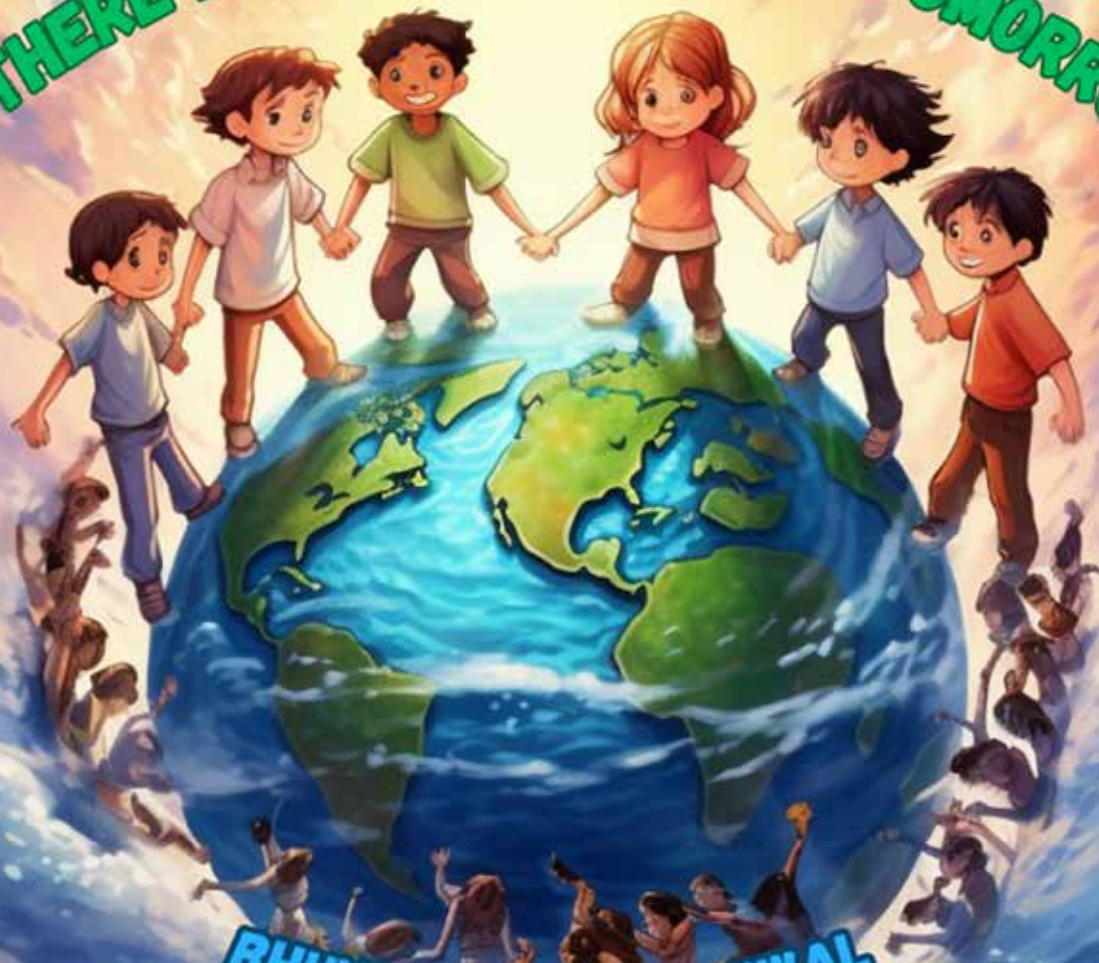


**JAL HAI TO KAL HAI**  
**IF THERE IS WATER THERE IS TOMORROW**



**BHUVI & TEJAS RAXWAL**

*Jal Hai To Kal Hai*

*if there is water, there is tomorrow*

*H2O 365*

*Bhuvi & Tejas*

*Dedicated to all our Water Warriors*

*"Somewhere inside all of us is the power  
to change the world."*

*Roald Dahl*

*Thank you, Shrinki, for being a  
constant source of inspiration!*

*Blue Is The Next Green*



# Contents

<i>Water</i>	11
<i>Water Sources</i>	17
<i>Water Forms</i>	22
<i>The Water Cycle</i>	24
<i>Water Bodies</i>	26
<i>Water Sports</i>	40
<i>The Water Crisis: Day Zero</i>	46
<i>Water Scarcity</i>	49
<i>The Dangers of Dirty Water</i>	53
<i>Waterborne Diseases</i>	54
<i>Are You Up For A Challenge?</i>	59
<i>Solutions</i>	60
<i>Are You Ready To Take Action?</i>	65
<i>The Water Quiz</i>	68
<i>Fun Facts</i>	70
<i>Saving Water Pledge</i>	75
<i>Water Warrior Certificate</i>	76



# Water

*Welcome to the beautiful world of water!*

*Water is life's best friend! It is absolutely vital for all living things! It helps plants grow, allows animals to stay hydrated, and keeps our bodies functioning correctly. Did you know? About 60% of the human body is made of water? That's why it is so important to drink plenty of water every day!*

*Have you noticed that water is see-through? Crazy right?*

*But water is not just important for humans. It helps plants grow and produce beautiful flowers, yummy fruits and veggies. Water can even be used to make electricity, like magic! It is truly fascinating because it can shape the Earth and make all kinds of cool things like rivers, lakes, canyons, and valleys. Let's not forget about all the incredible creatures that live in water, like fish, dolphins, and whales!*

*Did you know that pure water doesn't taste like anything, look like anything, or smell like anything? It's like a secret superhero, ready to do amazing things!*

*Even with this power, water needs our help to keep it clean and healthy.*









So if you are ready to become  
*Water Warriors*,  
join me on this journey to learn  
all about the wonderful world of  
water and how we can protect  
it for generations to come!





