

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Topic	Settling in/Routines/Feelings - zones of regulation	Why do leaves go crispy?	How many colours in a rainbow?	Are eggs alive?	Why can't I have chocolate for breakfast?	Can we explore it?
	I can	<p>Use all their senses in hands-on exploration of natural materials.</p> <p>Explore collections of materials with similar and/or different properties.</p> <p>Talk about what they see, using a wide vocabulary.</p> <p>Explore how things work.</p> <p>Plant seeds and care for growing plants.</p> <p>Understand the key features of the life cycle of a plant and an animal.</p> <p>Begin to understand the need to respect and care for the natural environment and all living things</p> <p>Explore and talk about different forces they can feel.</p> <p>Talk about the differences between materials and changes they notice.</p>					
	Vocab		Autumn Harvest Conker Acorn Oak Chestnut Leaves Pumpkin Forest Mud Sticks Squirrel Rabbit Bird hedgehog Pinecone Scarecrow Fruit vegetables Spiderweb Farmer	Colourful Rainbow Light Raindrop Sunshine Nature Sparkle Glitter Black White Night Day Gold Silver Colour names Shimmer Bright Dark Collage	Caterpillar Butterfly Cocoon Lifecycles Spring Growing Changing Chicks Eggs Chickens Ducklings Ducks Frogspawn Tadpoles Frogs Easter Blossom Beans Seeds Beanstalk Weather	Healthy Unhealthy Fruit Vegetables breakfast Lunch Dinner meal Taste Popcorn Milkshake Milk Cheese Delicious Crunchy Juicy Choice Drink Energy fresh Nutritious	Adventure Hunt Journey Map Explore Hide Tunnel Hole Maze Weather Camp Tent Cave Ocean Outdoors Field garden Den

Reception	Topic	Feelings Tell me a story	Why do squirrels hide their nuts?	Are we there yet?	Are Carrots Orange?	Why do Ladybirds have spots?	Who Lives in a Rockpool?
	Enquiry Learning/ Skills	<p>Classification Sort images of people according to their characteristics. Researching using secondary sources Find out information from visitors (dentist, nurse etc.). Pattern seeking Are taller children faster? Are taller children stronger?</p> <p>Talk about members of their immediate family and community. Name and describe people who are familiar to them.</p>	<p>Classification Which clothes are suitable for each season? Observing over time How does a puddle change over time? How does a snowman change as it melts? How does the natural world change with the seasons? Researching using secondary sources Find out about how animals behave in different seasons. Find out about the weather and seasons</p> <p>Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them.</p>	<p>Comparative testing How many cubes/small plastic animals can fit in different 'boats'? Compare how cars move down ramps/gutters. Compare how wheels turn when sand or water is poured through. Compare how objects fall with and without parachutes. Compare how different balls bounce. Compare how things move when blown. Compare how a marble moves through different liquids. Compare how different paper aeroplanes fly.</p> <p>Explore the natural world around them. Describe what they see, hear and feel whilst outside</p>	<p>Classification Name and describe different plants, fruit and vegetables</p> <p>Observing over time What happens to a seed when it has been planted?</p> <p>Explore the natural world around them. Describe what they see, hear and feel whilst outside</p> <p>Understand the effect of changing seasons on the natural world around them.</p>	<p>Classification Name and describe plants and animals they find in the school grounds. Pattern seeking Look for minibeasts in different areas of the school grounds. Look for plants in different areas of the school grounds</p> <p>Draw information from a simple map. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live.</p>	<p>Classification Sort animals according to where they live. Researching using secondary sources Learn how animals from a different habitat are cared for. Learn about animals in a different habitat.</p> <p>Recognise some environments that are different to the one in which they live.</p>
	Key Vocab	hair (black, brown, dark, light, blonde, ginger, grey,	spring, summer, autumn, winter, seasons, sunny,	float, sink, up, down, top, bottom, surface, move, roll,		plant, tree, bush, flower, vegetable,	names of animals, live, on

		white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman Supplemental: bald, elderly, wrinkles, male, female, freckles	cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers Supplemental: hibernate, migrate, snowflake	drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow Expose children to Supplemental: force, rotate, solid, liquid, gravity		herb, weed, animal, names of plants and animals they see, name of a contrasting environment such as grassland, forest Supplemental: environment, minibeast	land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice Supplemental: environment, polar regions, ocean, camouflage
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1	Forces and space: Seasonal changes	Materials: Everyday materials	Animals: Sensitive bodies	Animals: Comparing animals	Plants: Introduction to plants	Making connections: Investigating science through stories
Y2	Living things: Habitats	Living things: Microhabitats	Materials: Uses of everyday materials	Animals: Life cycles and health	Plants: Plant growth	Making connections: Plant-based materials
Y3	Animals: Movement and nutrition	Forces and space: Forces and magnets	Materials: Rocks and soil	Energy: Light and shadows	Plants: Plant reproduction	Making connections: Does hand span affect grip strength?
Y4	Animals: Digestion and food	Energy: Electricity and circuits	Materials: States of matter	Energy: Sound and vibrations	Animals: Classification and changing habitats	Making connections: How does the flow of liquids compare?

Y5	Materials: Mixtures and separation	Materials: Properties and changes	Forces and space: Earth and space	Living things: Life cycles and reproduction	Forces and space: Unbalanced forces	Animals: Human timeline
Y6	Living things: Classifying big and small	Energy: Light and reflection	Living things: Evolution and inheritance	Energy: Circuits, batteries and switches	Animals: Circulation and health	Making connections: Are some sunglasses safer than others?

YEAR 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Forces and space: Seasonal changes	Materials: Everyday materials	Animals: Sensitive bodies	Animals: Comparing animals	Plants: Introduction to plants	Making connections: Investigating science through stories
Lesson 1	<p>1) identify how the weather changes across the four seasons.</p> <p>Vocab:season</p> <p>Skills:I can describe the expected weather patterns for each season.</p> <p>Knowledge:I can name the four seasons.</p>	<p>1) sort objects into groups based on the materials they are made from.</p> <p>Vocab:material</p> <p>Skills:I can sort objects into groups.</p> <p>Knowledge:I can name everyday materials.</p>	<p>1)name parts of the human body.</p> <p>Vocab: body</p> <p>Skills: I can draw and label human body parts.</p> <p>Knowledge: I can identify some differences in animal body parts.</p>	<p>1)identify and group animals.</p> <p>Vocab: mammal</p> <p>Skills:I can group animals based on their similarities and differences.</p> <p>knowledge: I can name animals.</p>	<p>1)identify plants in the school grounds.</p> <p>Vocab: flower</p> <p>Skills: I can identify plants and their features</p> <p>Knowledge: I can identify plants and their features.</p>	<p>1)observe changes across the seasons.</p> <p>Vocab:data</p> <p>Skills:I can use data to answer a question.</p> <p>Knowledge:I can identify changes that occur in each season.</p>
Lesson 2		2)recognise the	2) Name the body		2) identify parts of a flowering	2)describe and compare

