seasons. Then Mr. Ben said, “Let’s read something together.”

He opened his Bible and read Matthew 8:27: *“Even the winds and the waves obey Him!”*

“Do you know who that’s about?” he asked.

“Jesus!” shouted several children.

“Yes,” said Mr. Ben. “One day, Jesus and His disciples were in a boat when a terrible storm came. The wind blew hard, and the waves crashed. The disciples were scared and woke Jesus up. Do you remember what He did?”

“He told the storm to stop,” said Emma.

“And it did!” added Liam. “Right away!”

“Right,” said Mr. Ben. “Jesus said, ‘Peace, be still.’ And just like that, the wind and the waves became calm. Why do you think the disciples were amazed?”

“Because only God can do that,” said Jenna.

“Exactly. That moment showed the disciples – and us – that Jesus is God. He has power over nature. We don’t have to be afraid of storms because Jesus is more powerful than any storm.”

The group sat quietly for a moment, listening to the wind and watching the clouds drift past the sun. A kookaburra laughed from a nearby tree.

Then someone whispered, “God really knows what He’s doing.”

Mr. Ben smiled. “Yes, He does.”

To finish, the children each chose one weather type to draw and write about. Hannah chose sunshine and wrote, “Thank You God for light and warmth.” Max chose wind and drew leaves blowing across a field. Jenna wrote a short poem about rain. Tyler made a diagram showing how snow melts into water.

As they packed up, Mr. Ben reminded them, “Next time you feel the wind on your face or see a raindrop on your window, remember – it’s part of God’s plan. Even weather obeys His voice.”

As the families walked back to their cars, the children still chatted about clouds and storms and sunshine. But under it all was a deeper sense of wonder – that the sky wasn’t just full of weather. It was full of God’s presence and design.

C) Narration

Parent/Tutor Says:
"Now I’d like you to tell me the story in your own words. What happened on Sunrise Hill? What did the Sky Watchers learn about weather?"

Encourage:

- F–2: describe rain, clouds, or sun
- Y3–4: explain what each type of weather does
- Y5–6: when you are retelling the story, connect the idea of purpose in weather to God's design and balance

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D) Teaching Skills

Parent/Tutor Says:
"When scientists study the weather, they look at the sky, take notes, and use tools to help them understand what’s going on. Let’s practise making some weather observations and thinking about how weather works."

Model how to:

- Pose a question: eg., "Why does it rain?" – “what other questions could we ask?”
- Observe the sky: use sight, sound, and touch
- Record observations in a journal or chart
- Discuss how weather changes from day to day

E) Thinking Questions

F–2:

- What does the sun do for the earth?
- What did the kids use to pretend rain and clouds?
- Who made the weather?

Y3–4:

- What are some ways that wind and rain help the earth?
- Why do you think God gave us different kinds of weather?
- How does weather show that God brings order to the world?

Y5–6:

- How does each type of weather help the earth in a unique way?
- Why do you think Jesus calming the storm is included in the Bible? What does that tell us about Him?
- What would the world be like if God didn’t use weather to keep things in balance?

F) Practical Activities

F–2:

1. **Weather Play Station** – Act out different types of weather using props (fan, spray bottle, flashlight, cotton balls).
2. **Weather Collage** – Cut out or draw pictures showing rain, sunshine, wind, or snow. Label and describe each.

Y3–4:

1. **Build a Mini Weather Station** – Use simple tools (thermometer, wind sock, rain gauge) to observe and record weather for three days.
2. **Create a Weather Wheel** – Make a spinning chart showing weather types and their effects.

Y5–6:

1. **Weather Journal** – Record the weather over a week, noting changes and how they affect nature and people.

2. **Weather Role Cards** – Assign students weather roles (sun, rain, wind, snow) and have them write about their job in God's creation.

G) Optional Extension Research Activity - Choose one:

- Research an extreme weather event (like a cyclone, blizzard, or drought) and explain its effects
- Interview a local farmer or gardener about how they rely on weather
- Explore Bible stories where God used weather for a purpose (e.g., Noah's flood, the storm Jesus calmed)

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Matthew 8:27 says, 'Even the winds and the waves obey Him!' That means Jesus has authority over every part of nature. When we see sunshine or feel the wind, we can remember that God is in control."

Ask:

- How do you feel when there's a big storm?
- How can knowing Jesus controls the weather help us trust Him more?
- What can we do to show thankfulness for sunshine, rain, and wind?

Close in prayer:
"Dear Jesus, thank You for creating weather to take care of the earth. Help us not to be afraid of storms. Help us to trust You and enjoy the world You made. Amen."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full AC v9 Description	Justification
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.	Lesson teaches types of weather and how they change day to day.
AC9SFI02	Engage in investigations safely and make observations using their senses.	Students observe weather outdoors as part of the Sky Watchers activity.
AC9SFI03	Represent observations in provided templates and identify patterns with guidance.	Children record weather in journals.
AC9SFI06	Communicate observations, findings and ideas using everyday and scientific vocabulary.	Students describe weather using words such as *wind, clouds, sunshine, rain.*

YEARS 3–4

Code	Full AC v9 Description	Justification
AC9S3U03	Describe how weathering, erosion and deposition result from natural processes and human activity.	Students discuss how weather affects plants, animals, and people.
AC9S3H01	Examine how people use data to develop scientific explanations.	Students learn that observing clouds, wind, and patterns helps predict weather changes.
AC9S3I01	Pose questions to explore observed patterns and make predictions.	Children ask and answer questions like *What weather might come next?*
AC9S3I03	Make and record observations using informal measurements and digital tools where appropriate.	Journaling weather conditions involves recording sensory and visual observations.
AC9S3I06	Communicate findings using scientific vocabulary.	Students use weather terms such as *breeze, cumulus cloud, sunshine* in discussion and writing.

YEARS 5–6

Code	Full AC v9 Description	Justification
AC9S5U02	**Describe how the rotation and tilt of Earth, in combination with the Sun, cause daily and seasonal changes.**	**Lesson theme connects weather and seasons as part of God's ordered system.**
AC9S5H02	**Investigate how scientific knowledge is used to identify problems and make decisions.**	**Students consider how weather knowledge helps communities prepare (e.g., storms, watering crops).**
AC9S5I04	**Construct and use representations to describe patterns and relationships.**	**Older students may chart weather changes over time.**
AC9S5I06	**Communicate scientific ideas using appropriate vocabulary.**	**Students explain weather patterns using terms like atmosphere, patterns, changes.**

Lesson 26: The Four Seasons – God's Perfect Timing

Theme: Earth's seasonal patterns and environmental rhythms
Character Focus: Orderliness – Observing God's faithful design in creation

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Learning Objectives:
By the end of this lesson, students will:
• Understand the cause and observable effects of the four seasons
• Recognise how seasons affect living things and environments
• Explore seasonal patterns through story, observation, and experimentation
• Represent environmental changes using creative and scientific methods
• Reflect on God's order in creation and how the seasons follow His faithful plan

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A) Introduction

Parent/Tutor Says:
"Today's lesson is about the four seasons – spring, summer, autumn, and winter. These seasons repeat every year and affect everything around us: trees, animals, weather, and even people. We're going to read a story about a tree named Maple and how she experiences each season."

Vocabulary Words to Teach First:

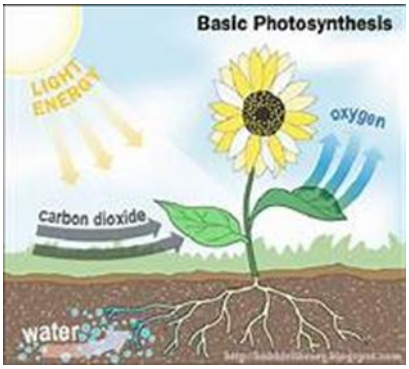
- **Season**: A part of the year with particular weather patterns – spring, summer, autumn (fall), winter.
- **Cycle**: Something that repeats in a pattern.
- **Dormant**: Resting or sleeping, not actively growing.
- **Photosynthesis**: How plants use sunlight to make food.
- **Migration**: When animals move to another place for a season.
- **Deciduous**: Trees that lose their leaves in autumn.

B) Informational Story: "The Year of the Tree"

In the middle of a peaceful backyard, there stood a tall and graceful maple tree. Her name was Maple. She wasn't like the animals who ran and hopped and flew – she didn't move from place to place – but oh, how much she noticed. She had stood in the same soil for decades, stretching her roots deep into the earth, her branches wide into the sky. Every year, she watched the world change through four beautiful seasons.

Spring – A Season of Renewal
After the long, cold quiet of winter, the sun returned with warmer rays. The snow melted, and water soaked into the earth. Maple could feel it. Her roots drank the water eagerly, and deep inside, a signal told her it was time. Buds appeared along her branches – tiny green tips full of promise.

Bees, just awakened from hibernation, buzzed nearby. Birds chirped as they searched for twigs and string to build nests among Maple's branches. "Welcome back," Maple whispered. The sun shone longer each day, and with it came warmth and light – two things Maple needed for her special job: **photosynthesis**.



Photosynthesis is how plants make their food. Using energy from the sun, Maple's leaves would soon convert sunlight, carbon dioxide, and water into sugar for energy. "This is how I grow strong," Maple thought. "God gave me this pattern to follow."

Baby rabbits hopped across the grass, nibbling the fresh shoots. Rain fell gently, soaking the ground. Everything was fresh, new, and full of life.

Summer – A Season of Strength

Now the days were long and hot. Maple's canopy was full – lush, wide leaves rustled in the breeze. Her branches stretched with strength and confidence, casting cool shade on the grass below. Children played beneath her: reading books, sipping lemonade, playing tag.

"I'm at my strongest now," thought Maple. "This is the season of work." Her leaves were busy – transforming sunlight into food all day. Her roots pulled water from the soil. She needed that water to stay healthy. Summer wasn't always easy. There were storms, hot winds, and sometimes dry weeks with no rain. But Maple had learned to store water and stay steady. Her bark protected her. Her deep roots anchored her.

Even as people came and went, Maple stayed, working steadily, growing a little more each day. The bees still buzzed, now collecting nectar. Caterpillars munched on leaves. Butterflies danced through the air. Summer was noisy, colourful, and alive.

Autumn – A Season of Transition

One morning, Maple felt a cool breeze, different from the winds of summer. The sun rose later and set earlier. "It's time," she whispered. Her leaves, once deep green, now turned golden yellow, bright orange, and rich crimson.

Inside, Maple was preparing. She stopped making food and began drawing nutrients back into her trunk and roots for storage. Her leaves no longer needed to stay, and so one by one, they let go, fluttering to the ground.

Squirrels scurried around, gathering nuts and hiding them under Maple's roots. Birds chirped goodbye as they prepared to **migrate** – flying to warmer lands for the cold months ahead.

Children returned to school and raked piles of colourful leaves. "This is my season of beauty and giving," Maple thought. "Even as I let go, I prepare for rest." God had written this cycle into her life. Letting go of her leaves wasn't an end – it was part of the plan.

Winter – A Season of Rest

Now the world was quiet. Cold winds blew across the land. Maple stood still, her branches bare and strong. Snow blanketed the ground. No buzzing bees, no children's laughter – only the hush of winter.

But Maple wasn't dead. Inside, her roots were alive, storing energy, staying strong. She was **dormant**, which means resting. Many animals rested too – bears hibernated, birds were gone, and ponds froze. The sun was low in the sky, and days were short.

This was a quiet season, but not useless. "Even rest is important," Maple thought. "God gave this time for preparing."

And when the snow began to melt again, Maple felt it: a tingle in her roots, a call from the soil, a warmth from the sun.

A New Cycle Begins

Year after year, Maple lived the rhythm of the seasons. Spring to summer, summer to autumn, autumn to winter, and back to spring again.

Each season had its purpose:

- Spring – for growth and beginnings
- Summer – for work and strength
- Autumn – for letting go and preparing
- Winter – for rest and renewal

Maple had come to love every season, even the hard ones. They reminded her of God's **perfect timing**. He never forgot to turn the world. He never missed a sunrise. He never stopped caring for His creation.

And even though Maple was just one tree in one backyard, she was part of something bigger: God's amazing design for Earth – predictable, beautiful, and filled with meaning.

C) Narration

Parent/Tutor Says:

"Now it's your turn. Can you tell me the story back in your own words?"

Prompt students with:

- "What happened in spring?"
- "How did Maple prepare for winter?"
- "What did Maple learn about the seasons?"

Encourage them to describe each season's changes and use correct vocabulary like 'dormant,' 'photosynthesis,' or 'migration' as appropriate.