# Water Sources

*There are two main types of water: saltwater and freshwater. Saltwater is in big oceans, and, as the word says, it is really salty. Freshwater is not salty. It can be found in rivers, lakes, and even underground! We use fresh water to drink and grow all our food.*

*Did you know that some animals only like saltwater or freshwater?*

*Some fish can live in all types of water, but others live in one type. For example, sea snakes can live in both saltwater and freshwater, but lionfish live only in saltwater. Catfish live only in freshwater.*







*The Earth has plenty of saltwater but very little freshwater. Only 3% of all the water on Earth is freshwater, and only 1% is good for us to drink. But we use a lot of freshwater to grow food. More than 70% of all freshwater is used to water plants!*

*So next time you see water, think about whether it's salty or fresh, and remember how important it is for us and all the animals and plants on Earth!*

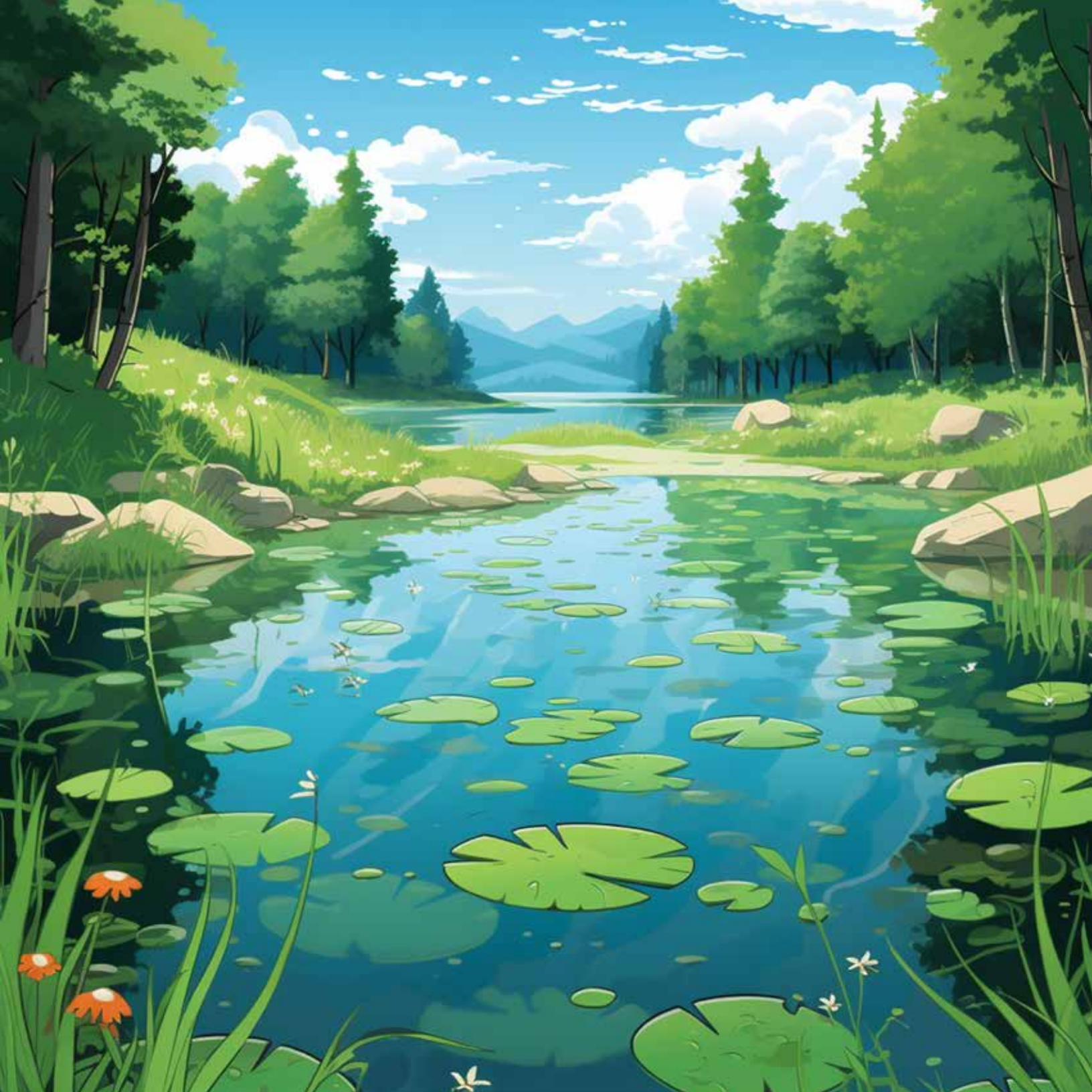
*Look at the pictures on page 18 and 21.*

*Which one is freshwater and which is saltwater?*

*Write your answers on the lines:*

*Page 18* \_\_\_\_\_

*Page 21* \_\_\_\_\_



# Water Forms

Water is so powerful that it can take three forms: liquid, solid, and gas. When it's a liquid, we call it "water." When it's solid, we call it "ice." And when it's a gas, we call it "water vapor."