	<p>2)identify events and activities that take place in different seasons.</p> <p>Vocab:weather</p> <p>Skills:I can sort activities and events into the correct seasons.</p> <p>Knowledge:I can suggest appropriate clothing to wear in different weather conditions.</p>	<p>difference between objects and materials.</p> <p>Vocab:fabric</p> <p>Skills:I can explain the difference between objects and materials.</p> <p>Knowledge:I can name objects.</p>	<p>parts used for each sense.</p> <p>Vocab: senses</p> <p>Skills: I can draw and label the body parts used for each sense.</p> <p>Knowledge:I can draw and label the body parts used for each sense.</p>	<p>2) describe a variety of animals.</p> <p>Vocab: amphibian, reptile</p> <p>Skills:I can recall animal groups and what they have in common.</p> <p>Knowledge: I can name animal body parts.</p>	<p>plant.</p> <p>Vocab: feature</p> <p>Skills: I can use a magnifying glass to observe closely.</p> <p>Knowledge:I can recall the parts of a flowering plant.</p>	<p>the features of animals.</p> <p>Vocab:compare</p> <p>Skills:I can use a website to find answers to questions.</p> <p>Knowledge:I can identify similarities and differences.</p>
Lesson 3	<p>3) explain how trees change across the four seasons.</p> <p>Vocab:temperat ure</p> <p>Skills:I can ask simple questions about my observations.</p> <p>Knowledge:I can name the four seasons in</p>	<p>3)describe the properties of materials.</p> <p>Vocab:property</p> <p>Skills:I can recognise that objects are made from materials which suit their purpose.</p> <p>Knowledge:I can recall that</p>	<p>3)identify the body parts used for the sense of taste and touch.</p> <p>Vocab: sensitive</p> <p>Skills: I can use my sense of touch to identify an object</p> <p>Knowledge:. I can use my sense of touch to identify an object.</p>	<p>3)compare the features of animals.</p> <p>Vocab: compare</p> <p>SkillsI can sort animals and choose appropriate group labels.</p> <p>Knowledge:I can identify differences between animals in the same group.</p>	<p>3) identify and name wild and garden plants.</p> <p>Vocab:plant</p> <p>Skills: I can use a magnifying glass to observe closely.</p> <p>Knowledge: I can use pictures to help me identify plants.</p>	<p>3)identify differences in animal features.</p> <p>Vocab:measure</p> <p>Skills:I can measure the length of animal footprints.</p> <p>Knowledge:I can identify differences in animal footprints.</p>

	order.	property refers to how a material can be described.				
Lesson 4	<p>4)recognise that daylight hours change across the four seasons.</p> <p>Vocab:pictogram</p> <p>Skills:I can use a pictogram to answer questions.</p> <p>Knowledge:I can recall which seasons have the most and fewest daylight hours.</p>	<p>4)make observations and record data.</p> <p>Vocab:absorbent</p> <p>Skills:I can describe and record what I notice.</p> <p>Knowledge:I can name the properties of materials.</p>	<p>4) identify the body parts used for the sense of smell and sight.</p> <p>Vocab: sight smell</p> <p>Skills: I can recall the body part used for smell and sight.</p> <p>Knowledge:I can recall the body part used for smell.</p> <p>I can recall the body parts used for sight.</p>	<p>4) identify animals that are carnivores, herbivores and omnivores.</p> <p>Vocab: carnivore herbivore omnivore</p> <p>Skills:I can recall what carnivores, herbivores and omnivores eat.</p> <p>Knowledge: I can sort animals into groups according to what they eat.</p>	<p>4) identify and name deciduous and evergreen trees.</p> <p>Vocab: leaf</p> <p>Skills: I can observe leaves and identify similarities and differences.</p> <p>Knowledge: I can name some trees and their parts.</p>	<p>4) describe the properties of everyday materials.</p> <p>Vocab:material</p> <p>Skills:I can suggest how to test something to see if it is waterproof.</p> <p>Knowledge:I can use natural materials to make an animal home.</p>
Lesson 5	<p>5) gather and record data about how seasons change over time.</p> <p>Vocab: thermometer</p> <p>Skills:I can</p>	<p>5)group materials based on their properties (waterproofness).</p> <p>Vocab:waterproof</p>	<p>5)identify the body part used for the sense of hearing.</p> <p>Vocab: volume</p> <p>Skills: I can name the body part used</p>	<p>5)recognise animals that make suitable pets.</p> <p>Vocab: record</p> <p>Skills:I can record data in a block chart.</p> <p>Knowledge:I can recall how to care for a pet.</p>	<p>5) recognise that new plants come from seeds and bulbs.</p> <p>Vocab: bulb</p> <p>Skills: I can use similarities and differences to group seeds and bulbs.</p>	<p>5) identify animals that are carnivores, herbivores and omnivores.</p> <p>Vocab: diet</p> <p>Skills: I can group birds according to what they eat.</p> <p>Knowledge:I can explain the</p>

	<p>compare data collected over time.</p> <p>Knowledge:I can describe changes that take place in different seasons.</p>	<p>Skills:I can recognise when my prediction does not match the results.</p> <p>Knowledge:I can suggest ways to test the properties of materials</p>	<p>for hearing.</p> <p>Knowledge: I can name the body part used for hearing.</p> <p>I can identify an object based on the sound it makes.</p>		<p>Knowledge: I can recall that plants grow seeds or bulbs.</p>	<p>difference between carnivores, herbivores and omnivores.</p>
Lesson 6	<p>6)plan and carry out a weather report.</p> <p>Vocab: symbol</p> <p>Skills:I can suggest ways to prepare for different weather conditions.</p> <p>Knowledge:I can label the capital cities of each country in the UK.</p>	<p>6) group materials based on their properties (toughness).</p> <p>Vocab:material</p> <p>Skills:I can use my observations to answer questions.</p> <p>Knowledge:I can describe how materials respond to pulling and tearing.</p>	<p>6)recognise how the senses are used in everyday life.</p> <p>Vocab: sense</p> <p>Skills: I can list actions people take based on their senses.</p> <p>Knowledge: senses</p>	<p>6) describe and compare the structure of animals</p> <p>Vocab: research</p> <p>Skills: I can recognise similarities and differences between humans and chimpanzees.</p> <p>Knowledge: I can describe Jane Goodall's findings.</p>	<p>6) recognise the importance of a scientist's role.</p> <p>Vocab: observe</p> <p>Skills: I can closely observe different plant parts.</p> <p>Knowledge: I can name important discoveries made by scientists.</p>	
Vocabulary						