D) Teaching Skills

Parent/Tutor Explains:
"To understand the seasons, we need to know two things:

1. The Earth rotates (spins) on its axis once every 24 hours – that's why we have day and night.
2. The Earth also revolves (orbits) around the sun once a year, and its axis is tilted. Because of that tilt, different parts of the Earth get more or less sunlight during the year – and that's what causes the seasons!"

Use a torch and a globe (or ball) to demonstrate Earth's tilt and revolution. Show how when one side leans toward the sun (summer), the other side leans away (winter).

Teach how organisms adapt to these changes:

- Plants grow leaves in spring, do photosynthesis in summer, and go dormant in winter.
- Animals migrate, hibernate, or grow thick fur to adapt to seasonal changes.

E) Thinking Questions

F–2:
• What do trees do in spring and winter?
• What animals did we hear about in the story?
• Who made the seasons?

Years 3–4:
• What patterns do we see each year with the seasons?
• How does Maple change in each season?
• Why do animals and plants need different seasons?

Years 5–6:
• What scientific reasons explain why we have seasons?
• How do the seasons show God's order and design?
• What might happen to life on Earth if the seasons didn't change?

F) Practical Activities

F–2 Options:

1. **Season Tree Wheel** – Draw four small trees on a rotating wheel showing spring, summer, autumn, and winter. Use cotton wool for snow, tissue paper for blossoms, etc.
2. **Nature Walk Season Hunt** – Go outside and list or draw signs of the current season. (E.g. birds, flowers, temperature.)

Years 3–4 Options:

1. **Model of Earth's Seasons** – Use a lamp as the sun and a tilted ball as the Earth to model the orbit and explain why the seasons happen.

2. **Four-Panel Comic Strip** – Draw Maple in each season and write captions explaining what she's doing scientifically (e.g. photosynthesis, going dormant).

Years 5–6 Options:

1. **Design a Seasonal Calendar** – Create a calendar of seasonal changes for your local area (flora, fauna, weather, human activity).
2. **Mini Research Poster** – Choose one season and explain its scientific importance to ecosystems (e.g. pollination in spring, animal migration in autumn).

G) Optional Extension Research Activity

Research how the seasons differ in other parts of the world.
• What are the seasons like at the equator?
• How are seasons different in the Northern vs. Southern Hemisphere?
• Do all trees lose their leaves in winter?

H) Biblical Connection & Wrap-Up

Parent/Tutor Says:
"Let's read Genesis 8:22 again:
'As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease.'"

Ask:
• "Why do you think God made seasons that come back every year?"
• "What does it teach us about His promises and order?"
• "Can we trust God to bring growth, rest, and new beginnings at the right time?"

Encourage students to thank God in prayer for His wisdom and perfect timing in nature – and in our lives.

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification (Evidence in Lesson)
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.	The lesson directly teaches the four seasons and how changes in weather affect plants, animals, and people.
AC9SFI02	Engage in investigations safely and make observations using their senses.	Students observe weather and seasonal cues and talk about what they notice.
AC9SFI03	Represent observations in provided formats and identify patterns with guidance.	Students draw or chart seasonal features (sunny, rainy, windy, cold).
AC9SFI06	Communicate observations and ideas using everyday and scientific vocabulary.	Students use vocabulary such as summer, autumn, temperature, rain, warm, cold in narration & activity.

YEARS 3–4

Code	Full Description	Justification
AC9S3U02	Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources.	The weather–earth connection is taught through how seasonal changes affect land, plants, and farming, especially rainfall and soil conditions.
AC9S3H01	Examine how people use data to develop scientific explanations.	The lesson explains how weather patterns and seasonal observations help people plan farming, gardening, and daily activities.
AC9S3I01	Pose questions to explore observed patterns and relationships; make predictions.	Students ask and predict what season comes next and how weather might change.
AC9S3I03	Make and record observations using informal measurements and tools.	Students record daily weather observations or track changes over time.
AC9S3I06	Communicate findings using scientific vocabulary.	Students present their seasonal charts or journal entries using correct terms.

YEARS 5–6

Code	Full Description	Justification
AC9S5U02	Describe how the rotation and tilt of the Earth, in combination with the Sun, cause daily and seasonal changes.	Older students learn why seasons occur – the role of Earth's tilt and orbit. This is explicit in the teaching focus of this lesson.
AC9S5H02	Investigate how scientific knowledge is used to make decisions.	Students consider how seasonal knowledge guides agriculture, wildlife management, and planning.
AC9S5I04	Construct and use representations to describe patterns and relationships.	Students may create seasonal climate charts or comparison tables.
AC9S5I06	Communicate scientific ideas using appropriate language.	Students explain seasonal change and effects using correct terminology: rotation, tilt, hemisphere, daylight hours.

Lesson 27: The Sun, Moon, and Time

Theme: Understanding Time through God's Heavenly Lights
Character Focus: Orderliness – Observing God's perfect timing in creation

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Learning Objectives:
By the end of this lesson, students will be able to:
• Explain how the sun and moon help us understand and measure time
• Explore Earth's rotation and revolution and their effects on day, night, and seasons
• Describe how sundials work as early timekeeping tools
• Recognise the moon's phases and its role in marking months
• Reflect on time as a gift from God, given with purpose and rhythm

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A) Introduction

Parent/Tutor Says:
"Today we're going to learn about how God uses the sun and the moon to help us understand time. These lights in the sky are like a big, beautiful clock designed by God. The Bible tells us that the sun knows when to go down, and the moon was made to mark the seasons. Let's learn how it all works!"

Vocabulary to Pre-Teach:

- **Rotation** – when something spins on its own axis
- **Revolution** – when one object moves around another (like Earth around the sun)
- **Sundial** – a tool that tells time using the shadow of the sun
- **Phase (of the Moon)** – the shape of the lit part of the moon we see
- **Gnomon** – the stick or part of a sundial that casts the shadow
- **Lunar Month** – the time it takes for the moon to go through all its phases (~29.5 days)

B) Informational Story: "The Clock in the Sky"

Liam was a curious boy, full of questions. He loved to learn about how things worked, especially the sky. One crisp morning over toast and eggs, he looked up from his cereal bowl and asked, "Mum, who made time?"

His mum smiled and said, "That's a big and wonderful question, Liam. What if we went on a little time adventure today and found out together?"

So, after breakfast, they packed a picnic and walked to a grassy hill near their home. It was a place where the trees parted to give a wide view of the sky, and the sun shone bright from above. They laid out a blanket under a tall gum tree and sat down.

Mum pointed up. “Look at the sun, Liam. Every day, the sun rises in the east, travels across the sky, and sets in the west. That’s how we know it’s morning, afternoon, or evening. But did you know the sun isn’t really moving across the sky?”

Liam blinked. “It isn’t? But it looks like it!”

“That’s because we are moving,” said Mum. “The Earth spins like a top. That’s called rotation. It takes 24 hours for the Earth to spin once, and that gives us day and night. When our part of the Earth turns toward the sun, we see daylight. When our side turns away, we get night.”

Liam lay back in the grass and imagined himself standing on a spinning ball in space. “Whoa,” he said. “So, when I wake up, I’m spinning into the sunlight?”

“Exactly,” said Mum. “And that’s not all. The Earth also travels around the sun once every year. That’s called revolution. That’s how we get seasons.”

“But what about hours? How did people know when it was lunch or bedtime before clocks?”

Mum reached into her bag and pulled out a paper plate with the numbers 1 to 12 written around the edge, like a clock. A pencil poked through the middle.

“This,” she said, “is a sundial. Long ago, people didn’t have phones or wristwatches. They looked at shadows. As the sun moves through the sky, the shadow cast by this pencil – or gnomon – moves too. That’s how they told the time.”

She stuck the pencil in the ground with the plate flat. “Let’s see what time it is now.”

Actually, because the sun seems to follow a half circle across the sky, the plate didn’t show the correct time. Sun dials are also different for different parts of the country. So, after thinking about it, Mum drew a different pattern on another plate that was basically ok for Queensland. She had to start with 6am on the right side, then 7 above that, and progress 8, 9, 10, 11 with 12 noon at the top. Then going down the left side with 1pm, 2, 3, 4, 5, to 6pm at the far left side. She also had to place the plate on the ground so 12 pointed to the South. This time it worked much better and was more accurate.

Liam crouched and watched the pencil’s shadow stretch across the plate. It pointed between two numbers. “It’s like the sky has a clock!”

“Yes,” Mum said. “And it’s one that never runs out of batteries!”

They watched the shadow shift slowly. The more they watched, the more Liam noticed the quiet movement of the sun – too slow to see in one second, but steady and constant.

Later, as the sun sank toward the hills, Liam saw the sky begin to change colour – from pale blue to gold, then pink and purple. “Look!” he cried. “It’s sunset!”

“That’s right,” said Mum. “The sun always knows when to go down.”

She opened her Bible and read:
‘He made the moon to mark the seasons, and the sun knows when to go down.’ – Psalm 104:19

“God didn’t just make the sun and moon to light up the sky. He gave them a job. They help us measure time.”

As twilight settled, a silver shape rose in the east. It was the moon – round and glowing. Liam watched as it climbed higher.

“The moon helps us count months,” Mum said. “It doesn’t shine by itself – it reflects the sun’s light. And each night, the amount we can see changes. That’s called the moon’s phases.”

Liam listened closely as Mum explained. “Sometimes we see a full circle, called a full moon. Other times it’s just a sliver – a crescent. It goes through a cycle about every 29 and a half days. Ancient people watched the moon to know when to plant crops, hold festivals, and count the months.”

Liam’s mind whirled with all the new ideas. “So, the sun helps us know when it’s day, and the moon helps us track the months?”

“That’s right,” said Mum. “Even the stars helped sailors know where they were at sea. The whole sky is full of order and purpose. God didn’t make the universe by accident. He set everything in motion on purpose – like the gears of a great cosmic clock.”

They lay on the blanket and watched the stars appear, one by one. “So, time isn’t just hours and minutes,” Liam whispered. “It’s light and darkness, seasons and moon phases. It’s the way the sky changes.”

Mum nodded. “And time isn’t just to help us plan our day. It’s a gift from God. He gives us time to learn, to work, to rest, to worship, to grow. Every morning is a fresh start. Every evening is a reminder to slow down and reflect.”

Liam yawned. “So, every sunrise is God’s way of saying, ‘Let’s begin again,’ and every sunset is like Him saying, ‘Well done. Rest now.’”

Mum kissed his forehead. “That’s a wise thought, Liam. God placed time in the sky – not just for calendars and clocks, but to teach us how to live wisely.”

And as the moon shone down on the sleeping hills and the sundial rested in the dark, Liam understood: the sky really was a clock – God’s own clock – measuring life with perfect timing.

C) Narration

Parent/Tutor Says:
“Now it’s your turn to tell the story. What did Liam learn about the sun and the moon? What is a sundial? How does the sky show us the time?”

Encourage children to recall events in sequence: morning questions, sundial, Earth's rotation, moon phases, and God's purpose for time.

D) Teaching Skills

Parent/Tutor Explains:
"To understand how the sky helps us tell time, we need to learn about rotation and revolution."

1. **Rotation** – Earth spins on its axis once every 24 hours → causes day and night.
2. **Revolution** – Earth orbits the sun once every 365.25 days → causes seasons.
3. **Moon Phases** – The moon reflects the sun's light. As it orbits Earth, we see different parts of its lit side.

Visual Aid Suggestion:
Use a globe or ball and flashlight to model Earth's rotation and the moon's phases.

E) Thinking Questions

F–2:
• What happens when the sun rises?
• What do we see at night?
• Who made the sun and moon?

Years 3–4:
• How does a sundial work?
• Why do we need day and night?
• What do moon phases help us understand?

Years 5–6:
• How did ancient people use the sky to measure time?
• What does Psalm 104:19 teach about God's creation?
• How can we use time wisely in our daily lives?

F) Practical Activities

F–2 Options:

1. **Sundial Craft** – Make a paper plate sundial using a pencil and observe its shadow.
2. **Sun and Moon Collage** – Create two scenes: one showing daytime with the sun, one nighttime with the moon and stars.

Years 3–4 Options:

1. **Moon Phase Model** – Use Oreos or paper to show the 8 phases of the moon.
2. **Sky Clock Journal** – Track sunrise/sunset times for a week and graph them.

Years 5–6 Options:

1. **Time Stewardship Chart** – Create a pie chart of how you use your time each day.
2. **Cultural Time Study** – Research how different cultures used the moon and stars to create calendars (e.g. Hebrew, Egyptian, Aboriginal).