Water changes from one form to another depending on the temperature.

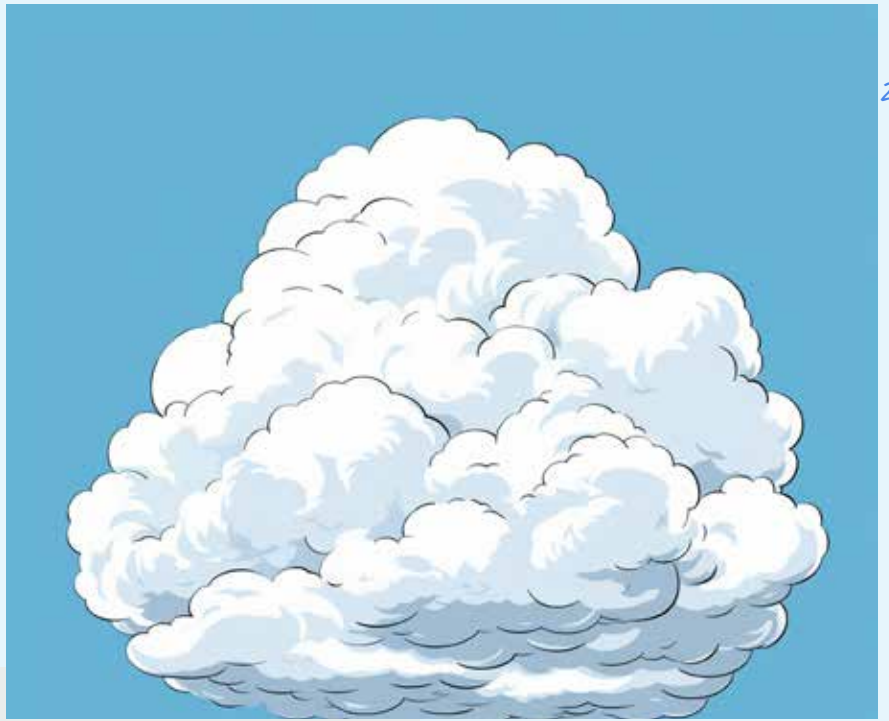
When it gets super hot, it turns into water vapor.

This happens when the temperature reaches 100 degrees Celsius. And when it gets super cold, water turns into ice. This happens when the temperature drops below 0 degrees Celsius.





Look at these pictures  
and write down the  
three fascinating  
forms of water!



2



3



# The Water Cycle

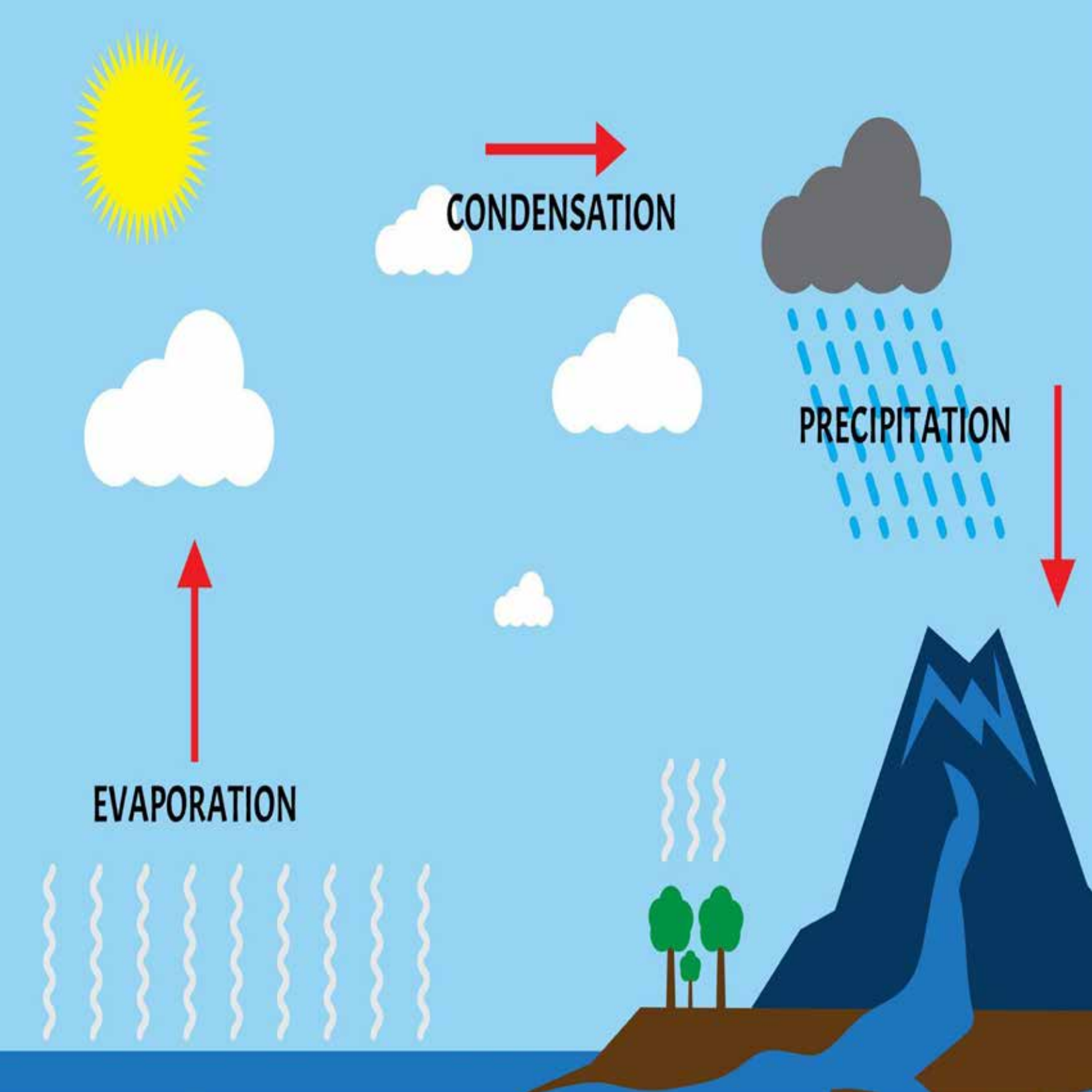
Water is amazing because it's always moving and changing in a process called "the water cycle." Here's how this cycle works:

1. The sun heats the water on the Earth and turns it into water vapor. We call this "evaporation."

2. The water vapor goes up into the sky. There, it cools down, and turns into tiny droplets that stick together to make clouds. We call this "condensation."

3. When the clouds get really heavy with water droplets, they fall back down to the Earth. This is called "precipitation."  
Precipitation comes in many forms, like rain, snow, sleet, or hail.

And that's how the water cycle works! It's like a big circle that keeps going and going, helping our planet stay healthy and beautiful. So next time it rains or you see a cloud, remember that you are seeing a little piece of the water cycle in action!

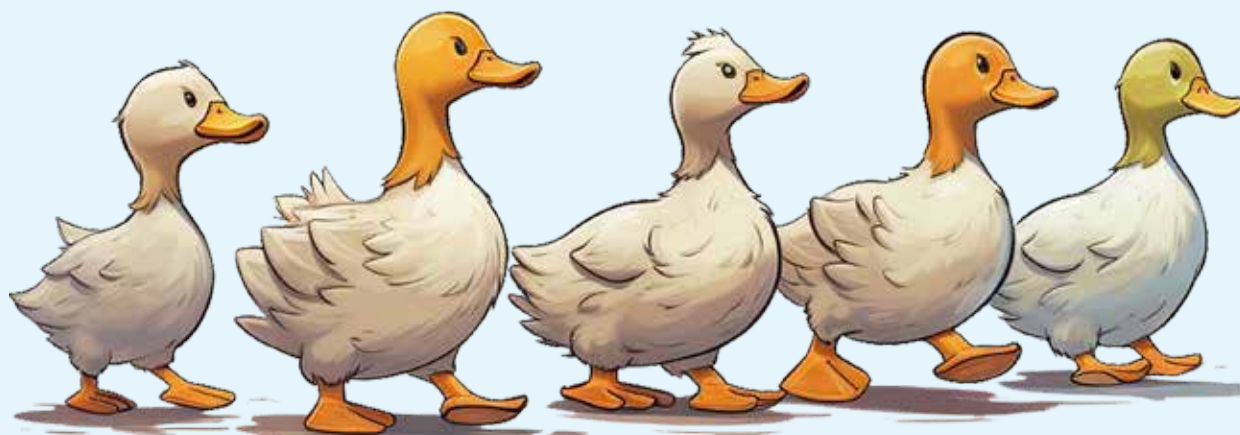


# Water Bodies

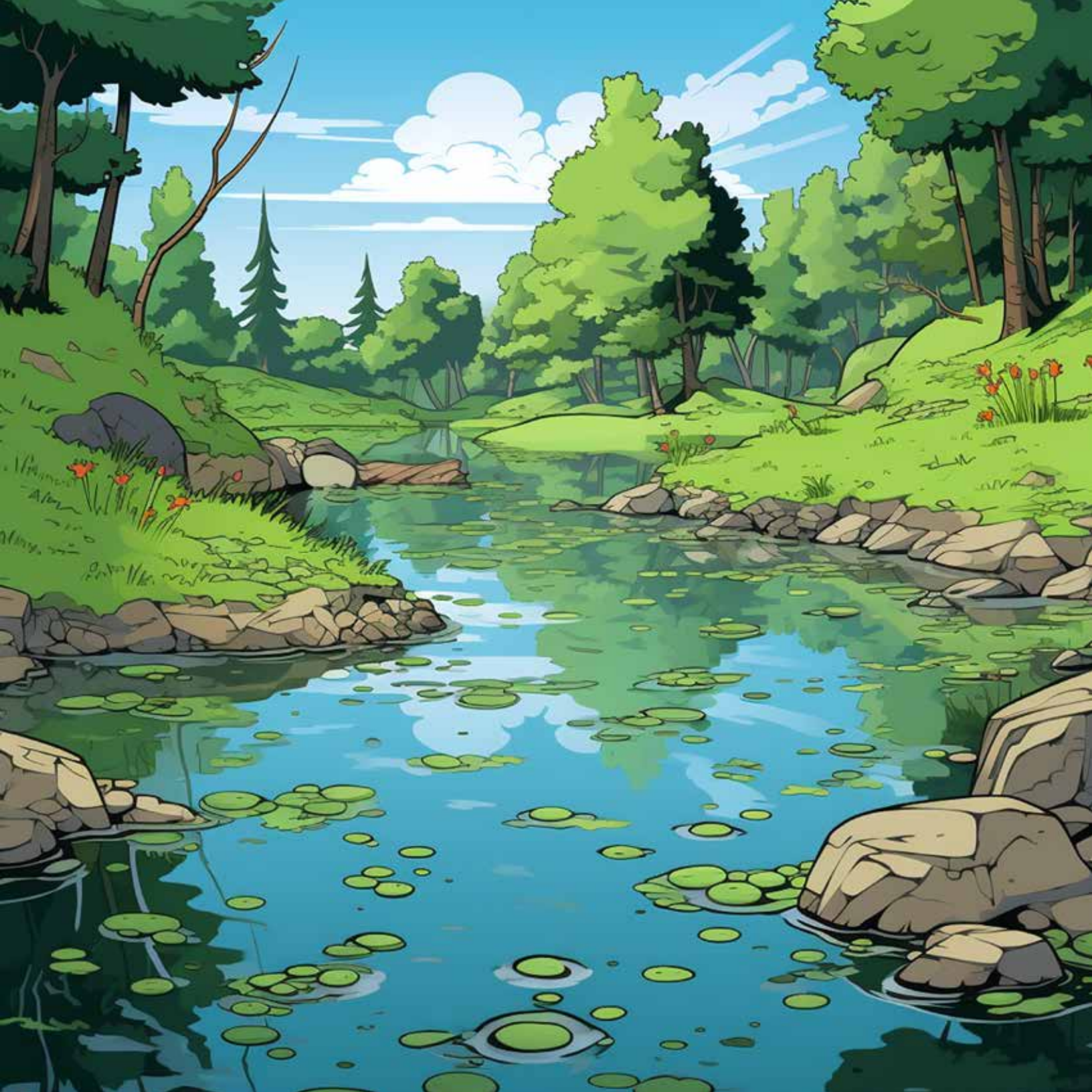
*Water is all around us. It comes in many shapes and sizes!*

## Ponds

*Some water bodies are small, like ponds and lakes. They are perfect for little creatures like frogs and fish to call home. You might even spot a duck paddling around!*













## Rivers

Some water bodies, like rivers, are bigger and more exciting as they wind through the countryside. Rivers can be really long and lead to cool places like waterfalls and rapids! A waterfall is when river water falls over a steep cliff. A rapid is when a part of the river moves very fast, usually over rocks.

Have you heard of the Nile River? It's the longest river in the world, stretching over 4,000 miles! It flows through many different countries in Africa, including Egypt and Sudan, and empties into the Mediterranean Sea. In ancient times, Egyptians believed that the Nile was a sacred god named "Hapi." They built temples along the river and prayed to it for good luck and prosperity.



# Oceans

*Oceans are the biggest and most amazing water bodies on Earth! They are home to all kinds of creatures like whales, dolphins, and sea turtles. Did you know that there are five huge oceans on our planet?*