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Living things: Habitats	Living things: Microhabitats	Materials: Uses of everyday materials	Animals: Life cycles and health	Plants: Plant growth	Making connections: Plant-based materials
Lesson 1	<p>1. identify how the weather changes across the four seasons.</p> <p>Vocab:life processes</p> <p>Skills:I can give examples of how life processes apply to plants and animals.</p> <p>Knowledge:I can name some of the life processes.</p>	<p>1. classify a variety of minibeasts.s.</p> <p>Vocab:minibeast</p> <p>Skills: I can organise questions to create a simple classification key.</p> <p>Knowledge:I can name a variety of minibeasts.</p>	<p>1. recognise that objects are made from materials that suit their uses.</p> <p>Vocab: material property</p> <p>Skills: I can name objects with the same use that are made from different materials.</p> <p>Knowledge: I can name objects with the same use that are made from different materials. I can name a material that is used to make objects with different uses.</p>	<p>1. identify different stages of the human life cycle.</p> <p>Vocab:offspring</p> <p>Skills:I can identify animal offspring.</p> <p>Knowledge: I can describe how humans change</p>	<p>1. recognise that seeds need certain conditions for growth.</p> <p>Vocab:condition</p> <p>Skills:I can plan what to observe and measure.</p> <p>knowledge: I can suggest conditions that help seeds grow.</p>	<p>1. describe how materials can be reused.</p> <p>Vocab:recycle</p> <p>Skills:I can identify products that are made from recycled materials.</p> <p>Knowledge:I can sort objects based on their properties.</p>
Lesson 2	<p>2. identify events and activities that take place in different</p>	<p>2. recognise how scientists answer questions.</p>	<p>2) recognise that objects are made from materials that suit their uses.</p>	<p>2. know which offspring come from which parent animal.</p> <p>Vocab:life cycle</p>	<p>2. recognise that seeds and bulbs contain what they need to grow into a plant.</p> <p>Vocab: growth</p>	<p>2. identify human-made and natural materials.</p> <p>Vocab:human-made</p>

	<p>seasons.</p> <p>Vocab:habitat</p> <p>Skills:I can match animals and plants to their habitats.</p> <p>Knowledge:I can name four different habitats</p>	<p>Vocab: Skills: microhabitat.</p> <p>Knowledge:I can recognise that scientists choose the most suitable way to answer questions.</p>	<p>Vocab: material</p> <p>Skills: I can describe the properties of materials.</p> <p>Knowledge: I can explain why a material is suitable for its object's use.</p>	<p>Skills:I can order the human life cycle.</p> <p>knowledge: I can match the stages of animal life cycles with the correct animal.</p>	<p>Skills: I can measure the height of a shoot in centimetres.</p> <p>Knowledge:I can recall that a seed needs suitable conditions to grow.</p>	<p>Skills:I can sort human-made and natural materials.</p> <p>Knowledge:I can identify human-made and natural materials.</p>
Lesson 3	<p>3. recognise how trees change across the four seasons.</p> <p>Vocab: diet</p> <p>Skills:I can use a website to retrieve information.</p> <p>Knowledge:I can name woodland plants and animals.</p>	<p>3. recognise that living things live in habitats to which they are suited.</p> <p>Vocab:camouflage</p> <p>Skills: I can gather data and record it in a survey.</p> <p>Knowledge:I can give examples of how microhabitats suit the needs of minibeasts.</p>	<p>3. recognise that the shape of some solid objects can be changed.</p> <p>Vocab: bend elastic Flexible pull push</p> <p>Skills: I can observe how actions change the shape of solid objects.</p> <p>Knowledge I can describe what happens to objects after an action has been performed.</p>	<p>3. observe and measure growth in humans.</p> <p>Vocab: growth</p> <p>Skills: I can read my measurements.</p> <p>knowledge: I can apply my understanding of the human life cycle.</p>	<p>3. describe what seeds need to germinate.</p> <p>Vocab: germinate</p> <p>Skills: I can record plant growth data in a table.</p> <p>Knowledge:I can recall that seeds need water and warmth to germinate.</p>	<p>3. identify suitable materials based on their properties.</p> <p>Vocab: eco-friendly</p> <p>Skills: I can make observations about material properties</p> <p>Knowledge:I can suggest suitable materials for a plant pot.</p>

Lesson 4	<p>4. record data in a pictogram.</p> <p>Vocab: predator</p> <p>Skills: I can use a website to retrieve information.</p> <p>Knowledge: I can name woodland plants and animals.</p>	<p>4. ask questions and plan how to carry out an experiment.</p> <p>Vocab: food chain</p> <p>Skills: I can order the steps of a method.</p> <p>Knowledge: I can ask questions about the conditions minibeasts prefer.</p>	<p>4. compare the suitability of materials for particular uses.</p> <p>Vocab: compare material</p> <p>Skills: I can work in a group to carry out a test.</p> <p>Knowledge: To compare the suitability of materials for particular uses.</p>	<p>4. identify and list the basic needs for survival for humans and animals.</p> <p>Vocab: basic needs</p> <p>Skills: I can present research as a poster.</p> <p>knowledge: I can explain the three things animals need to survive.</p>	<p>4. describe the effect of light on plant growth.</p> <p>Vocab: data</p> <p>Skills: I can record plant growth data over time.</p> <p>Knowledge: I can recall that plants need light for healthy growth.</p>	<p>4. identify a material to help plant growth.</p> <p>Vocab: test</p> <p>Skills: I can test materials based on their properties.</p> <p>Knowledge: I can describe the needs of plants.</p>
Lesson 5	<p>5. gather and record data about how seasons change over time.</p> <p>Vocab: nutrition</p> <p>Skills: I can give examples of how animals and plants depend on each other.</p> <p>Knowledge: I can name animals in a rainforest and</p>	<p>5. To carry out an experiment and record data in a table.</p> <p>Vocab: tally</p> <p>Skills: I can use tally marks to record results.</p> <p>Knowledge: I can use a stopwatch.</p>	<p>5. can recognise that the strength of some materials changed.</p> <p>Vocab: record Strong</p> <p>Skills: I can measure strength using non-standard units.</p> <p>Knowledge: Vocab: record strong</p>	<p>5. recognise the importance of exercise and personal hygiene.</p> <p>Vocab: exercise</p> <p>Skills: I can record results each day.</p> <p>knowledge: I can describe how germs spread.</p>	<p>5. identify stages of a plant's life cycle.</p> <p>Vocab: life cycle</p> <p>Skills: I can draw diagrams to represent the stages of a plant's life cycle.</p> <p>Knowledge: I can describe the stages of a plant's life cycle.</p>	<p>5. choose materials to create a suitable plant pot.</p> <p>Vocab: life process</p> <p>Skills: I can identify living things, dead things and things that were never alive.</p> <p>Knowledge: I can select materials based on test results.</p>