G) Optional Extension Research Activity

• Research: How do astronauts track time in space, where there's no regular sunrise or sunset?
• Explore lunar calendars – how do Islamic or Jewish calendars use the moon?

H) Biblical Connection & Wrap-Up

Parent/Tutor Says:
"Let's read Psalm 104:19 again:
'He made the moon to mark the seasons, and the sun knows when to go down.'"

Ask:
• Why did God make time?
• How can the sun and moon help us trust God's faithfulness?
• What would it mean to live each day with purpose?

Pray together:
"Thank You, Lord, for the gift of time. Help us to use it wisely – to love, to learn, to rest, and to praise You. Just like the sun rises and sets, may our days begin and end with You."

Australian Curriculum (v9) Content Descriptions Addressed in this Lesson

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.	The lesson teaches that the Sun causes day and night, and that seasonal changes affect how we live.
AC9TDE2P02	Use materials, components, tools and techniques to safely make designed solutions.	Students make a simple sundial using basic materials to observe changes in the Sun's shadow over time.

YEARS 3–4

Code	Full Description	Justification
AC9S3I04	Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns.	Students create a physical moon phase model and/or record shadow or time observations over several days to identify patterns.
AC9S4I03	Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate.	Students record sunrise/sunset times or shadow lengths over multiple days as part of their time and sky journal.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	The moon phase model and/or constructed shadow-tracking chart involve choosing materials and assembling a purposeful representation.

YEARS 5–6

Code	Full Description	Justification
AC9S6U02	Describe the movement of Earth and other planets relative to the Sun and model how Earth's tilt, rotation and revolution relate to observable phenomena, including seasons and day and night length.	The lesson explains that Earth's rotation causes day and night and its orbit and tilt create seasonal changes, and students model or discuss these movements.

Code	Full Description	Justification
AC9S5I04	Construct and use representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships.	Students create charts or diagrams showing how celestial movement relates to the passage of time (day, night, month).
AC9S5I06	Communicate scientific ideas and findings for a specific purpose using appropriate language and representations.	Students explain how people use the Sun and Moon to measure time, verbally or through labelled diagrams and written reflection.

Lesson 28: Calendars and Days – God's Gift of Time

Theme: Measuring Time Through God's Creation
Character Focus: Orderliness – Living wisely through God's patterns in time

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Learning Objectives:
By the end of this lesson, students will:
• Understand the scientific reasons for measuring time in days, months, and years
• Learn how Earth's movement and the moon's phases create time patterns
• Explore how calendars are designed based on observable celestial patterns
• Reflect on God's orderly design in creation and the gift of each day
• Practice using time wisely and joyfully as a form of stewardship

Relevant Content Descriptions:

- AC9S1U02, AC9S6U02 (Science Understanding – Earth & Space Sciences)
- AC9S3I04, AC9S4I04 (Science Inquiry – Modelling & Analysing)
- AC9TDE2P02, AC9TDE4P03 (Design & Technology – Producing & Implementing)
- AC9S5I03 (Science Inquiry – Planning & Conducting)

A) Introduction
Parent/Tutor Says:
"Today's lesson is all about time – how we measure it, how God created it, and how we can use it wisely. God designed the sun, moon, and Earth to help us know when to work, rest, and celebrate. We'll look at calendars and why they help us live with purpose."

Vocabulary Words to Pre-Teach:

- **Rotation** – when the Earth spins on its axis, causing day and night
- **Revolution** – when the Earth travels around the sun, creating a year
- **Orbit** – the path one object takes around another
- **Calendar** – a tool that shows the order of days, weeks, and months in a year
- **Cycle** – a pattern that repeats in a predictable way

B) Informational Story: "The Day That God Made"

Emma loved mornings. Each day, she'd hop out of bed, tiptoe into the kitchen, and check the family calendar hanging beside the fridge. It was colourful and filled with boxes showing the days of the week, little doodles for birthdays, stars for church Sundays, and bright stickers for holidays.

But one morning, while munching her toast, Emma stared at the calendar longer than usual. She tilted her head and asked, "Dad, who made calendars? Why do we even use them?"

Her dad smiled, setting down his coffee mug. "That's a great question, Emma. Would you like to go on a time tour today?"

Emma grinned. “Yes, please!”

Her dad pulled out paper, markers, a globe, and a flashlight. “Let’s start at the very beginning. Before clocks, before calendars, even before people – God made time.”

He held up the Bible. “Genesis tells us that when God created the heavens and the earth, He also created light and dark, sun and moon, day and night. That was the first calendar.”

He spun the globe slowly. “See this ball? Imagine this is Earth. God made it spin. One full spin takes about 24 hours. That’s how we get a day.”

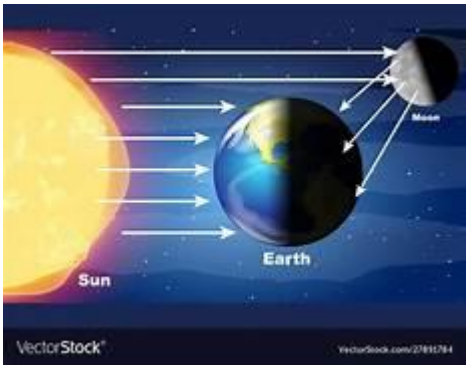
Emma watched as the flashlight shone on one side of the globe. “So, when our side faces the sun, it’s day. And when it turns away, it’s night?”

“Exactly,” said Dad. “Every day, Earth rotates once. That’s why the sun rises and sets.”

Emma drew a big circle and wrote “1 Day = 1 Earth spin.”

“But how do we get months?” she asked.

Her dad pulled out a small silver ball. “This is the moon. It orbits Earth. It takes about 29 and a half days to go all the way around. That’s one lunar month.”



He drew the moon’s path around the Earth. “Ancient people watched the moon carefully. When it was full, they knew it was the middle of the month. When it disappeared, it was the start of a new one.”

“So, a month is like a moon map?” Emma asked.

“Yes!” said Dad. “Many old calendars were based on the moon. Even today, some cultures still use lunar calendars for special festivals.”

Emma added to her paper: “1 Month = Moon’s trip around Earth.”

“But what about a year?” she asked.

“Let’s go back to our globe,” Dad said. “Earth not only spins – it also travels around the sun. That path is called an orbit. One full trip takes about 365 and one-quarter days. That’s a year.”

Emma's eyes widened. “So, a year is Earth’s birthday circle around the sun!”

Her dad laughed. “I’ve never heard it described that way – but yes! And because of Earth’s tilted axis, as it orbits, we get seasons. Sometimes one part of the Earth is tilted toward the sun – so it’s summer there. Other times, it’s tilted away – so it’s winter.”

He showed her with the flashlight and globe how different parts of the world get more or less sunlight during the year.

Emma's page now read:

- 1 Day = Earth spins once
- 1 Month = Moon orbits Earth
- 1 Year = Earth orbits Sun

"Wow," she whispered. "It's like God built time into the sky!"

"He really did," said Dad. "Calendars are tools people made to track what God already designed. They help us know when to plant seeds, celebrate holidays, rest, and give thanks."

He flipped open his Bible to Psalm 118:24 and read:
"This is the day the Lord has made; let us rejoice and be glad in it."

"That means today – yes, this very one – is a gift from God," he said. "And every square on the calendar is full of potential."

Emma smiled. "Even Mondays?"

"Even Mondays," he said with a wink.

Then they sat down and made a calendar together. Emma wrote the days of the week, coloured Sundays in gold, and added smiley faces for birthdays and hearts for special family days. She even added a big cross on Sunday mornings for church.

As they worked, Dad said, "God also gave us special times in the Bible – like the Sabbath. Every seventh day, we're invited to rest and remember that God is in control."

Emma nodded. "Like a weekly pause button?"

"Exactly. That's God's rhythm for life – work, rest, celebrate, repeat."

Later that afternoon, Emma hung her homemade calendar on her bedroom wall. She added one last thing: a sticky note that read, "Thank You, God, for today."

From then on, every morning started with that same prayer – before breakfast, before schoolwork, before anything else. A reminder that every single day – whether cloudy or bright – was a treasure crafted by the Creator.

C) Narration
Parent/Tutor Says:
"Let's see what you remember from the story. What did Emma learn about days, months, and years? Why do we use calendars? What does the Bible say about today?"

Encourage students to retell the story in their own words. Prompt with:
• "What's a day based on?"
• "How do we know when a month has passed?"
• "What did Emma put on her calendar?"

D) Teaching Skills

Parent/Tutor Explains:
"To understand time scientifically, we use models. Let's practice making models that show how time works in God's creation."

Teach with visuals:
• Use a ball as Earth and a torch as the sun to model **rotation** (day/night).
• Show how the moon goes around Earth to model **months**.
• Move the Earth around the sun to model **years** and **seasons**.

Talk about patterns:
• Daily patterns (sunrise, sunset)
• Monthly moon cycles
• Seasonal changes across the year

E) Thinking Questions

Foundations to Year 2:
• What do we use calendars for?
• What happens when the Earth spins?
• Who made time?

Years 3–4:
• What does the moon have to do with months?
• Why is it helpful to mark special days?
• How can we see God's order in our calendars?

Years 5–6:
• Why are calendars based on the sun and moon?
• How does understanding Earth's movement help us live wisely?
• How can planning your time help you honour God?

F) Practical Activities

Foundations to Year 2:

1. **My Week Poster** – Draw a poster showing 7 days. Add drawings for what happens on each day (e.g., church, rest, homeschool).
2. **Calendar Stamping** – Use a blank month calendar and stamps or stickers to mark special events, rest days, or fun family times.

Years 3–4:

1. **Moon Phases Journal** – Watch the moon each night for 7 days and draw what shape you see.

2. **Sun & Shadow Diary** – Go outside 3 times in a day to draw how a shadow moves (like a simple sundial).

Years 5–6:

1. **Design a Cultural Calendar Poster** – Research how other cultures (e.g., Jewish, Aboriginal, Chinese) track time using the moon or stars. Make a poster comparing them with modern calendars.
2. **Time Management Tracker** – Record how you spend your time for 2 days. Reflect on how you can use time better to glorify God.

G) Optional Extension Research Activity

Research:
• What are leap years, and why do we have them?
• Why do some months have different numbers of days?
• Explore lunar calendars (used in Islam, Judaism, or Chinese culture) and how they align with moon phases.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Let's read Psalm 118:24 again:
'This is the day the Lord has made; let us rejoice and be glad in it.'"

Discuss:
• "What does this verse mean to you?"
• "How can we show thankfulness for each day God gives us?"
• "What are some ways to use our days wisely?"

Conclude with a prayer:
"Dear Lord, thank You for the gift of time. Thank You for making the sun, the moon, and the stars to help us live in an orderly way. Help us use our time to honour You, serve others, and enjoy the days You have made. Amen."

Australian Curriculum (v9) Content Descriptions

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9S1U02	Describe daily and seasonal changes in the environment and explore how these changes affect everyday life.	The lesson explains that days and seasons come from the movement of the Sun and Earth, and discusses how this affects daily routines.
AC9SFI03	Represent observations in provided formats and identify patterns with guidance.	Students complete or create simple day/night or season sequence charts.

YEARS 3–4

Code	Full Description	Justification
AC9S3H01	Examine how people use data to develop scientific explanations.	Students learn that early people observed the Sun and Moon to develop calendars.
AC9S3I04	Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns.	Students make a visual calendar wheel or compare months and seasons in chart form.
AC9TDE4P03	Select and use materials, components, tools, equipment and techniques to safely make designed solutions.	If the lesson includes constructing a calendar wheel or season dial, students choose materials and assemble a working design.

YEARS 5–6

Code	Full Description	Justification
AC9S6U02	Describe the movement of Earth and other planets relative to the Sun and model how Earth's tilt, rotation and revolution relate to observable phenomena, including seasons and variable day and night length.	The lesson links the calendar year and month length to Earth's movement and the Moon's orbit.
AC9S5I04	Construct and use representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships.	Students map or chart the annual cycle or compare solar vs lunar calendar systems.
AC9S5I06	Communicate scientific ideas and findings for a specific purpose using appropriate language and representations.	Students explain how calendars reflect astronomical cycles in written, spoken, or diagrammatic form.

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

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Weather, Seasons & Calendars Unit Quiz

Bible Verse of the Week: Ecclesiastes 3:1 – "To everything, there is a season."