*Try listing the 5 oceans on our planet below!*

---

---

---

---

---





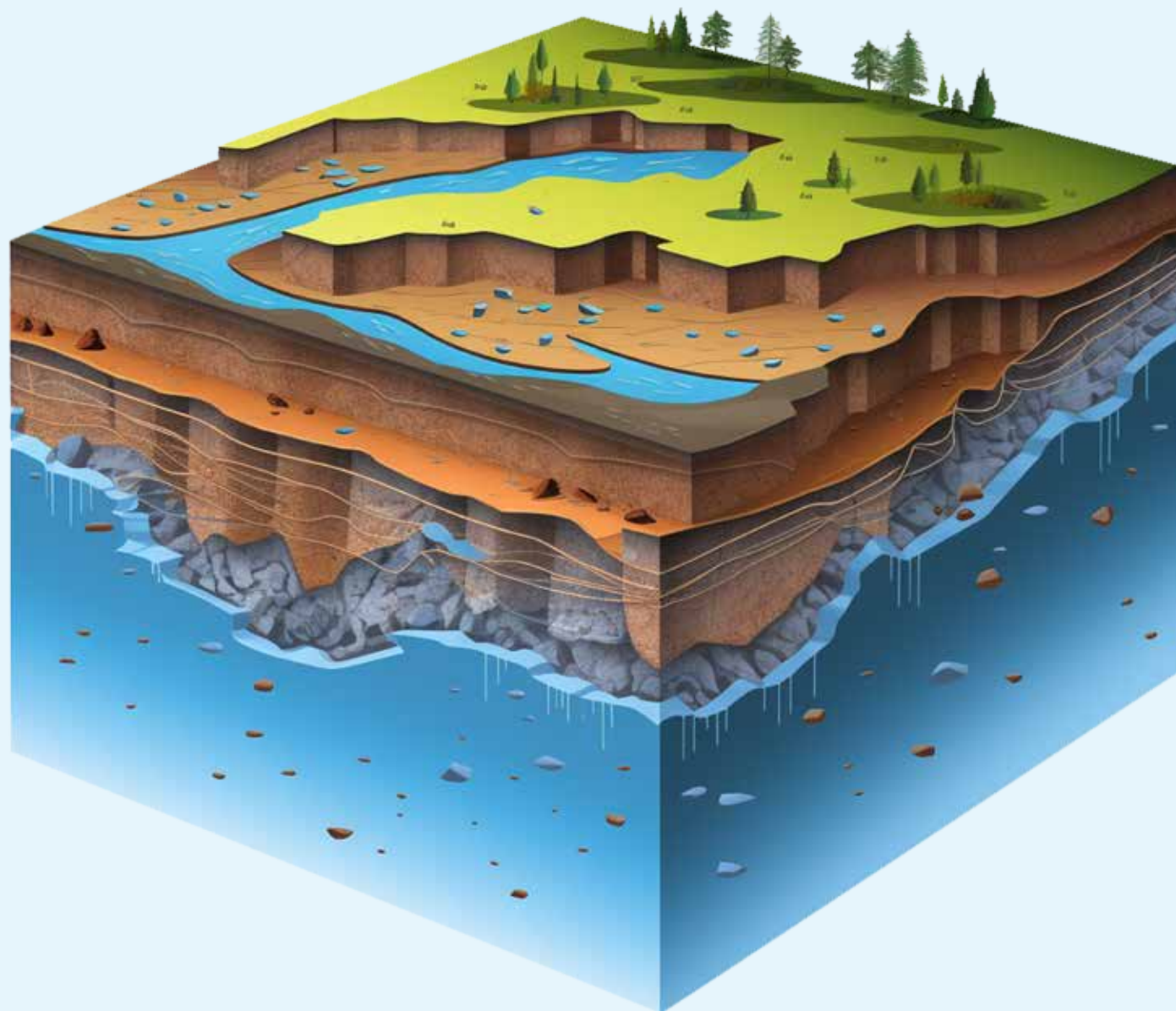
*The Indian Ocean is one of the largest bodies of water on Earth! It covers an area of about 27,400,000 square miles, which is 57 trips to the moon and back! And do you want to hear something really cool? In some places, the Indian Ocean is more than 13,000 feet deep. That's taller than some of the tallest mountains in the world!*

*However, the biggest ocean is the Pacific. It's so big that you could fit all other oceans inside it and still have room left! The Arctic Ocean is the smallest. It's up north near the North Pole, where it's always super chilly.*

## Aquifer

*Have you ever wondered where all the rainwater goes? Some of it soaks into the ground and collects in special places called “aquifers.” Imagine an aquifer as a big, underground sponge that can hold a lot of water!*

*When it rains, the water seeps into the ground and fills the tiny spaces between the soil and rocks. Slowly it builds up and forms a big underground pool.*



Sometimes, people dig wells to get freshwater from the aquifer. A well is a hole that goes deep into the ground, all the way to the aquifer. People drop buckets into the hole, or use pumps, to collect water. This water can be used for all sorts of things like drinking, bathing, and cooking!

So, the next time it rains, remember that some water is going underground to fill up an aquifer. Who knows, maybe one day you'll get to use a well to get that water back out!

*No matter where you are,  
there's always water nearby  
to explore and enjoy!*





*Find the words in the puzzle.*



Find the following words in the puzzle.  
Words are hidden → and ↓ .

AQUIFER  
BASS  
DROPLET  
FRESHWATER  
FROGS

NILE  
OCEAN  
POND  
RAIN  
RIVER

SALTWATER  
SHARK  
WATER









# Water Sports

*Are you ready to make a splash and have fun in the water? There are so many exciting water sports to try, and in this book, we will explore them!*

## Swimming:

*Swimming is an activity that many people enjoy. When you swim, you move your arms and legs to glide through the water. You can swim for fun or join sports competitions and swim against other people. Swimming is a great way to stay healthy and improve your strength.*



An illustration of two young children with brown hair, wearing blue snorkel masks and fins, swimming happily underwater. They are holding hands and looking towards the viewer with wide smiles. The water is a vibrant blue with light rays filtering down. Several orange and white striped clownfish are swimming around them. In the background, there are coral reefs and some green seaweed. Bubbles are rising from the children's snorkels.

# *Snorkeling:*

*Have you ever wanted to explore the underwater world?*

*Snorkeling is a fun water sport where you swim near the surface of the water while wearing a snorkel mask and fins. You can see different fish and coral reefs without scuba gear.*



# Kayaking:



Kayaking is a relaxing water sport where you use a small boat called a “kayak” to paddle through the water. You can do it alone or with a friend and explore different bodies of water, like lakes or rivers.