	ocean habitat.					
Lesson 6	<p>6. plan and carry out a weather report.</p> <p>Vocab: food chain</p> <p>Skills: I can name predators that prey on other animals.</p> <p>Knowledge: I can name a producer and place it at the beginning of a food chain.</p>	<p>6. identify a variety of flowering plants.</p> <p>Vocab: species</p> <p>Skills: I can use an identification chart to name flowering plants.</p> <p>Knowledge: I can describe the role of a botanist.</p>	<p>6. compare the suitability of materials for particular uses.</p> <p>Vocab: suitable</p> <p>Skills: I can name properties of materials that make them suitable for their uses.</p> <p>Knowledge: To recognise that some materials are harmful to the environment.</p>	<p>6. identify how to have a balanced diet.</p> <p>Vocab: carbohydrates proteins</p> <p>Skills: I can recognise a pattern in data.</p> <p>knowledge: I can name foods in each group.</p>	<p>6. recognise what plants need for healthy growth.</p> <p>Vocab: wilt</p> <p>Skills: I can describe why healthy plant growth is important.</p> <p>Knowledge: I can recall what plants need for healthy growth.</p>	
Vocabulary						

YEAR 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Animals: Movement and nutrition	Forces and space: Forces and magnets	Materials: Rocks and soil	Energy: Light and shadows	Plants: Plant reproduction	Making connections: Does hand span affect grip strength?
Lesson 1	1) explain the role of a	1) describe the effects of	1) group rocks using their appearance.	1) explain the role of light sources.	1) identify the growth and survival needs of plants.	1) revise the units Movement and nutrition and

	<p>skeleton.</p> <p>Vocab: skeleton</p> <p>Skills:I can group animals based on their skeletons.</p> <p>Knowledge:I can name the three key functions of the skeleton.</p>	<p>contact forces.</p> <p>Vocab: Material fabric</p> <p>Skills:I can sort objects into groups. I can name everyday materials.</p> <p>Knowledge:</p>	<p>Vocab: rock</p> <p>Skills:I can define the term rock.</p> <p>Knowledge: I can describe the appearance of different rocks.</p>	<p>vocab:light source</p> <p>Skills:I can record information in the correct columns.</p> <p>Knowledge: I can recall examples of light sources and those that do not give out light.</p>	<p>Vocab: testable</p> <p>Skills: I can pose a testable question.</p> <p>Knowledge: I can identify that plants need air, water, light, nutrients and space to grow.</p>	<p>Rocks and soil.</p> <p>Vocab:grip strength</p> <p>Skills:I can identify the best prediction.</p> <p>Knowledge:I can describe how muscles move the skeleton.</p>
Lesson 2	<p>2) recognise the main bones in the body.</p> <p>Vocab: joint</p> <p>Skills:I can sort the data into size order.</p> <p>Knowledge:I can name key bones in the human skeleton.</p>	<p>2)recognise the effects and uses of forces</p> <p>Vocab: object group</p> <p>Skills:I can identify the material an object is made from.</p> <p>Knowledge:</p> <p>I can explain the difference between objects and materials</p>	<p>2)group rocks using their physical properties.</p> <p>Vocab: absorbency impermeable permeable</p> <p>Skills:I can group rocks by their absorbency, hardness and reaction to acid rain (vinegar).</p> <p>Knowledge: I can describe the appearance of different rocks.</p>	<p>2) compare light reflecting on different surfaces.</p> <p>vocab:reflect</p> <p>Skills:I can give examples of reflective surfaces or materials.</p> <p>Knowledge: I can describe factors that may affect the quality of a reflected image.</p>	<p>2) describe the relationship</p> <p>Vocab: absorb</p> <p>Skills: I can describe the purpose of a table.</p> <p>Knowledge: I can identify parts of flowering plants.</p>	<p>2) revise the units Movement and nutrition and Plant reproduction</p> <p>Vocab: nutrient</p> <p>Skills:I can record data.</p> <p>Knowledge:I can describe the role of fruits in plant reproduction.</p>

Lesson 3	<p>3)explain how muscles are used for movement. Vocab: involuntary</p> <p>Skills:I can explain how scientific research has helped with prosthetics.</p> <p>Knowledge:I can recall that there are different muscles in the body.</p>	<p>3)interpret how and why things move differently on different surfaces.</p> <p>Vocab: material object property</p> <p>Skills: I can recall that property refers to how a material can be described.</p> <p>Knowledge: I can describe the properties of everyday materials.</p>	<p>3) describe the process of fossil formation.</p> <p>Vocab:absorbency impermeable permeable</p> <p>Skills: I can list the different factors that break down rocks.</p> <p>Knowledge: To describe the process of fossil formation.</p>	<p>3)recognise which materials cast a shadow.</p> <p>vocab:testable</p> <p>Skills:I can plan ways to answer a testable question.</p> <p>Knowledge: I can describe how shadows form.</p>	<p>3) investigate how water is transported in plants.</p> <p>Vocab: nutrients</p> <p>Skills: To decide on equipment that might be useful.</p> <p>Knowledge: I can label parts of the plant involved in water transport.</p>	<p>3)revise the unit Forces and magnets.</p> <p>Vocab:bar chart</p> <p>Skills:I can draw a bar chart.</p> <p>Knowledge:I can describe how friction helps with grip.</p>
Lesson 4	<p>4) explain how food is an essential energy source for animals.</p> <p>Vocab: energy</p> <p>Skills:I can compare the nutritional</p>	<p>4)describe the effects of magnets.</p> <p>Vocab: absorbent</p> <p>Opaque transparent</p> <p>Skills: I can</p>	<p>4) identify fossils and group rocks accordingly.</p> <p>Vocab: Bone fossil</p> <p>Skills:I can group rocks that contain fossils.</p> <p>Knowledge:To identify fossils and</p>	<p>4) summarise how shadows change throughout the day.</p> <p>vocab:prediction</p> <p>Skills:I can explain why something is an advantage or disadvantage of a method.</p> <p>Knowledge: I can recall what causes shadows to</p>	<p>4) investigate how water is transported in plants.</p> <p>Vocab:seed formation</p> <p>Skills: I can identify the value of a bar in a bar chart.</p> <p>Knowledge: I can describe the role of flowers in pollination and fertilisation.</p>	<p>4) revise the unit Uses of materials.</p> <p>Vocab:property</p> <p>Skills:I can compare results from different tests.</p> <p>Knowledge:I can identify the best materials for specific uses.</p>