Section A – For Younger Students (Grades 1–2)

1. What does the sun do?
   a) It rains
   b) It shines and keeps us warm
   c) It makes snow

2. What do we use to count the days and months?
   a) A book
   b) A calendar
   c) A clock

3. Which of these happens in winter?
   a) Trees grow new leaves
   b) Some animals hibernate
   c) Flowers bloom

4. Can you name one kind of weather?

_____

5. Who made the seasons and days?

_____

Section B – For Middle Students (Grades 3–4)

1. Match the season with what happens:
   - Spring: _____

   - Summer: _____

   - Fall: _____

   - Winter: _____

(Choices: Animals hibernate, Flowers bloom, Leaves change colour, Plants grow quickly)

2. What does the moon help us track?

_____

3. Why is rain important?

_____

_____

4. How does a sundial tell time?

_____

_____

5. What does Psalm 118:24 remind us to do each day?

_____

_____

Section C – For Older Students (Grades 5–6)

1. Explain how the sun, moon, and earth work together to mark days, months, and years:

_____

_____

_____

2. Describe how each type of weather helps the earth in a different way:

_____

_____

_____

3. Why did God design the seasons in an orderly pattern?

_____

_____

4. How does making a calendar help you be a good steward of your time?

_____

_____

5. What is one way you can honour God with the time He gives you?

_____

_____

Bonus Activity (For All Ages)

Draw or label the four seasons on a tree. Under your picture, write one sentence about what you like most about each season.

TOPIC 8 WE ARE WONDROUSLY MADE

Bible Verse of the Week: Psalm 139:14 – "I am fearfully and wonderfully made."

Overview:

This week, children will explore **how God designed our bodies, how our senses work, how we grow, and the unique purpose God has for each of us.**

Lesson 29: How Our Bodies Work

Theme: God's Order in the Human Body
Character Focus: Orderliness

Learning Objectives:
By the end of this lesson, students will be able to:

- Identify and describe major human body systems (skeletal, muscular, circulatory, respiratory, digestive, nervous, immune, and endocrine).
- Explain how body systems interact to maintain health and function.
- Understand that God created the human body with purpose and order.
- Create labelled models or diagrams of the body and its systems.
- Recognise the body as a gift from God and a temple of the Holy Spirit.

A) Introduction
Parent/Tutor Says:
"Today we're going to explore how your body works like a well-designed machine! God made your body with amazing parts that work together in perfect order. We'll learn about different *body systems* like the *skeletal system*, *muscles*, *lungs*, *heart*, and more. But first, let's learn what some of those words mean."

Vocabulary to Discuss:

- **Body System** – A group of parts inside the body that work together to do a job (like breathing or moving)
- **Skeleton** – The bones that give your body shape and protection
- **Muscle** – Tissues that pull on bones to help you move
- **Heart** – A muscle that pumps blood around the body
- **Lungs** – Organs that help you breathe in oxygen and breathe out carbon dioxide
- **Digestive System** – The parts of the body that turn food into energy
- **Brain** – The control centre of the body, part of the nervous system

B) Informational Story
Parent/Tutor Says:
"Now I'll read you a story about a boy named Theo who takes an amazing tour inside his body! Listen carefully and think about all the body systems he visits. I'll ask you to tell me what you remember afterward."

…….

Theo was an energetic boy who loved building things with Lego. One rainy afternoon, after finishing his tallest tower yet, he sat back and thought, *"Machines are amazing…but is there any machine more amazing than me?"*

That night, Theo had the most extraordinary dream. He found himself standing in a gleaming control room filled with whirring gears, glowing screens, and rushing pipes. On the wall was a big sign: **"Welcome to The Incredible Machine – The Human Body!"**

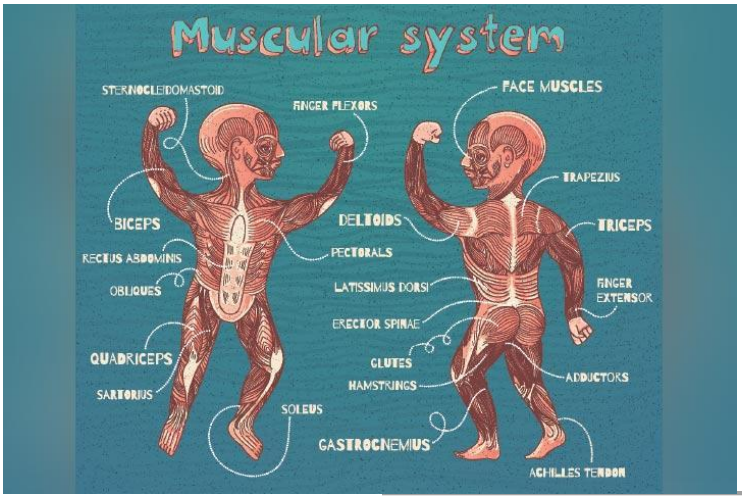
A friendly guide appeared beside him. "Hello, Theo," she said. "Today you'll take a tour through the greatest machine ever designed – your own body. Ready?"

Theo grinned. "Let's go!"

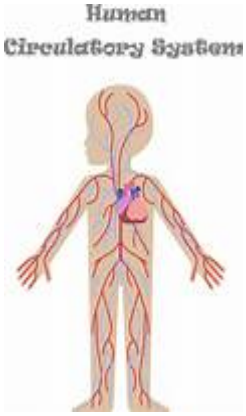
The Skeletal System

They entered a huge hall filled with tall white beams like towers holding up a building. "These are your bones," the guide explained. "The skeleton gives your body shape and protects the important organs." Theo knocked on one gently. *Clink!* It felt strong and solid. He saw a helmet-shaped skull protecting the brain, and a ribcage guarding the heart and lungs. "Wow," Theo said, "it's like a fortress inside me!"

The Muscular System

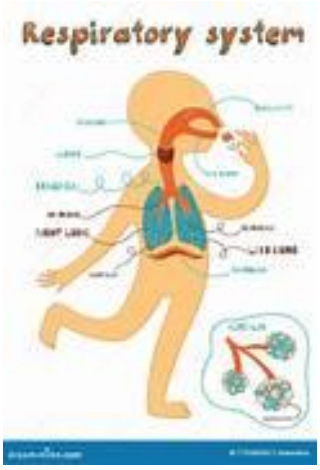


Next, they moved into a room where ropes and pulleys pulled on the beams. "These are your muscles," the guide said. "They work by pulling on your bones so you can move." Theo watched arm muscles contracting like bungee cords. He tried flexing his arm, and the ropes pulled tight. "Without muscles, you'd be floppy like a puppet with no strings," the guide smiled.



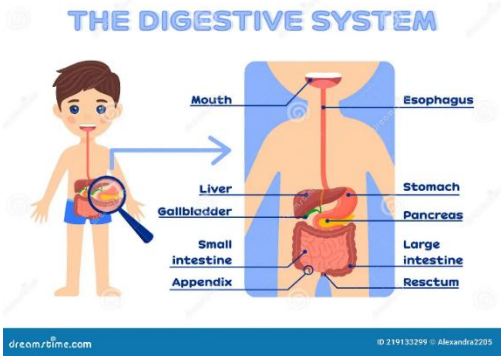
The Circulatory System

Suddenly, a loud *thump-thump, thump-thump* echoed through the floor. They entered a room where a giant red pump beat rhythmically. “This is your heart,” the guide explained. “It’s a muscle that pumps blood through your whole body.” Red rivers flowed out through pipes like highways, carrying oxygen and nutrients to every cell. Theo traced one pathway – he was amazed to see it reached even his fingertips and toes.



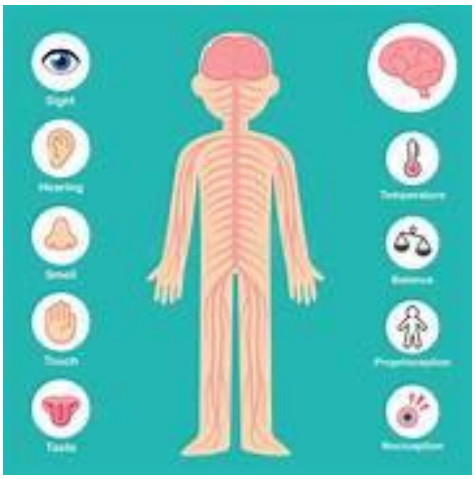
The Respiratory System

The pipes led them into a chamber filled with giant balloons inflating and deflating. “These are your lungs,” the guide said. “When you breathe in, oxygen fills these balloons. The oxygen travels into your blood, and carbon dioxide goes out when you breathe out.” Theo took a deep breath and saw one balloon fill up. “It’s like I have my own air factory!” he laughed.



The Digestive System

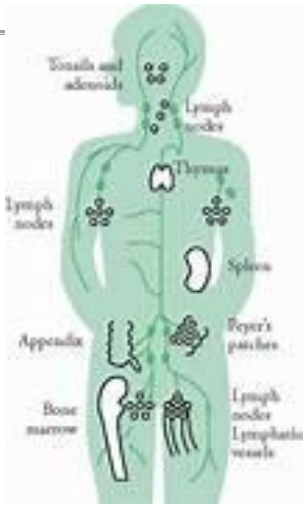
They slid down a tunnel and landed in a bustling kitchen. Machines were chopping, mixing, and squeezing food. “This is your digestive system,” the guide explained. “Your mouth chews food, your stomach churns it, and your intestines break it down into nutrients your blood can carry.” Theo imagined the sandwich he’d eaten earlier being turned into fuel for his adventures. “So that’s how I get my energy!” he said.



The Nervous System

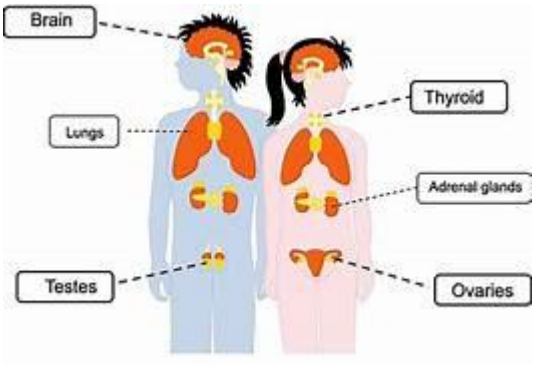
The kitchen lights flickered, then Theo was whisked into a sparkling control tower full of flashing buttons and wires. At the very top sat the most important computer of all – the brain. “Your nervous system is like the control network,” the guide said. “Your brain sends messages down the spinal cord and nerves, telling your body what to do. And it also receives messages back – like when you touch something hot.” Theo pressed a button and saw a signal zoom down glowing wires. “I guess my brain is the best computer ever made,” he said proudly.

The Immune System



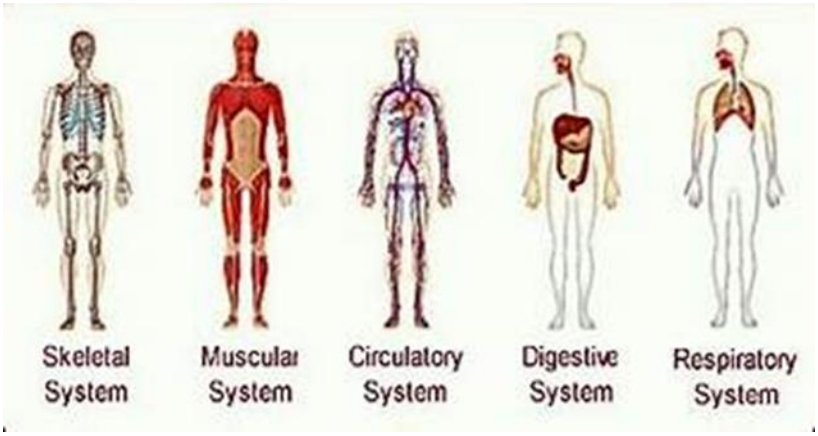
Just then, a siren rang. Tiny intruders shaped like spiky balls tried sneaking through a tunnel. But an army of white defenders rushed to stop them. “This is your immune system,” the guide explained. “It protects you from germs.” Theo cheered as the white blood cells gobbled up the invaders. “Go, team!” he shouted. “I didn’t know I had my own bodyguards!”

The Endocrine System



Finally, they stepped into a room filled with little factories sending out drops into the bloodstream. “These are your glands,” the guide said. “They release hormones – special messengers that control growth, energy, and emotions.” Theo saw tiny packages of instructions flying through the blood highways. “So even my feelings are carefully designed,” Theo realised.

The Big Picture



At last, Theo stood in the centre of a huge map showing all the systems together: skeleton, muscles, heart, lungs, stomach, brain, defences, and hormones. He saw how each one connected with the others, like pieces in a giant puzzle.

The guide said gently, “Theo, your body is no accident. God made it with order and purpose. Every part is different, yet they all work together. Just like the Bible says – you are fearfully and wonderfully made.”