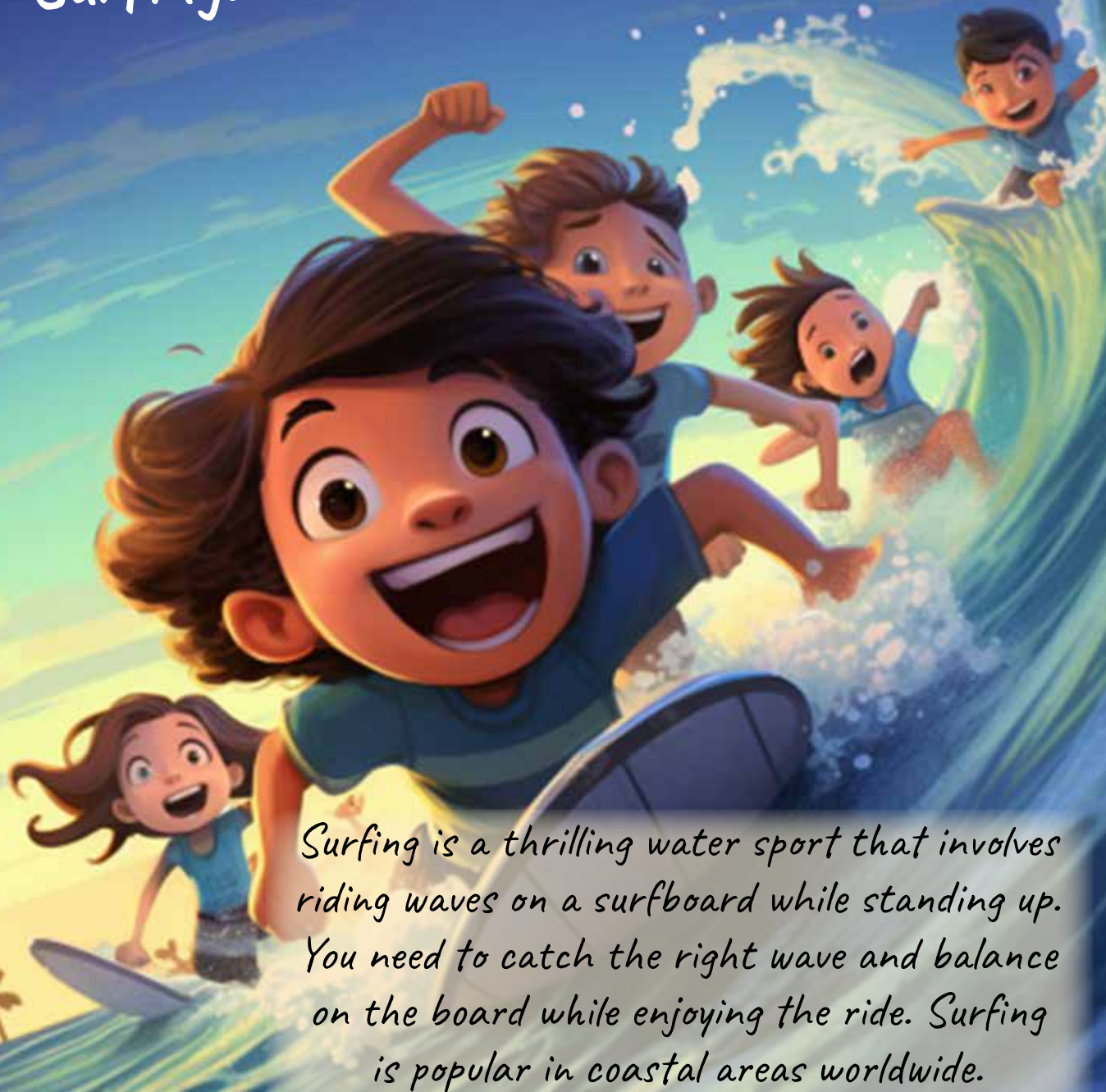
## *Water polo:*



*Water polo is a team sport played in a pool with a ball. You pass the ball to your teammates and try to score goals by throwing the ball into the opposing team's net. It's a fun and exciting sport that improves your teamwork and endurance.*



# Surfing:



*Surfing is a thrilling water sport that involves riding waves on a surfboard while standing up. You need to catch the right wave and balance on the board while enjoying the ride. Surfing is popular in coastal areas worldwide.*

## Surf's up!

Water sports are a great way to have fun and stay active in the water. From swimming to jet skiing, there's a water sport for everyone. You can do them for fun or join competitions and show off your skills. So get ready to make a splash and try some new water sports!

Rank these sports from your favorite to your least favorite and compare with your friends!