	<p>information on food packaging.</p> <p>Knowledge:I can recall that animals, including humans, need to eat food to survive.</p>	<p>sort materials into groups based on their properties.</p> <p>Knowledge I can name the properties of materials.:</p>	<p>group rocks accordingly.</p>	<p>change throughout the day.</p>		
Lesson 5	<p>5)identify the main nutrient groups and their simple functions.</p> <p>Vocab:balanced diet</p> <p>Skills:I can summarise key information using secondary sources.</p> <p>Knowledge:I can recall some of the seven nutrient groups.</p>	<p>5)describe the effects of magnets.</p> <p>Vocab: Waterproof data</p> <p>Skills: I can make a prediction.</p> <p>Knowledge: I can suggest ways to test the properties of materials.</p>	<p>5)compare soils and how they were formed.</p> <p>Vocab: clay soil loam soil peaty soil sandy soil</p> <p>Skills: I can name some different types of soil.</p> <p>Knowledge: I can compare and group soils according to their appearance.</p>	<p>5) investigate how the distance of the light source affects the size of its shadow.</p> <p>vocab: pattern</p> <p>Skills:I can describe patterns in data.</p> <p>Knowledge: I can name factors that change the size of a shadow.</p>	<p>5)apply knowledge of plant life and growth.</p> <p>Vocab: evaluate</p> <p>Skills: I can identify steps that are difficult to control.</p> <p>Knowledge: I can identify the effects of different variables on plant growth.</p>	<p>5) revise the units Light and shadows and Movement and nutrition.</p> <p>Vocab:light source</p> <p>skills:I can summarise my findings.</p> <p>knowledgeI can describe how shadows are formed.</p>
Lesson 6	<p>6) explain what makes a balanced diet.</p> <p>Vocab: nutrient</p> <p>Skills:I can describe some</p>	<p>6) explain the uses of magnets.</p> <p>Vocab: material Property</p> <p>Skills:I can use</p>	<p>6) describe a soil sample using sedimentation.</p> <p>Vocab:sedimentation</p> <p>Skills: I can list some of the benefits of earthworms to the</p>	<p>6) tell a story using shadow puppets.</p> <p>vocab: shadow puppet</p> <p>Skills: I can describe how different people work with light and shadows.</p>	<p>6)explore seed dispersal methods</p> <p>Vocab:dispersal</p> <p>Skills: I can identify a pattern in the results.</p> <p>Knowledge: I can name</p>	

	changes to scientific knowledge about nutrition. Knowledge:I can give examples of foods that make up a balanced diet.	my observations to answer questions. Knowledge:I can describe how materials respond to pulling and tearing.	soil. Knowledge: To describe a soil sample using sedimentation.	Knowledge: I can use my knowledge of shadows to animate a shadow puppet.	methods of seed dispersal.	
Vocabulary						

YEAR 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Animals: Digestion and food	Energy: Electricity and circuits	Materials: States of matter	Energy: Sound and vibrations	Animals: Classification and changing habitats	Making connections: How does the flow of liquids compare?
Lesson 1	<p>1)describe the function of the human digestive system.</p> <p>Vocab: digestive system</p> <p>Skills:I can explain how a model has been used to show a part of the digestive</p>	<p>1) recognise how electrical appliances are powered.</p> <p>Vocab: electricity mains power source</p> <p>Skills: I can identify if something is an electrical</p>	<p>1)identify solids using their properties.</p> <p>Vocab: solid state</p> <p>Skills: I can list the properties of solids</p> <p>Knowledge: I can identify examples of solids.</p>	<p>1)describe how sounds are made.</p> <p>vocab:record</p> <p>Skills:I can record my observations in a results table.</p> <p>Knowledge: I can define the term vibration.</p>	<p>1)group animals in various ways.</p> <p>Vocab: Venn diagram</p> <p>Skills:I can record data in a Venn diagram.</p> <p>Knowledge: I can identify broad groups of animals (vertebrates and invertebrates).</p>	<p>1)revise the units States of matter and Classification</p> <p>Vocab: predict</p> <p>Skills:I can write a prediction.</p> <p>Knowledge:I can identify the characteristics of insects.</p>

	<p>system.</p> <p>Knowledge:I can list the main organs of the human digestive system.</p>	<p>appliance or not.</p> <p>Knowledge: I can classify an electrical appliance as mains or battery-powered.</p>				
Lesson 2	<p>recognise the different types of human teeth and their roles in eating.</p> <p>Vocab: jaw</p> <p>Vocab: Skills:I can identify how scientists observe teeth.</p> <p>Knowledge:I can recall the four types of human teeth.</p>	<p>2)construct an electrical circuit.</p> <p>Vocab:power source results table</p> <p>Skills:I can classify an electrical appliance as mains or battery-powered.</p> <p>Knowledge:I can identify if something is an electrical appliance or not.</p>	<p>2)identify liquids and gases using their properties.</p> <p>Vocab: gas liquid</p> <p>Skills: I can list the properties of liquids and gases.</p> <p>Knowledge:I can identify examples of liquids and gases.</p>	<p>2) describe how sounds are heard through different mediums.</p> <p>vocab: research</p> <p>Skills: I can identify the important information.</p> <p>Knowledge: I can explain why sound travels faster and further in water than in air.</p>	<p>2)group plants in various ways.</p> <p>Vocab: classification key</p> <p>Skills: I can choose appropriate questions for a classification key.</p> <p>Knowledge:I can identify broad groups of plants (flowering and non-flowering).</p>	<p>2)revise the unit Electricity and circuits.</p> <p>Vocab:switch</p> <p>Skills:I can gather data.</p> <p>Knowledge:I can explain how a switch works.</p>
Lesson 3	<p>3)explain how to care for our teeth.</p> <p>Vocab: decay</p>	<p>3)explain the use of switches in a circuit.</p> <p>Vocab:componen</p>	<p>3)describe melting and freezing.</p> <p>Vocab: Freezing freezing point</p>	<p>3) describe the relationship between vibration strength and volume.</p>	<p>3)make careful observations.</p> <p>Vocab: classification key</p> <p>Skills: I can use a</p>	<p>3)revise the units States of matter and Sound and vibrations.</p> <p>Vocab:conclusion</p>