Theo looked around in awe. “So, my body is the most incredible machine of all. And God designed it!”

With that thought, he woke up in his own bed, his heart still beating steadily. He smiled, put his hand on his chest, and whispered, “Thank You, Lord, for my amazing body.”

C) Narration
Parent/Tutor Says:
"Can you tell me the story in your own words? Who did Theo meet? What systems did he visit? What does the story teach us about how the body works together with order?"

Encourage children to mention as many body systems as they can remember, and how they function or cooperate.

D) Teaching Skills
Parent/Tutor Explains:
"Let's look at how scientists and designers learn from the body. We learn by observing, comparing, and drawing body parts. We can label a diagram or create a model to show how different parts work together. That's a scientific and design skill!"

Demonstrate how:

- To label major organs and systems on a diagram
- Use coloured lines to show blood flow or air paths
- Create a legend (key) to explain symbols or labels

Design Link: Just as body systems are connected and designed for a purpose, designers also plan, model, and test ideas.

E) Thinking Questions

Foundations to Year 2:

- What does your heart do?
- Which body part helps you breathe?
- Who made your body and why is it special?

Years 3 & 4:

- Why do your muscles and bones need to work together?
- What happens when your lungs and heart work as a team?
- How does your body show order and good design?

Years 5 & 6:

- How do two or more systems work together when you're exercising?
- What would happen if one system stopped working properly?
- What does it mean that your body is a temple of the Holy Spirit?

F) Practical Activities

Foundations to Year 2:

1. **Body Tracing & Labelling:** Trace the child's body on butcher paper and draw major organs.
2. **Play-Dough Organs:** Create simple models of the heart, lungs, and stomach from coloured clay.

Years 3 & 4:

1. **Body Systems Puzzle:** Cut out parts of body systems and match them to labels.
2. **Breathing Model:** Use a plastic bottle and balloons to show how lungs work.

Years 5 & 6:

1. **Design a Poster:** Create an illustrated poster explaining how three systems work together.
2. **Body System Quiz Game:** Make and play a quiz board game about human body systems.

G) Optional Extension Research Activity
All Ages:

- Research another system not mentioned in the story (e.g. reproductive, lymphatic, or excretory)
- Create a labelled drawing or short report about it

H) Biblical Connection & Wrap-Up
Parent/Tutor Says:
"The Bible says your body is a temple of the Holy Spirit. That means it is valuable and should be treated with care. God made every part of you with purpose. Just like Theo learned, your body is full of systems that cooperate."

Ask:

- How can we care for our body?
- How can we use our body to serve God and others?
- Why do you think God designed us with such order?

Pray together: "Thank You, God, for giving us such amazing bodies. Help us to take care of them, use them for good, and remember that we are fearfully and wonderfully made. Amen."

Australian Curriculum (v9) Content Descriptions Addressed

FOUNDATION – YEAR 2

Science

Code	Full Description	Justification
AC9S1I03	Make and record observations using informal methods.	Students observe their own breathing, heartbeat, movement, and describe or draw what they notice about their bodies.

Design & Technologies

Code	Full Description	Justification
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students create a body outline and place or draw major organs to show where they are located.
AC9TDE2P02	Use materials and techniques to safely make designed solutions.	Students use materials (paper, markers, clay, etc.) to construct and label a simple body map or organ models.

Health & Physical Education

Code	Full Description	Justification
AC9HPFP05	Demonstrate protective behaviours and identify parts of the body that help keep them safe.	Students identify eyes, heart, lungs, skin, etc., and learn how caring for them keeps the body safe and healthy.
AC9HPFM03	Participate in physical activities and explore benefits of being active.	Students notice how breathing and heart rate change during movement, linking activity to body function.

YEARS 3–4

Science

Code	Full Description	Justification
AC9S3I04	Construct and use visual or physical models to show relationships and identify patterns.	Students create and use a breathing model or body systems diagram to show how organs work together.

Design & Technologies

Code	Full Description	Justification
AC9TDE4P02	Generate and communicate design ideas using technical vocabulary and diagrams.	Students explain how their model represents body function using correct terms (lungs, diaphragm, circulation, etc.).
AC9TDE4P03	Select and use materials and tools to safely make designed solutions.	Students construct a working breathing model (e.g., bottle and balloons) or a systems puzzle.

Health & Physical Education

Code	Full Description	Justification
AC9HP4P10	Investigate and apply behaviours that support health, safety and wellbeing.	Students learn and discuss habits that help care for the heart, lungs, skin, and muscles.
AC9HP4M04	Participate in physical activities and describe benefits to the body.	Students observe changes in breathing and heart rate before and after movement, describing what happens in their bodies.

YEARS 5–6

Science

Code	Full Description	Justification
AC9S5U01	Examine how structural features and behaviours enable survival.	Students explore how body systems (respiratory, circulatory, muscular) work together to support life and activity.

Code	Full Description	Justification
AC9S5I04	Construct and use representations to describe patterns and relationships.	Students create a systems interaction poster showing how organs depend on each other.
AC9S5I06	Communicate scientific ideas using appropriate language.	Students present written or oral explanations of how systems coordinate (e.g., exercise → breathing → oxygen to muscles).

Design & Technologies

Code	Full Description	Justification
AC9TDE6P03	Select and use suitable materials, tools and techniques to safely make designed solutions.	Students produce a body systems poster or educational display, making design choices about structure, clarity, and materials.

Health & Physical Education

Code	Full Description	Justification
AC9HP6P10	Analyse how behaviour influences health and wellbeing for self and others.	Students consider how choices (diet, exercise, sleep, hygiene) affect how well their body systems function.
AC9HP6M03	Participate in physical activities and describe the effects on the body.	Students observe how heart rate, breathing and muscle activity change during exercise, and explain why.

Lesson 30: The Five Senses – God's Good Design

Theme: Exploring Human Senses
Character Focus: Orderliness – Recognising the structured design of our body systems.

Learning Objectives

By the end of this lesson, students will be able to:

- Name and describe the five senses.
- Explain how each sense helps us explore the world and keep safe.
- Understand how senses connect to the brain and work in an orderly system.
- Observe and investigate sensory input through practical exploration.
- Reflect on God's purposeful design of our senses.

Addressed Content Descriptions:

- AC9SFH01, AC9SFI02, AC9S1I03, AC9S2U02, AC9S5U01
- AC9HPFP05, AC9HP2P05, AC9HP4P08, AC9HP6P10
- AC9TDE2K01, AC9TDE2P01, AC9TDE4K02, AC9TDE6K05

A) Introduction

Parent/Tutor Says:
"Today we're going to learn about five special ways God has made your body to learn about the world – your senses! Can you name any of the five senses? Let's learn their names and how they help us."

Key Vocabulary:

- **Senses** – The ways your body receives information about the world.
- **Sight** – Using your eyes to see.
- **Hearing** – Using your ears to hear sound.
- **Taste** – Using your tongue to detect flavours.
- **Smell** – Using your nose to detect scents.
- **Touch** – Using your skin to feel things like pressure, temperature, or texture.
- **Nerves** – Tiny threads inside your body that send messages.
- **Brain** – The control centre that receives all sensory messages.

Parent/Tutor Instruction:
Introduce the words one at a time. Say them aloud and ask the student to repeat them. If the child is writing, ask them to copy the words into a notebook and draw a matching symbol for each sense.

B) Informational Story – "Sam's Sensory Safari"

Sam had always dreamed of going on a safari. One evening, after reading a book about African animals, he curled up under his warm blanket and drifted off to sleep. But when he opened his eyes again, he wasn't in his bedroom anymore. He stood on a sunlit plain with tall grasses swaying around him, birds soaring overhead, and a breeze carrying the scent of something wild and wonderful.

Before he could even speak, a smiling woman approached him. She wore a khaki safari hat and had a notebook slung over her shoulder.

"Welcome, Sam!" she said cheerfully. "I'm Zina, your guide. Today you're going on a different kind of safari – one through the five senses God has given you!"

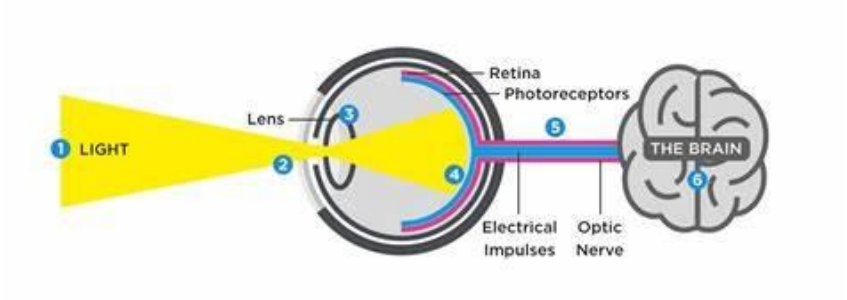
Sam blinked. "A safari of my senses?"

Zina nodded. "Yes! You use them every day, but today, we'll explore what each one does and how it helps you live, learn, and worship the God who made you."

Sam grinned. "Let's go!"

Sight – The Camera of the Body

Zina led Sam to a tall rock that overlooked a valley bursting with colour. There were golden grasses, red and yellow flowers, green trees, and a shimmering blue river winding through it all. A group of zebras grazed nearby, their black-and-white stripes dazzling in the sunlight.



"Your first sense is sight," said Zina. "Your eyes are like cameras. Light enters through your pupils, is focused by your lens, and hits the retina at the back of your eye. That retina is covered in special cells called rods and cones. They turn the light into signals that travel along the optic nerve to your brain. Your brain puts the picture together in less than a second!"

Sam blinked rapidly. "So, my eyes don't actually 'see' – my brain does?"

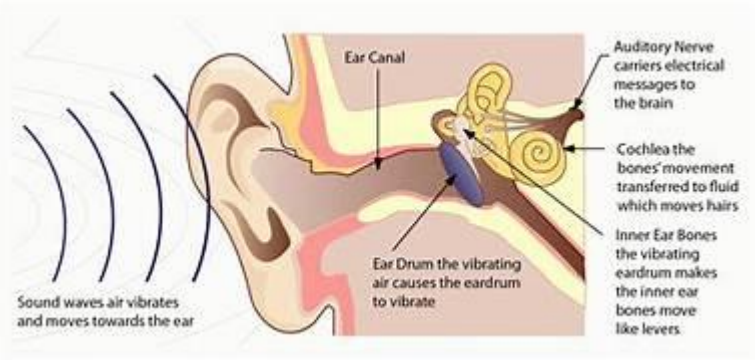
"Exactly," said Zina. "Your brain interprets what the eyes take in. That's why if you close one eye, things can look a little flat – it's your two eyes working together that help you see depth and distance."

She handed him a pair of binoculars. "Look closely – what do you see?"

Sam scanned the horizon. "I see an elephant bathing in the river! And… wow! A rainbow in the mist!"

Zina smiled. "Your sight helps you enjoy God's beauty, recognize faces, read books, and stay safe by noticing danger."

Hearing – The Invisible Music



They walked down to the riverside, where the jungle seemed alive with sound – chirping crickets, buzzing insects, birds calling, and the bubbling water.

"Now let's talk about hearing," Zina said. "Your ears pick up vibrations in the air, called sound waves. These waves enter your ear canal and hit the eardrum. Tiny bones – the hammer, anvil, and stirrup – carry the vibrations to your cochlea, a snail-shaped organ filled with fluid. Inside the cochlea, tiny hair cells turn the vibrations into signals sent to your brain."

Sam cupped his hands behind his ears. "It's like my brain is doing a concert review!"

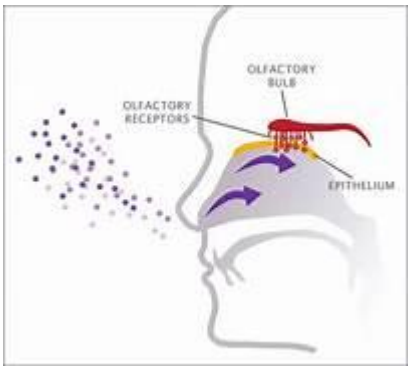
Zina laughed. "Exactly. Sound helps you enjoy music, hear your name, follow instructions, and even detect danger – like hearing a snake hiss or a car horn."

She picked up two stones and clicked them together behind his back. "What direction did that come from?"

Sam pointed correctly.

"Well done," said Zina. "Your two ears help you locate where sounds are coming from, which is a gift from God's orderly design."

Smell – The Memory Maker



Next, Zina led Sam into a shady grove filled with scents. She opened a small pouch and pulled out vials (tiny bottles) labelled "vanilla," "peppermint," and "eucalyptus."

"Your nose is more powerful than you think," she said. "Inside it, smell receptors detect tiny particles in the air. These send signals to the olfactory bulb in your brain, which then decodes the smell."

Sam took a sniff of the vanilla vial and smiled. "It smells like baking cookies!"

"Exactly!" said Zina. "Smell is connected to the memory part of your brain. That's why certain scents can remind you of places or people."

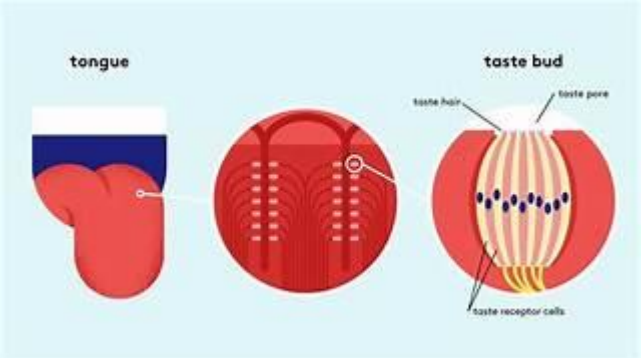
She handed him another vial. "Smell this one."

Sam wrinkled his nose. "Oof! Rotten eggs!"

Zina nodded. “And that’s your body warning you of danger. Smell helps protect us from things like spoiled food or smoke from a fire.”

“God really thought of everything,” Sam murmured.

Taste – The Tongue Detective



A table appeared, set with small dishes – berries, lemon slices, olives, crackers, and a bit of honeycomb.

“Taste time!” Zina announced.

Sam popped a berry in his mouth. “Sweet.”

Then a lemon slice. “Sour!”

A cracker. “Salty.”

An olive. “Bitter.”

And the honeycomb. “Delicious!”

Zina explained, “Your tongue is covered in taste buds, each with tiny receptors that detect five basic tastes: sweet, sour, salty, bitter, and umami – which means savoury, like cheese or meat. These receptors send signals to the brain, which combines the taste with smells and textures to create flavour.”

Sam thought for a moment. “That’s why food tastes boring when I have a cold! I can’t smell properly.”

“Exactly,” said Zina. “Taste not only helps you enjoy meals – it also protects you from harm. Bitter tastes can warn you that something might be poisonous, while sweetness often means there’s energy.”

Touch – The Sensory Net

Zina handed Sam a blindfold. “Let’s try touch.”

She placed a series of objects in his hands: a fuzzy pom-pom, a smooth stone, a rough bark, a soft feather, and a prickly pinecone.

“Your skin,” she explained, “is your largest organ and is filled with thousands of nerve endings. Some respond to pressure, others to temperature or pain. The signals travel to your brain instantly.”

Sam touched his cheek. “That’s why I feel the wind or know if something’s hot?”

“Exactly. Touch helps you stay safe – like pulling your hand away from something sharp – and also helps you connect with others through hugs, handshakes, or helping someone up.”

She handed him a warm cloth. “Feel this? That warmth is comforting. God gave us touch not just for safety, but for relationship.”

The Brain – The Grand Coordinator

Sam’s head was spinning – in a good way.

“So… all these senses are like reporters sending information to the control centre – my brain?”

“Yes,” said Zina. “And your brain processes all the data in less than a second. That’s what allows you to understand what’s happening around you – and respond.”

Zina picked up her notebook. “And your senses don’t work alone. For example, taste needs smell. Balance uses your inner ear and eyes. And when one sense is missing – like sight – your brain strengthens the others.”

“Wow,” said Sam. “I never knew I used all this every day!”

“You do,” said Zina. “And you didn’t even have to think about it. God designed your body with amazing order.”

Waking Up to Wonder

The wind rustled again. Sam felt a change in the air – like something was calling him back.

Zina smiled. “It’s time to go, Sam. But remember: your senses are more than tools. They’re gifts – ways to explore creation, enjoy beauty, love others, and worship God.”

As the scene faded, Sam heard birds chirping again.

He opened his eyes – and was back in his bed.

The sheets felt cool and soft. He smelled toast from the kitchen. Outside, golden light poured through the window, and he could hear his dog barking playfully.

Sam smiled and whispered, “Thank You, God, for making me with eyes that see and ears that hear. You really thought of everything.”

Then he sat up, stretched, and ran to the breakfast table – ready to use every one of his amazing senses to discover the day.

C) Narration

Parent/Tutor Says:
"Now tell me everything you remember from Sam's Sensory Safari. What did Sam discover about each of the five senses? How do they work, and how do they help us?"

Allow time for retelling. Prompt gently with questions like:

- "What did Sam see and hear?"
- "What happened when he touched the rock or tasted the lemon?"
- "Why did Zina say God gave us our senses?"

Encourage older students to include vocabulary words and brain-body connections.

D) Teaching Skills

Parent/Tutor Says:
"Let's learn more about how scientists explore senses. Scientists often observe things closely, ask questions, and test ideas using tools or their own senses."

Explain to the children:

- Each sense organ (eye, ear, nose, tongue, skin) sends signals to the brain.
- The brain receives, interprets, and tells us what we are experiencing.
- These observations help scientists learn how bodies work.

Skills to Teach:

- Observation using different senses
- Comparing sensory inputs
- Describing textures, sounds, flavours, or sights
- Drawing conclusions about how the senses help us

Instructional Tip:
Use real-life examples: "Close your eyes. Listen carefully. What do you hear?" Or: "Rub your hands on sandpaper. What words can you use to describe that texture?"

E) Thinking Questions

Foundations to Year 2:

- Which part of your body helps you see?
- Can you remember a smell from the story? What did it remind you of?
- Why do you think God gave us ears?

Years 3–4:

- What would happen if you didn't have one of your senses?
- Which of the five senses helps you stay safe? How?
- How do your senses work together when you eat?

Years 5–6:

- How does your brain know what you're touching or tasting?
- Why do people say the senses are connected to memory?
- In what ways does God show order and purpose in the way your senses work?

F) Practical Activities

Foundations to Year 2:

Activity 1: Sense Sorting Cards
Make five cards with drawings or photos of things you can see, hear, smell, taste, or touch. Sort them into the right categories.

Activity 2: Texture Bag Game
Put different small objects (smooth rock, sponge, cotton ball, button) into a bag. Let the student reach in and describe how it feels without looking.

Years 3 & 4:

Activity 1: Senses Field Journal
Go on a short walk and record what you see, hear, smell, taste (if safe), and feel. Write descriptive words for each sense.

Activity 2: Hearing Experiment
Use a stopwatch and ask: "How long can you stay quiet and just listen?" List all the sounds you hear and how far away they seem.

Years 5 & 6:

Activity 1: Sense & Brain Connection Poster
Create a diagram that shows each sense organ, the nerves involved, and where the message goes in the brain.

Activity 2: Design a Safety Alert System
Use design thinking to create a simple system that warns someone using one of their senses (e.g., a smell for fire, or a flashing light for danger).

G) Optional Extension Research Activity

Option 1:
Research and write a short report on "How blind people use their other senses."

Option 2:
Create a diagram of the brain's sensory cortex, showing which part controls sight, sound, smell, taste, and touch.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Let's read Proverbs 20:12 together: 'Ears that hear and eyes that see – the Lord has made them both.' God didn't just give us these amazing tools by accident. He made them on purpose – with order and care."

Discuss:

- How do the senses show that God loves us?
- How can we use our senses to worship Him?
- How can we care for our senses (like wearing sunglasses or washing our hands)?

Prayer Suggestion:
"Thank You, God, for creating our amazing senses. Help us to use them well, care for them, and remember they are gifts from You. Amen."

Australian Curriculum (v9) Content Descriptions Addressed

FOUNDATION – YEAR 2

Science

Code	Full Description	Justification
AC9SFH01	Explore ways people make and use observations to learn about the world.	The lesson teaches children to use their senses to observe and describe what they notice in the environment.
AC9SFI02	Engage in investigations safely and make observations using their senses.	Sense-based activities require children to explore textures, smells, sounds, etc., safely and attentively.
AC9S1I03	Make and record observations using informal methods.	Students talk about or draw what they noticed during sensory exploration.

Design & Technologies

Code	Full Description	Justification
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students produce a simple "sense map" or labelled diagram showing body parts and senses.

Health & Physical Education

Code	Full Description	Justification
AC9HPFP05	Demonstrate protective behaviours and name body parts that help keep them safe.	The lesson requires students to identify sensory organs (eyes, ears, nose, skin, tongue) and discuss how to care for them safely.
AC9HPFM03	Participate in activities in natural and outdoor settings and explore benefits of being physically active.	A "sensory walk" or outdoor observation experience is part of the lesson's exploration.

YEARS 3–4

Science

Code	Full Description	Justification
AC9S3I03	Follow procedures to make and record observations, using simple measurements where appropriate.	Students follow steps in a sound/hearing observation task and record what they notice.
AC9S3I04	Construct and use representations (diagrams, models) to show relationships and patterns.	Students complete labelled diagrams of sensory organs or create a sensory data chart.

Design & Technologies

Code	Full Description	Justification
AC9TDE4P03	Select and use materials and tools to safely make designed solutions.	Students may create a simple sensory model (e.g., sound cup, smell jars, texture board).

Health & Physical Education

Code	Full Description	Justification
AC9HP4P10	Investigate and apply behaviours that support health, safety and wellbeing.	Students learn how to care for senses (e.g., protect eyes from brightness, avoid loud noise, hygiene for taste/smell).
AC9HP4M04	Participate in physical activities to explore how the body feels and describe benefits of being active.	Sensory movement activities (moving, feeling, noticing breathing and sensation changes) connect sensory awareness to bodily experience.

YEARS 5–6

Science

Code	Full Description	Justification
AC9S5U01	Examine how structural features enable function in living things.	Students study how sensory organs are shaped and connected to function (e.g., ear parts, nerves to brain).
AC9S5I04	Construct and use representations to show patterns or relationships.	Students create a sense-to-brain process diagram (stimulus → nerves → brain → response).
AC9S5I06	Communicate scientific ideas and findings in appropriate ways.	Students explain how senses work together, using labelled diagrams, written notes, or oral explanation.

Design & Technologies

Code	Full Description	Justification
AC9TDE6P02	Generate and communicate design ideas using technical terms and clear representation.	Students design and explain a simple sensory alert or safety signal system.
AC9TDE6P03	Select and use materials, tools and techniques to safely make designed solutions.	If students create or prototype the sensory alert design, this requires safe material selection and assembly.

Health & Physical Education

Code	Full Description	Justification
AC9HP6P10	Analyse how behaviours influence the health and wellbeing of individuals and communities.	Students identify behaviours that protect senses (e.g., wearing hearing protection, safe screen time, hygiene habits).

Lesson 31: Growing and Changing

Theme: God's Orderly Design for Growth
Character Focus: Orderliness – Recognising that God planned for all living things to grow step by step.
Bible Verse: Luke 2:52 – "And Jesus grew in wisdom and stature."

Learning Objectives

By the end of this lesson, students will be able to:

- Describe how humans grow and change physically, mentally, and spiritually.
- Recognise that growth happens in stages, showing God's design and order.
- Identify ways they have grown and how they can grow in wisdom and character.
- Compare their growth journey to the growth of Jesus as a child.
- Use observation, reflection, and creative expression to track and celebrate growth.

A) Introduction

Parent/Tutor Says:
"Have you noticed how you've changed from when you were a baby until now? God has designed all living things to grow step by step. Today, we're going to explore what it means to grow in our bodies, minds, and hearts – just like Jesus did."

Vocabulary:

- **Growth** – The process of getting bigger, stronger, or smarter over time.
- **Wisdom** – Understanding what is right and true and using knowledge well.
- **Stature** – Physical size or strength.
- **Stages** – Different times or steps in life.
- **Spiritual Growth** – Learning to trust and follow God more closely.

Parent Instruction:
Write these words on a whiteboard or paper. Say each one aloud and ask students to give an example or draw a quick picture to show what the word means.

B) Informational Story – "Maia's Growing Book"

Maia loved flipping through the photo album her mum kept on the living room shelf. Each page held a piece of her story – baby pictures with gummy smiles, toddler snapshots with sticky fingers, first-day-of-school grins, and last summer's family picnic. As she looked at herself growing up in those photos, a question bubbled up in her mind.

"Mum," she asked one afternoon, "how do I grow? What makes me bigger and smarter?"

Her mum smiled, sitting beside her. "You're growing all the time, Maia – in your body, your brain, and your heart. God designed you to grow, just like He designed seeds to sprout and trees to stretch toward the sky."

That night, Maia dreamed she was stepping into the photo album itself. Each page became a doorway into her past and future.