	<p>Skills:I can describe some steps involved in real scientific testing and evaluation.</p> <p>Knowledge:I can describe how to maintain dental hygiene.</p>	<p>† electrical tape switch</p> <p>Skills:I can identify the symbol for a switch.</p> <p>Knowledge:I can predict whether a circuit will work by observing whether the switch is open or closed.</p>	<p>melting melting point</p> <p>Skills: I can describe the conditions needed for melting and freezing.</p> <p>Knowledge: I can name the start and end states when melting and freezing materials.</p>	<p>vocab: decibels (dB)</p> <p>Skills: I can read the bars on a bar chart.</p> <p>Knowledge:I can define the term volume.</p>	<p>classification key to group, identify and name local living things.</p> <p>Knowledge: make and use classification keys.</p>	<p>Skills:I can write a conclusion that refers to data.</p> <p>Knowledge:I can describe how sound travels in solids, liquids and gases</p>
Lesson 4	<p>4) recognise that differences in teeth relate to an animal's diet.</p> <p>Vocab:diet</p> <p>Skills:I can use evidence when grouping animals.</p> <p>Knowledge:I can describe what different types of teeth are used for.</p>	<p>4)explain the use of materials as electrical conductors or insulators.</p> <p>Vocab:</p> <p>Skills:</p> <p>Knowledge:I can describe how to test whether a material is a good electrical conductor or insulator.</p>	<p>4)describe condensing and evaporating.</p> <p>Vocab: Condensation evaporation</p> <p>Skills: I can describe the conditions needed for evaporating and condensing.</p> <p>Knowledge: I can name the start and end states when evaporating and condensing materials.</p>	<p>4) describe the relationship between volume and distance.</p> <p>vocab:volume</p> <p>Skills: I can identify which variables should be measured.</p> <p>Knowledge: I can estimate the comparative loudness of a sound based on its volume and distance.</p>	<p>4)recognise and describe different habitats and their inhabitants.</p> <p>Vocab:seasonal changes</p> <p>Skills:I can record observations of how a habitat changes over the seasons.</p> <p>Knowledge:I can describe how habitats change over time.</p>	<p>4)revise the unit of Digestion and food.</p> <p>Vocab: medicine</p> <p>Skills:I can observe the speed of absorption of different viscosity liquids.</p> <p>Knowledge:I can name the organs of the digestive system.</p>

Lesson 5	<p>5)recognise producers, predators and prey in food chains.</p> <p>Vocab: population</p> <p>Skills:I can begin to analyse predator-prey graphs.</p> <p>Knowledge:I can identify a producer, a predator and a prey.</p>	<p>5) investigate what affects bulb brightness.</p> <p>Vocab:ammeter brightness variable</p> <p>Skills:I can describe how the number of bulbs in a series circuit affects bulb brightness.</p> <p>Knowledge:I can explain why bulb brightness is affected by the number of bulbs.</p>	<p>5)describe the different stages of the water cycle.</p> <p>Vocab: the water cycle</p> <p>Skills: I can name the stages of the water cycle.</p> <p>Knowledge: I can describe the changes of state that occur during the water cycle.</p>	<p>5)describe pitch and how to change it.</p> <p>vocab: pitch</p> <p>Skills: I can draw a table with two columns.</p> <p>Knowledge: I can describe how to change the pitch of different musical instruments.</p>	<p>5)recognise the impact humans can have on habitats.</p> <p>Vocab:habitat</p> <p>Skills:I can identify the key information from my research.</p> <p>Knowledge:I can describe how human activities can change the environment.</p>	<p>5) revise the unit States of matter.</p> <p>Vocab: the water cycle</p> <p>Skills: I can assess the effectiveness of a presentation.</p> <p>KnowledgeI can describe the stages of the water cycle.</p>
Lesson 6	<p>6) recognise that animal poo can give us clues about digestion, teeth and diet.</p> <p>Vocab:sample</p> <p>Skills:I can draw a results table and record</p>	<p>6) explain how to be safe around electricity.</p> <p>Vocab:hazard precaution safety</p> <p>Skills: I can use scientific knowledge to</p>	<p>6)describe how temperature affects evaporation rates and the water cycle.</p> <p>Vocab: climate</p> <p>Skills: I can describe the effect of climate change on temperature.</p>	<p>6)explain how insulating materials can be used to muffle sound.</p> <p>vocab: predict</p> <p>Skills: I can identify a result that does not match a prediction.</p> <p>Knowledge: I can explain why some jobs require ear protection.</p>	<p>6)recognise the impact of natural disasters on habitats.</p> <p>Vocab: uprooted</p> <p>Skills:I can identify some of the impacts of natural disasters on wildlife.</p> <p>Knowledge: I can describe how wildfires, earthquakes and floods affect habitats</p>	

	observations. Knowledge:I can describe what a herbivore, carnivore and omnivore are.	explain why safety rules are in place. Knowledge:I can describe precautions for working safely with electricity.	Knowledge: I can describe how climate change affects the water cycle.			
Vocabulary						

YEAR 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Materials: Mixtures and separation	Materials: Properties and changes	Forces and space: Earth and space	Living things: Life cycles and reproduction	Forces and space: Unbalanced forces	Animals: Human timeline
Lesson 1	1) describe mixtures. Vocab:mixture Skills:I can research a mixture to find out what substances it is made from. Knowledge:I can define the term mixture.	1) determine the hardness of materials and link this to their uses. Vocab:hard hardness Skills: I can test, compare and group hard and soft materials.	1)compare the contributions of Ptolemy, Alhazen and Copernicus to models of the Solar system. Vocab: solar system Skills: I can describe the geocentric model. Knowledge: I can describe the shape	1)describe the life cycle of a plant, including the reproductive stage. vocab:life cycle Skills:I can dissect a flower. Knowledge: I can describe sexual reproduction in plants.	1)describe gravity and its effects. effort. Vocab: anomaly Skills:I can analyse data and identify anomalies. Knowledge:I can define the term gravity.	1)describe how humans change from babies through to old age. Vocab:life cycle Skills:I can describe growth from baby to adult. Knowledge:I can order the stages in growth and development from birth to old age

		Knowledge:I can define the term hardness.	of celestial bodies.			
Lesson 2	<p>2)explain the process of sieving.</p> <p>vocab: sieving</p> <p>Skills:I can draw and annotate a diagram to explain how sieving separates a solid-solid mixture.</p> <p>Knowledge: I can define the term sieving.</p>	<p>2)construct an electrical circuit.</p> <p>Vocab:translucent transparency</p> <p>Skills: I can test, compare and group transparent, translucent and opaque materials</p> <p>Knowledge: I can define the term transparency.</p>	<p>2)describe the movement and shapes of the celestial bodies in our Solar System.</p> <p>Vocab: elliptical force gravity</p> <p>Skills: I can name the celestial bodies in the solar system.</p> <p>Knowledge: I can describe the orbits of celestial bodies in the Solar System.</p>	<p>2)describe the life cycle of a mammal.</p> <p>vocab: mammal</p> <p>Skills: I can research using a fact sheet.</p> <p>Knowledge: I can describe sexual reproduction in mammals.</p>	<p>2)describe air resistance and its effects.</p> <p>vocab:air resistance</p> <p>Skills:I can write a method.</p> <p>Knowledge: I can define the term air resistance.</p>	<p>2)identify changes in males and females as a result of puberty.</p> <p>Vocab:hormones</p> <p>Skills: I can describe the emotional changes that occur during puberty.</p> <p>Knowledge:I can describe the physical changes that occur in females and males during puberty.</p>
Lesson 3	<p>3)explain how to care for our teeth.</p> <p>Vocab:filtering</p>	<p>3)explain the use of switches in a circuit.</p> <p>Vocab: conductor</p>	<p>3)describe the movement of the Moon relative to the Earth.</p> <p>Vocab: phase</p>	<p>3)describe the life cycle of a bird and compare it with that of a mammal.</p> <p>vocab: incubation</p>	<p>3)describe water resistance and its effects.</p> <p>Vocab: water resistance</p> <p>Skills:I can measure time accurately.</p>	<p>3)explore the gestation periods of humans and other animals.</p> <p>Vocab:gestation period</p>

	<p>Skills:I can identify and justify which type of enquiry to use to answer my testable question.</p> <p>Knowledge:I can define the term filtering.</p>	<p>electrical conductivity</p> <p>Skills:I can test and compare the conductivity of different materials.</p> <p>Knowledge: I can define the terms thermal conductivity and electrical conductivity.</p>	<p>Skills: I can name some of the phases of the Moon.</p> <p>Knowledge: I can describe the orbit of the Moon around the Earth.</p>	<p>Skills:I can use technology to answer those questions.</p> <p>Knowledge: I can describe the life cycle of a bird.</p>	<p>Knowledge:I can define the term water resistance.</p>	<p>Skills:I can plot data on a scatter graph.</p> <p>Knowledge: I can recall what a gestation period is.</p>
Lesson 4	<p>4) recognise that differences in teeth relate to an animal's diet.</p> <p>Vocab: solution</p> <p>Skills:I can identify solutions by observing and describing their appearance.</p> <p>Knowledge:I can define the terms solution and dissolve.</p>	<p>4)explain the use of materials as electrical conductors or insulators.</p> <p>Vocab:change of state</p> <p>reversible change</p> <p>Skills: I can describe how to reverse changes of state by</p>	<p>4)explain the causes of day and night and the seasons.</p> <p>Vocab: Axis rotate tilt</p> <p>Skills: I can accurately shade day and night on the Earth.</p> <p>Knowledge: I can describe how the Earth rotates on its axis.</p> <p>I can accurately</p>	<p>4)describe the life cycle of an amphibian.</p> <p>vocab: conclusion</p> <p>Skills: I can use data to draw conclusions.</p> <p>Knowledge: I can describe the life cycle of an amphibian.</p>	<p>4)describe the effects of levers, pulleys and simple machines on movement.</p> <p>Vocab:evaluate</p> <p>Skills:I can identify steps that need improving.</p> <p>Knowledge:I can define the term friction.</p>	<p>To revise the units Earth and space and Life cycles and reproduction.</p> <p>Vocab:predict</p> <p>Skills:I can form a prediction.</p> <p>Knowledge:I can compare an asteroid to a celestial body.</p>

		heating and cooling. Knowledge:I can define the term reversible change.	shade day and night on the Earth.			
Lesson 5	5)recognise producers, predators and prey in food chains. Vocab:control variable Skills:I can decide which measurements to take and how long to take them for. Knowledge:I can recall some factors that affect the time taken to dissolve.	5) investigate what affects bulb brightness Vocab: irreversible change Skills: I can identify and describe burning and rusting as irreversible changes. Knowledge:I can define the term irreversible change.	5)devise a sundial to tell the time. Vocab: sundial Skills: I can name the parts of a sundial. Knowledge:I can explain how a sundial works.	5)describe the life cycle of an insect and compare it with that of an amphibian. vocab: chrysalis Skills:I can use data to make predictions. Knowledge: I can describe the three-stage life cycle of an insect.	5)describe the relationship between lever length and effort. Vocab:amplify Skills:I can draw a diagram of a wind-powered pulley. Knowledge: I can explain the purpose of gears.	revise the units Unbalanced forces and Mixtures and separation. Vocab:air resistance Skills:I can record data. Knowledge:I can describe the effects of gravity and air resistance
Lesson 6	6) recognise that animal poo can give us clues about digestion, teeth and diet. Vocab:evaporati	6) explain how to be safe around electricity. Vocab: Skills: I can	6) describe some uses of satellites and the problems posed by space junk. Vocab: artificial satellite natural satellite	6)describe asexual reproduction in plants. vocab: line of best fit Skills: I can plot data accurately on a line graph.	6) describe the relationship between lever length and effort. vocab:line of best fit Skills:I can plot data on a line graph.	revise the units Separating mixtures and Unbalanced forces. Vocab:accurate Skills: I can evaluate the trustworthiness of a method.

	<p>on</p> <p>Skills:I can identify when evaporation should be used.</p> <p>Knowledge:I can define the term evaporation.</p>	<p>measure the circumference of a balloon accurately using a string and a ruler.</p> <p>Knowledge:I can identify and describe cooking and mixing vinegar and bicarbonate of soda as irreversible changes.</p>	<p>Skills: I can list some of the uses of satellites.</p> <p>Knowledge: I can explain why space junk poses a problem to satellites.</p>	<p>Knowledge: I can explain the difference between a clone and other offspring.</p>	<p>Knowledge:I can name the three things needed for a lever.</p>	<p>Knowledge:I can choose the appropriate separation technique for separating different mixtures.</p>
Vocabulary						

YEAR 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Living things: Classifying big and small	Energy: Light and reflection	Living things: Evolution and inheritance	Energy: Circuits, batteries and switches	Animals: Circulation and health	Making connections: Are some sunglasses safer than others?
Lesson 1	<p>1)explain how organisms are classified using the Linnaean system.</p> <p>Vocab:germination</p>	<p>1)describe the pathway of light.</p> <p>Vocab: Skills: Knowledge:</p>	<p>1)explain why there are differences within a species.</p> <p>Vocab: variation</p> <p>Skills: I can identify examples of variation.</p>	<p>1) use recognised symbols for electrical components.</p> <p>vocab:power source</p> <p>Skills: I can describe the function of key electrical components.</p>	<p>1) identify factors that affect our health and how to reduce their negative impact.</p> <p>vocab: balanced diet</p> <p>Skills: I can explain whether a secondary source may be trustworthy or not.</p>	<p>1) revise the units Circulation and health and Light and reflection.</p> <p>Vocab:predict</p> <p>Skills:I can identify variables to inform writing</p>