The Baby Stage

She found herself in a sunny nursery, watching a tiny baby – herself – lying in a soft blanket. The baby's hands waved in the air, and her little feet kicked like tiny drumsticks. A gentle voice whispered, "Babies grow quickly. In just a few months they learn to smile, roll over, crawl, and eventually walk. Their brains are like sponges, soaking up every sound and sight."

Maia noticed the baby trying to grab a rattle. "That was me? I didn't know how to hold things then."

The voice chuckled kindly. "You had to grow muscles, coordination, and strength. You learned to eat real food, to make sounds, and to recognize your family's faces."

The Toddler Years

The scene changed. Now she was a toddler, tottering on unsteady legs, taking her first steps between her dad's outstretched hands. Toys were scattered on the floor, and bright finger paintings decorated the walls. "When you were a toddler," the voice explained, "your body was learning balance and movement. Your brain was learning new words every day. You began to understand rules like 'please' and 'thank you.'"

Maia giggled at the sight of her chubby cheeks covered in paint. "I was messy!"

"Messy means you were exploring. That's how we grow – by trying new things, even when we make mistakes."

The Early School Years

Suddenly, Maia found herself at her preschool birthday party. There was a cake with candles, colourful balloons, and a circle of friends singing. She saw her younger self sharing toys, building with blocks, and learning to sing songs with her classmates.

"Now you're growing in different ways," the voice continued. "You're learning how to share, take turns, and listen to instructions. Your brain is developing skills like counting, drawing, and remembering Bible stories. Your heart is learning kindness and patience."

Maia nodded. "I remember learning my first memory verse. It felt so special!"

The Now Stage

The dream shifted, and Maia saw herself as she was now – reading books at the kitchen table, measuring flour for cookies, and helping her little brother with a puzzle. She looked taller, more confident.

"Look how much you've grown," said the voice warmly. "You're becoming wiser as you learn about the world. Your muscles are stronger from running and climbing. You can think of ideas, solve problems, and encourage others."

Maia thought of the times she had helped a friend at school or learned a new skill like riding her bike. "I guess I am growing in lots of ways."

The Future Stage

Suddenly, the album's pages showed images of what could be – a grown-up Maia wearing a teacher's lanyard, another page with her in a white coat like a scientist, and yet another of her as a mum with children. She blinked. "Are these all me?"

"They are possible futures," the voice said. "No one knows exactly what you'll be, but one thing is certain – you will keep growing. Even adults keep learning new things about life and about God."

Maia looked around and asked softly, "Is this how Jesus grew too?"

“Yes,” the voice replied. “Luke 2:52 tells us that Jesus grew in wisdom (in His mind), stature (in His body), and in favour with God and man (in His spirit and relationships). He experienced all the stages of childhood, just like you.”

Waking Up Thankful

The dream faded, and morning light filled Maia’s room. She stretched and noticed the marks on her doorframe where her mum measured her height each year. “I’m taller already,” she thought, smiling.

“Thank You, God,” she whispered, “for helping me grow every day – in my body, my mind, and my heart.”

C) Narration

Parent/Tutor Says:
“Can you tell me the story in your own words? What did Maia learn about how she grows? How do you see yourself growing – like Jesus did?”

Encourage students to describe the baby, toddler, school-age, and future stages. Older students can reflect on how spiritual growth is as important as physical growth.

D) Teaching Skills

Skill Focus:

- Observing and comparing growth stages.
- Reflecting on personal change over time.
- Planning goals for personal development.

Parent/Tutor Says:
“Scientists and health professionals often study how people grow by measuring, comparing, and keeping records. Today, we’ll observe our own growth – physically, mentally, and spiritually.”

Mini Skill Activity:

- Show a measuring chart or family photo album.
- Discuss how physical measurements (like height) show growth, and how journals or memory verses show mental/spiritual growth.

E) Thinking Questions

Foundations to Year 2:

- What can you do now that you couldn’t do as a baby?

- Who helps you learn new things as you grow?
- How does God help you grow in your heart?

Years 3–4:

- What do you think it means to "grow in wisdom"?
- Why do you think we grow slowly instead of all at once?
- How does God show order in the way we grow?

Years 5–6:

- How can you grow spiritually (in faith and kindness) as you grow physically?
- What does it mean to grow "in favour with God and man"?
- How does tracking your growth help you see God's plan?

F) Practical Activities

Foundations to Year 2:

1. **Growth Collage:** Make a collage of pictures from babyhood to now (or draw each stage).
2. **Height & Handprint Chart:** Measure your height and trace your hand. Compare it in 6 months.

Years 3 & 4:

1. **Growth Timeline:** Draw a three-part timeline – baby, now, future dreams. Add captions of what you learned at each stage.
2. **Memory Verse Growth:** Learn Luke 2:52 by heart and illustrate what "wisdom" and "stature" look like.

Years 5 & 6:

1. **Letter to Future Self:** Write a letter to yourself in 5 years about what you hope to learn and how you hope to grow spiritually.
2. **Growth Bar Graph:** Create a bar graph comparing your height over the past few years (if measurements are available).

G) Optional Extension Research Activity

- Research how nutrition and exercise help children grow.
- Create a small presentation (drawing, poster, or 1-page report) on how babies develop in their first year.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Luke 2:52 reminds us that even Jesus grew step by step. He learned, worked, and grew in kindness and faith. Our growth is part of God's good design."

Wrap-up Question:
"What is one thing – big or small – that you've learned or improved at this year? Can we thank God for that?"

Prayer:
"Thank You, God, for designing our bodies, minds, and hearts to grow in an orderly way. Help us to grow in wisdom, kindness, and faith like Jesus. Amen."

Australian Curriculum (v9) Content Descriptions Addressed

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9HPFP02	Describe changes in their own lives and identify factors influencing these changes.	Students talk about how they have grown physically and emotionally since they were younger.
AC9HPFP04	Recognise strengths and achievements and identify how these contribute to personal identity.	Students reflect on personal growth and celebrate ways they have developed.
AC9SFI03	Represent observations in provided formats and identify patterns with guidance.	Students create a simple growth timeline using drawings or photos.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students design a "My Growth Story" poster, choosing images and labels to represent growth.

YEARS 3–4

Code	Full Description	Justification
AC9HP4P01	Describe physical, social and emotional changes that occur as people grow and develop.	Students discuss how growth happens in body, mind, and character, comparing younger and older versions of themselves.
AC9HP4P10	Investigate and apply behaviours that support health, safety and wellbeing.	Students identify healthy habits that support growth, including rest, nutrition, learning, and spiritual growth.
AC9S3I04	Construct and use representations to show relationships and patterns.	Students create a growth chart or development timeline, showing how change occurs in stages.
AC9TDE4P02	Generate and communicate design ideas using technical terms and graphical representation.	Students create a visual timeline, clearly organizing and labeling ages/stages in sequence.

YEARS 5–6

Code	Full Description	Justification
AC9HP6P01	Investigate how physical, social and emotional development changes during childhood and adolescence.	Students compare different kinds of growth (body, reasoning, relationships, faith) and discuss maturity.
AC9HP6P10	Analyse how behaviours influence health and wellbeing of themselves and others.	Students identify choices that support healthy growth, such as routines, exercise, encouragement, and wise habits.

Code	Full Description	Justification
AC9S5I06	**Communicate scientific and personal understandings using appropriate language and representations.**	**Students explain their personal growth journey, using reflection statements or presentations.**
AC9TDE6P02	**Generate and communicate design ideas using detailed representation techniques.**	**Students produce a structured personal growth portfolio, timeline, or reflective chart using organised formatting and labels.**

Lesson 32: God's Purpose for Us

Theme: Created with Purpose
Character Focus: Orderliness – God has an intentional design and purpose for each life.
Bible Verse: Jeremiah 29:11 – "For I know the plans I have for you," declares the Lord.

Learning Objectives

By the end of this lesson, students will be able to:

- Understand that each person has a unique purpose designed by God.
- Reflect on their individual gifts, interests, and talents.
- Explore the idea of purpose through story, discussion, and creative expression.
- Recognise that order and meaning come from God's intentional design.
- Appreciate that discovering purpose is a journey that continues throughout life.

A) Introduction

Parent/Tutor Says:
"Have you ever wondered why you were made? What is your special purpose? God didn't create anyone by accident. In fact, the Bible tells us that He has plans for each of us – good plans. Today we'll discover more about God's purpose for you."

Vocabulary Words:

- **Purpose** – The reason something or someone exists or was made.
- **Talents** – Special skills or abilities.
- **Plan** – A set of steps or a direction to follow.
- **Order** – Things being arranged with a reason and structure.
- **Gift** – Something given freely, often referring to our abilities from God.

Activity:
Say each word aloud. Ask students to use it in a sentence or give an example. For example, "My talent is drawing" or "A plan helps us know what to do."

B) Informational Story – "Joanna's Magnificent Mission"

Joanna loved asking big questions. Some kids asked why the sky is blue or what makes cats purr, but Joanna's questions were bigger. "Mum," she asked one quiet afternoon, curled up on the couch with her sketchbook, "why did God make me? What am I supposed to do with my life?"

Her mum didn't laugh or brush her off. She smiled gently, tucked a strand of hair behind Joanna's ear, and said, "That's a wonderful question, Joanna. Let me tell you a story."

The Glowing Map

That night, Joanna dreamed she was holding a glowing map. It wasn't an ordinary map with names and streets – it shimmered with light and curved lines, leading in many directions. As she stared, a gentle voice spoke.

"This is your life," the voice said. "I designed it just for you."

Joanna looked around and realised she was standing at the beginning of a beautiful pathway, one step at a time. Each stone sparkled under her feet. Though the end wasn't visible, the path ahead was inviting.

"But where am I going?" Joanna asked aloud.

"Keep walking," the voice replied. "You'll see."

The Gifted People

Joanna walked along the glowing path and came to a village filled with people joyfully using their gifts. A woman read stories to children under a tree, her voice full of life and wonder. Nearby, a young man played guitar and sang melodies that made everyone smile. A girl rescued a bird with a broken wing, gently nursing it back to health. Another fixed a fence while talking kindly with a neighbour.

Joanna's eyes widened. "They're all doing something important."

"These are people using the gifts I gave them," said the voice. "They are doing what I created them to do."

The Mirror of Truth

Joanna continued walking and came across a tall, golden-framed mirror standing alone in a clearing. She stepped closer and looked in. But instead of just her reflection, she saw herself painting a bird with vibrant wings. She saw herself helping a friend who was crying. She saw herself laughing, planting flowers, writing in a notebook, and dancing in a swirl of joy.

"That's me," she whispered. "But… I didn't know I could do all those things."

"You are still discovering them," said the voice kindly. "I made you creative. I gave you imagination, gentleness, and joy. I planted those things in your heart. You are still growing into who you were made to be."

A Conversation with the Voice

Joanna turned away from the mirror. "But what if I don't know what my purpose is yet? What if I make the wrong choice?"

“You won’t miss it if you keep walking with Me,” said the voice. “Your purpose isn’t just one big thing in the future. It’s made of many little things you do with love, kindness, and faith. It’s using your gifts to bless others, listening to Me when you pray, and saying yes when I ask you to help or try something new.”

Purpose in Small Things

As she walked, Joanna passed scenes of herself doing ordinary things: reading to her little brother, picking up rubbish at the park, helping set the table, comforting a friend, writing cards for sick people.

“These aren’t amazing,” Joanna said.

“But they are beautiful,” the voice replied. “Each of these things is part of your mission. Loving people. Using your gifts. Learning from mistakes. Growing in wisdom. All of this is part of the plan.”

A Promise for the Journey

At the end of the trail stood a tree bursting with light. Its branches spread wide, filled with glowing fruit. A verse appeared in golden letters among the leaves:
“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you a hope and a future.” – Jeremiah 29:11

“I know the plans I have for you,” the voice repeated. “Not random. Not rushed. But planned and good. You are never alone.”

Waking with Purpose

Joanna opened her eyes. Sunlight streamed through her curtains. Her sketchbook was still in her hands. She sat up and smiled. “God has a plan for me,” she whispered. “And I want to use the gifts He gave me.”

She ran to the kitchen, calling, “Mum! I know what I want to do today. I want to draw something… and maybe write a card for Gran. That can be part of my purpose!”

Her mum looked at her and said, “Yes, sweet girl. Every loving thing you do is part of your journey. God’s purpose is already at work in you.”

C) Narration

Parent/Tutor Says:
“Tell me what happened in Joanna’s story. What did she learn about herself and God’s purpose? What were some of the people she saw using their gifts?”