	<p>Skills:I can dissect a flower.</p> <p>Knowledge:I can describe the plant life cycle.</p>		<p>Knowledge: I can define variation.</p>	<p>Knowledge: I can use standard circuit symbols for electrical components.</p>	<p>Knowledge: I can recall factors that improve someone's health.</p>	<p>a method.</p> <p>Knowledge:I can recall that sun safety is a part of being healthy.</p>
Lesson 2	<p>2)classify the cold-blooded vertebrate groups using their common characteristics</p> <p>Vocab:adolescence</p> <p>Skills:I can research using a fact sheet.</p> <p>Knowledge:I can compare the life cycles of different mammals.</p>	<p>2)describe how we see.</p> <p>Vocab:light ray light source</p> <p>Skills:I can compare sources of light.</p> <p>Knowledge:I can describe how light travels.</p>	<p>2)recognise the inheritance of characteristics in plants and animals.</p> <p>Vocab: inheritance</p> <p>Skills: I can compare characteristics between individuals from the same species.</p> <p>Knowledge: I can describe patterns of inheritance.</p>	<p>2) predict and present results for electrical circuits.</p> <p>vocab: circuit diagram</p> <p>Skills:I can use standard circuit symbols when drawing diagrams.</p> <p>Knowledge: I can explain why an electrical circuit will or will not work.</p>	<p>2) summarise the key structures and purpose of the circulatory system.</p> <p>Vocab:circulatory system</p> <p>Skills:I can describe the pathway of blood around the human circulatory system.</p> <p>Knowledge:I can recall that the heart is a muscular pump that pushes the blood.</p>	<p>2) revise the units Light and reflection and Circuits, batteries and switches.</p> <p>Vocab:circuit diagram</p> <p>Skills:I can calculate the mean average from repeat readings.</p> <p>Knowledge:I can recall a range of light sources.</p>
Lesson 3	<p>3)classify the warm-blooded vertebrate groups using their common characteristics.</p> <p>Vocab: incubation</p>	<p>3)explain how shadows change</p> <p>Vocab: non-luminous protect</p> <p>Skills: I can describe how we</p>	<p>3)explain why adaptation is necessary.</p> <p>Vocab: adaptation</p> <p>Skills: I can recall what an adaptation is.</p>	<p>3) recognise a link between the number of components and resistance.</p> <p>vocab: component</p> <p>Skills:I can use scientific vocabulary when writing a conclusion.</p>	<p>3) identify the key roles of blood.</p> <p>Vocab:blood vessels</p> <p>Skills:I can identify similarities between the model used and real blood.</p>	<p>3) revise the units Light and reflection and Circulation and health.</p> <p>Vocab:evaluate</p> <p>Skills: I can evaluate the trustworthiness of the method.</p>

	<p>Skills:I can use technology to answer those questions.</p> <p>Knowledge: I can compare the life cycles of different birds.</p>	<p>see non-luminous objects.</p> <p>Knowledge: I can explain how the eye is protected from light.</p>	<p>Knowledge: I can describe key characteristics that would help an organism survive.</p>	<p>Knowledge: I can explain why the number of bulbs in a circuit affects their brightness.</p>	<p>Knowledge:I can describe some of the functions of blood.</p>	<p>Knowledge:I can describe how light passing through the lenses varies across the different sunglasses.</p>
Lesson 4	<p>4)classify invertebrates. Vocab:amphibia n</p> <p>Skills:I can use data to draw conclusions.</p> <p>Knowledge:I can describe the life cycle of an amphibian.</p>	<p>4)investigate what affects the angle of the reflected ray.</p> <p>Vocab: castShadow</p> <p>Skills: I can use ray diagrams to explain why the shape of a shadow matches the object that cast it.</p> <p>Knowledge: I can recall factors that affect the size of a shadow.</p>	<p>4)model how natural selection affects population size.</p> <p>Vocab: anomaly</p> <p>Skills: I can describe variation in a given population.</p> <p>Knowledge: I can explain how variation may affect survival within that population.</p>	<p>4) identify ways to change voltage within an electrical circuit. vocab: voltage</p> <p>Skills: I can put any units in the heading of a results table.</p> <p>Knowledge: I can describe how voltage affects bulb brightness.</p>	<p>4) explore the relationship between animal size and heart rate.</p> <p>Vocab:data</p> <p>Skills:I can use the pattern to predict new values.</p> <p>Knowledge:I can recall what is meant by heart rate and the unit used to measure it.</p>	<p>4) revise the units Classifying big and small, Evolution and inheritance, Light and reflection and Circulation and health.</p> <p>Vocab:adaptation</p> <p>Skills:I can compare results from different tests.</p> <p>Knowledge: I can classify animals based on their physical properties.</p>
Lesson 5	<p>5)describe how the plant kingdom is organised (based on shared</p>	<p>5)explain how a periscope works.</p> <p>Vocab: periscope</p>	<p>5)describe the theory of evolution.</p> <p>Vocab: evolution</p> <p>Skills: I can recall</p>	<p>5) investigate how voltage affects bulb brightness.</p> <p>Vocab:evidence</p> <p>Skills: I can identify the</p>	<p>5) investigate the relationship between exercise and heart rate.</p> <p>Vocab:variable</p> <p>Skills:I can identify the</p>	<p>5) revise the units Light and reflection and Circulation and health.</p> <p>Vocab: refute</p>

	characteristics) . Vocab: metamorphosis Vocab: chrysalis Skills:I can use data to make predictions. Knowledge:I can describe the three-stage life cycle of an insect.	trench Skills: I can use mirrors to make a working periscope. Knowledge: I can describe the journey light makes through a periscope.	what evolution is. Knowledge: I can describe some of the evidence used for evolution.	changed and measured variables. Knowledge: I can describe how changing the number of cells affects the voltage	changed, measured and controlled variables. Knowledge:I can describe how exercise affects heart rate.	Skills:I can summarise my findings. Knowledge:I can describe how light travels and how we see.
Lesson 6	6)describe and classify microorganisms. Vocab: asexual reproduction Skills:I can estimate missing data from a line graph. Knowledge:I can describe the changes to a cutting as it grows.	6)explain how mirrors are helpful. Vocab: evaluate Skills: To recall a range of uses of mirrors and reflection. Knowledge: To describe how a mirror is used to reflect light in different situations.		6) apply knowledge of circuits and components to a practical solution vocab: switch Skills: I can explain how switches can be used to keep people safe. Knowledge: I can draw a circuit diagram to show the circuit used.	6) describe the relationship between heart rate and fitness Vocab:fitness Skills:I can plot points on a line graph. Knowledge:I can describe what happens to heart rate during and after exercise.	