Encourage students to describe the map, the mirror, the scenes of people using their talents, and the message from the voice. Older students may reflect on the meaning of purpose and how it grows over time.

D) Teaching Skills

Skill Focus:

- Recognising talents and gifts
- Reflecting on identity and growth
- Exploring future aspirations in a guided and faith-based way

Parent/Tutor Says:
"Sometimes we don't know what our whole future looks like, but we can start noticing what we're good at, what we enjoy, and how we can help others. Let's practise identifying our gifts and talking about how they might be part of God's plan."

Mini Activity:

- Make a list of the student's interests and talents.
-
- Match each one with ways it could be used to help others.

E) Thinking Questions

Foundations to Year 2:

- What do you love to do?
- Who made you special?
- Can you help someone today with your gift?

Years 3–4:

- Why do you think everyone has different talents?
- What is one gift you think God gave you?
- How can you use it to show kindness?

Years 5–6:

- What does it mean that God has a plan for your life?
- What are some talents or dreams that might be part of that plan?
- How does knowing God has a plan bring peace or order to your life?

F) Practical Activities

Foundations to Year 2:

1. **Purpose Poster:** Draw yourself doing something you love with the words: "God made me for a special purpose!"

2. **Gift Match Game:** Match drawn or printed cards showing gifts (e.g., singing, helping, building) with ideas on how to use them kindly.

Years 3 & 4:

1. **"My Gifts" Booklet:** Fold paper into a booklet and draw or write your talents and how you want to use them.
2. **Purpose Tree:** Draw a tree and label each branch with a talent. Add fruit showing how each one could be used to bless others.

Years 5 & 6:

1. **"My Purpose Journal":** Create a journal with sections: My Gifts, My Interests, People I Admire, Prayers for Guidance.
2. **Vision Board:** Use drawings, magazine clippings, or symbols to create a collage of dreams and gifts. Label it "God's Plans for My Life."

G) Optional Extension Research Activity

- Research people from history or the Bible who used their gifts for God's purpose (e.g., Joseph, Esther, George Müller, Corrie ten Boom).
- Create a one-page poster or mini-report on how their gifts and choices honoured God.

H) Biblical Connection & Wrap-up

Parent/Tutor Says:
"Jeremiah 29:11 reminds us that God already knows the plan for our lives. He isn't surprised or confused about the future – He made you for something good, even if you're still discovering it."

Reflect:

- What is one thing you're thankful God made you good at?
- How can you offer that to others this week?

Prayer:
"Thank You, God, for making me with a purpose. Help me grow in wisdom, use my gifts well, and trust You to guide me. Amen."

Australian Curriculum (v9) Content Descriptions Used

FOUNDATION – YEAR 2

Code	Full Description	Justification
AC9HPFP04	Recognise strengths and achievements and how these contribute to identity.	Students reflect on what makes them unique and valuable as part of God's design.
AC9HPFP06	Identify people in their lives who support and care for them, and ways to show gratitude.	Students discuss how God provides support through family, church, and friends.
AC9TDE2P01	Generate and communicate design ideas through drawing or modelling.	Students create a "God Made Me Special" booklet or poster to express personal identity.

YEARS 3–4

Code	Full Description	Justification
AC9HP4P02	**Identify how personal identity is influenced by family, peers, and community.**	**Students reflect on how God works through relationships to shape purpose and identity.**
AC9HP4P04	**Recognise personal strengths and demonstrate strategies to develop them.**	**Students identify gifts, skills, and character traits God is growing in them.**
AC9HP4S03	**Describe how emotions influence behaviour and practise self-management strategies.**	**Students reflect on how understanding God's purpose gives direction and emotional grounding.**
AC9TDE4P02	**Communicate design ideas using technical and visual representations.**	**Students create a purpose or role poster, vision board, or character growth chart.**

YEARS 5–6

Code	Full Description	Justification
AC9HP6P01	**Investigate developmental changes and how these influence identity.**	**Students consider how growing mentally, socially, and spiritually relates to God's calling and maturation.**
AC9HP6P07	**Examine how values and beliefs influence personal behaviour and wellbeing.**	**Students explore how faith and Scripture shape direction, choices, and sense of purpose.**
AC9HP6P10	**Analyse how behaviour influences personal and collective wellbeing.**	**Students reflect on how choices guided by God's purpose positively affect their life and others.**
AC9TDE6P02	**Generate and communicate design ideas using structured representation.**	**Students design a "Life Purpose Plan Page," heart map, or mission identity statement, presented clearly and with organisation.**

Bonus Optional Lesson:

Today could be used for Field Trips or a Homeschool Co-op Group; or if you are at home then you might try this fun wrap-up of the week.

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We Are Wondrously Made – Unit Quiz

Bible Verse of the Week: Psalm 139:14 – "I am fearfully and wonderfully made."

Section A – For Younger Students (Grades 1–2)

1. What helps us see?
   a) Nose
   b) Eyes
   c) Hands

2. What part of our body pumps blood?
   a) Stomach
   b) Heart
   c) Foot

3. What is something you can taste?

_____

4. Who made your body?

_____

5. What do you want to be when you grow up?

_____

Section B – For Middle Students (Grades 3–4)

1. Match each system to its function:
   - Skeletal System: _____
   - Respiratory System: _____
   - Digestive System: _____
   (Choices: Helps you breathe, Gives structure to the body, Turns food into energy)

2. What are the five senses?

_____

3. How did Jesus grow, according to Luke 2:52?

_____

4. What is one way you've grown this year?

_____

5. Why did God give you talents and abilities?

_____

Section C – For Older Students (Grades 5–6)

1. Describe how two body systems work together:

_____

_____

2. Why are your senses important for exploring God's creation?

_____

_____

3. What does it mean that your body is a 'temple of the Holy Spirit'?

_____

_____

_____

4. What are some signs of growing spiritually as well as physically?

_____

_____

5. How does knowing God has a purpose for you affect the way you live?

_____

_____

_____

Bonus Activity (For All Ages)

Draw a picture of yourself doing something you love. Write a sentence underneath:
"God made me for a special purpose!"

ASSESSMENT TASKS FOR AUSTRALIAN CURRICULUM ACHIEVEMENT STANDARDS

Foundation – Year 2 Assessment Task

Title: *Creation & Patterns Poster – Caring for God's World*

Purpose

To show understanding of living things, habitats, observable patterns, and personal responsibility for caring for creation.

Step-by-Step Instructions

Prepare Materials:

- Large sheet of paper or poster board
- Coloured pencils, markers, or crayons
- Glue and scissors (optional for cut-outs)

Step 1: Draw the Pattern of Creation or Natural Order

- Draw **seven sections** for the days of creation OR show **natural patterns** like day/night and seasons.
- Label each section clearly (e.g., "Day 1 – Light and Darkness").

Step 2: Add Living Things and Habitats

- Draw at least **three living things** (e.g., fish, bird, tree).
- Show where they live (water, sky, land).
- Write one sentence for each: "A fish lives in water."

Step 3: Show Observable Features

- Add details like feathers, fins, leaves.
- Group similar things together (e.g., birds in the sky).

Step 4: Write About Caring for Creation (HPE Link)

- Write **one sentence** about how you can care for creation (e.g., "I can water plants.").

Step 5: Share Your Work

- Explain your poster to a parent/tutor:
  - What patterns did you show?
  - How do your drawings show order?
  - How will you care for creation?

Foundation – Year 2 Rubric

Criteria	Outstanding (5)	High (4)	Sound (3)	Basic (2)	Limited (1)
Classification & Habitats	Accurately groups multiple plants and animals with clear habitat links	Groups most correctly with minor errors	Groups some correctly; basic habitat mention	Limited grouping; unclear habitat links	Minimal attempt; incorrect or missing
Pattern Representation	Shows clear, ordered patterns (creation days, day/night) with labels	Mostly clear patterns; minor omissions	Basic sequence shown; lacks detail	Sequence unclear or incomplete	No pattern shown
Communication	Uses everyday and scientific vocabulary confidently	Uses some scientific terms correctly	Mostly everyday language; few scientific words	Limited vocabulary; unclear meaning	No relevant vocabulary
Care for Creation Statement (HPE)	Gives thoughtful, practical idea for caring for creation	Gives relevant idea; minor detail missing	Simple idea; lacks explanation	Vague or unrelated idea	No idea given

Years 3–4 Assessment Task

Title: *Ecosystem & Motion Interactive Display*

Purpose

To demonstrate understanding of ecosystems, food chains, forces, and personal responsibility for safety and wellbeing.

Step-by-Step Instructions

Prepare Materials:

- Shoebox or cardboard base
- Paper, glue, scissors
- Small objects or drawings for plants and animals
- Optional: string or arrows for food chain

Step 1: Choose an Ecosystem

- Pick one: forest, ocean, desert, or grassland.
- Write its name at the top of your display.

Step 2: Build the Ecosystem Model

- Place **producers** (plants) at the bottom.
- Add **consumers** (animals) and **decomposers** (worms, fungi).
- Label each clearly.

Step 3: Add a Food Chain Diagram

- Use arrows to show "who eats what."
- Example: Sun → Plant → Rabbit → Fox.

Step 4: Demonstrate a Force (Science Link)

- Use a small object (toy car or marble).
- Show what happens when you push it gently vs. hard.
- Record what you see in a short note: "Hard push = faster."

Step 5: Explain Safety & Order (HPE Link)

- Write **one sentence** about how being careful with forces keeps people safe (e.g., "I use gentle pushes so things don't break.").

Step 6: Present Your Display

Tell your parent/tutor:

- What is your ecosystem?
- How do plants and animals depend on each other?
- What did you learn about forces and safety?

Years 3–4 Rubric

Criteria	Outstanding (5)	High (4)	Sound (3)	Basic (2)	Limited (1)
Ecosystem Understanding	Explains roles of producers, consumers, decomposers with accurate food chain	Explains most roles correctly; minor errors	Basic food chain shown; limited explanation	Food chain incomplete or unclear	No food chain or explanation
Force Demonstration	Demonstrates force effect clearly with accurate explanation	Demonstrates force; explanation mostly correct	Demonstrates force; minimal explanation	Attempted demonstration; unclear result	No demonstration
Model/Diagram Quality	Highly organised, labelled, and visually clear	Mostly organised; minor omissions	Basic organisation; some labels missing	Poor organisation; unclear labels	No model or diagram
Scientific Explanation & HPE Link	Connects science to order and personal responsibility for safety	Connects science to order; limited HPE link	Mentions order; vague HPE link	Minimal connection; unclear	No connection made

Years 5–6 Assessment Task

Title: *Order in the Universe Research Project*

Purpose

To show understanding of Earth and space systems, light properties, sustainability, and personal responsibility for health and wellbeing.

Step-by-Step Instructions

Choose a Topic:

- Solar System
- Water Cycle
- Earth's Layers
- Light and Shadows

Step 2: Research and Gather Facts

- Use books or trusted websites.
- Write down **at least 5 key facts** about your topic.

Step 3: Create a Detailed Poster or Slideshow

- Include **diagrams** (e.g., orbit model, water cycle chart).
- Label parts clearly (e.g., Sun, Earth, Moon).

Step 4: Add a Practical Demonstration

Example:

- Show how light reflects using a mirror.
- Model Earth's orbit with a ball and torch.
- Record what happens in a short paragraph.

Step 5: Explain the Order and Why It Matters

Write **200–300 words** explaining:

- How your system shows order.
- Why this order is important for life.

Step 6: Add a Sustainability Action (HPE Link)

- Write **one practical action** you can take (e.g., "I will save water by turning off taps.").

Step 7: Present Your Work

- Share your poster/slideshow with a parent/tutor.
- Explain your diagrams, experiment, and sustainability idea.

Years 5–6 Rubric

Criteria	Outstanding (5)	High (4)	Sound (3)	Basic (2)	Limited (1)
Scientific Accuracy	Detailed, accurate description of chosen system (solar system, water cycle, etc.)	Mostly accurate; minor errors	Basic description; lacks depth	Limited or unclear description	Incorrect or missing
Representation & Model	Diagrams/models are precise, labelled, and well-presented	Diagrams/models mostly clear; minor omissions	Basic representation; lacks detail	Poorly organised or incomplete	No representation
Investigation & Reflection (HPE)	Insightful explanation of order and sustainability action	Clear explanation; sustainability link present	Basic explanation; vague sustainability link	Minimal explanation; unclear link	No explanation or link
Communication	Uses scientific language fluently and appropriately	Uses some scientific terms correctly	Mostly everyday language; few scientific words	Limited vocabulary; unclear meaning	No relevant vocabulary