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

# The Water Crisis: Day Zero

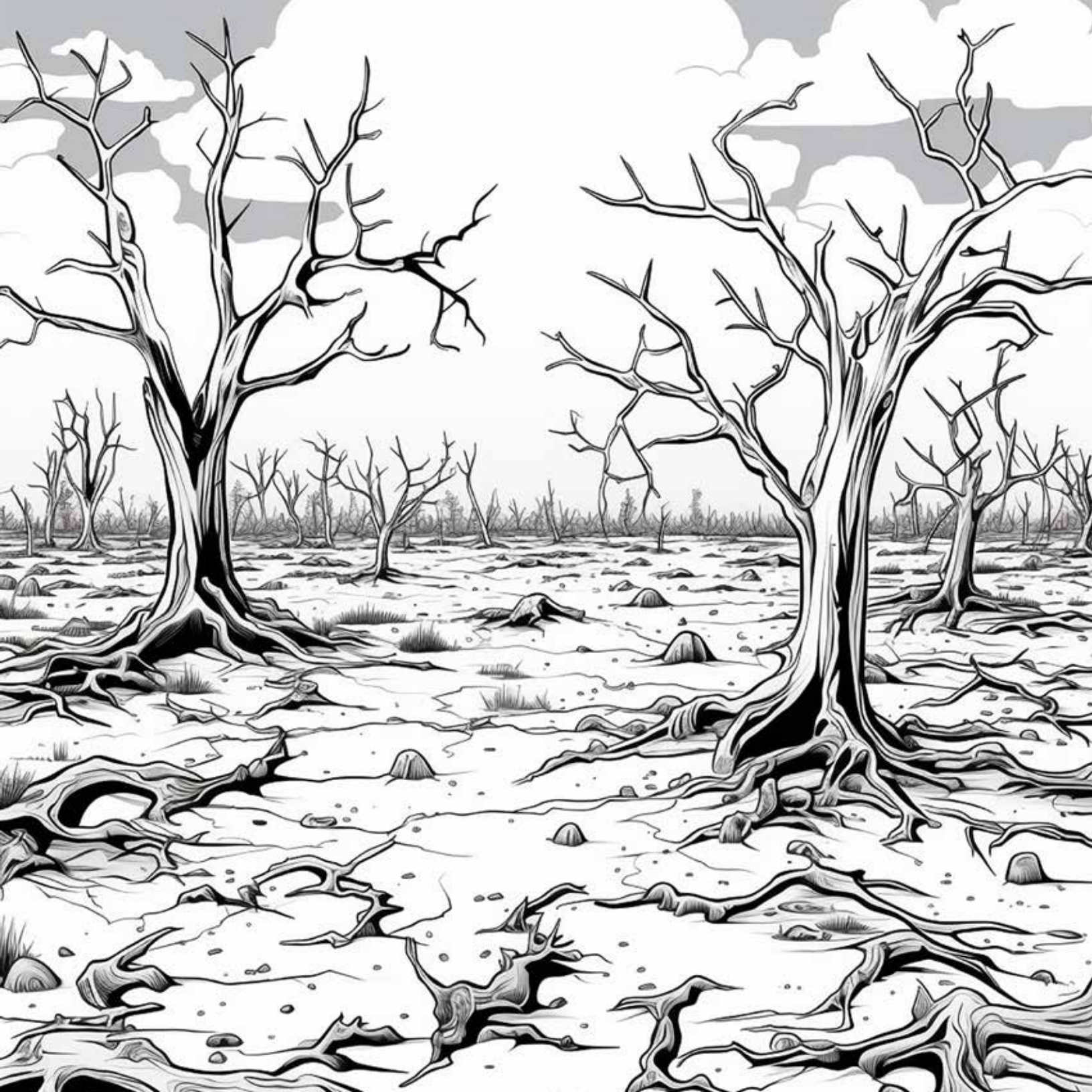
Water is amazing! It helps plants grow, animals stay healthy, and people live happy lives.

But what if, one day, all the fresh water in the world disappeared? This is called “Day Zero,” and it would be a big problem for every living thing on Earth.

Without water, we couldn't grow food, clean our homes, or even drink water to stay hydrated. That's why we need to take care of our water resources and use them wisely.

Color the picture to see how forests would look without water.









# Water Scarcity

*Imagine a world where clean water is scarce.*

*Water scarcity means not having enough clean water for everyone. It's a big problem for people, animals, and plants. In some places like Africa, Asia, and parts of the United States, there isn't enough water. People have to walk far to find water, and it might not be safe to drink. Farmers struggle to grow crops and raise animals.*

*Without enough water, plants, and animals cannot survive. This can lead to food shortages and hunger for people who rely on farming for their livelihoods.*

*Water scarcity also affects daily activities like bathing, cooking, and cleaning. Imagine not having enough water to take a shower or wash your dishes. It makes life more challenging and less comfortable.*

*Let's find out how much water you use in your daily activities! Fill in the blanks with the amount of water you think is used for each activity in a day.*

- 1. Brushing your teeth: \_\_\_\_\_ liters of water*
- 2. Taking a shower: \_\_\_\_\_ liters of water*
- 3. Washing your hands: \_\_\_\_\_ liters of water*
- 4. Watering a plant: \_\_\_\_\_ liters of water*

*Here is an average of how much you SHOULD use:*

*On average, 123 liters is enough  
water for one person a day.*

*What is your water usage breakdown?  
Remember, every drop counts!*









# The Dangers of Dirty Water

*Water is essential for life, but what happens when it becomes dirty and unsafe?*

*Oh no! Dirty water is a big problem because it is not safe to drink or use. Water is super-important for all living things. When it gets dirty, it causes trouble for everyone and the environment.*

*Water can get dirty from factories and farms and when people throw trash in rivers and oceans. That is not good! When water gets polluted, it is terrible for the animals living there. Fish and other creatures can get sick or die. If we drink or swim in dirty water, we can also get sick with tummy aches and other illnesses.*

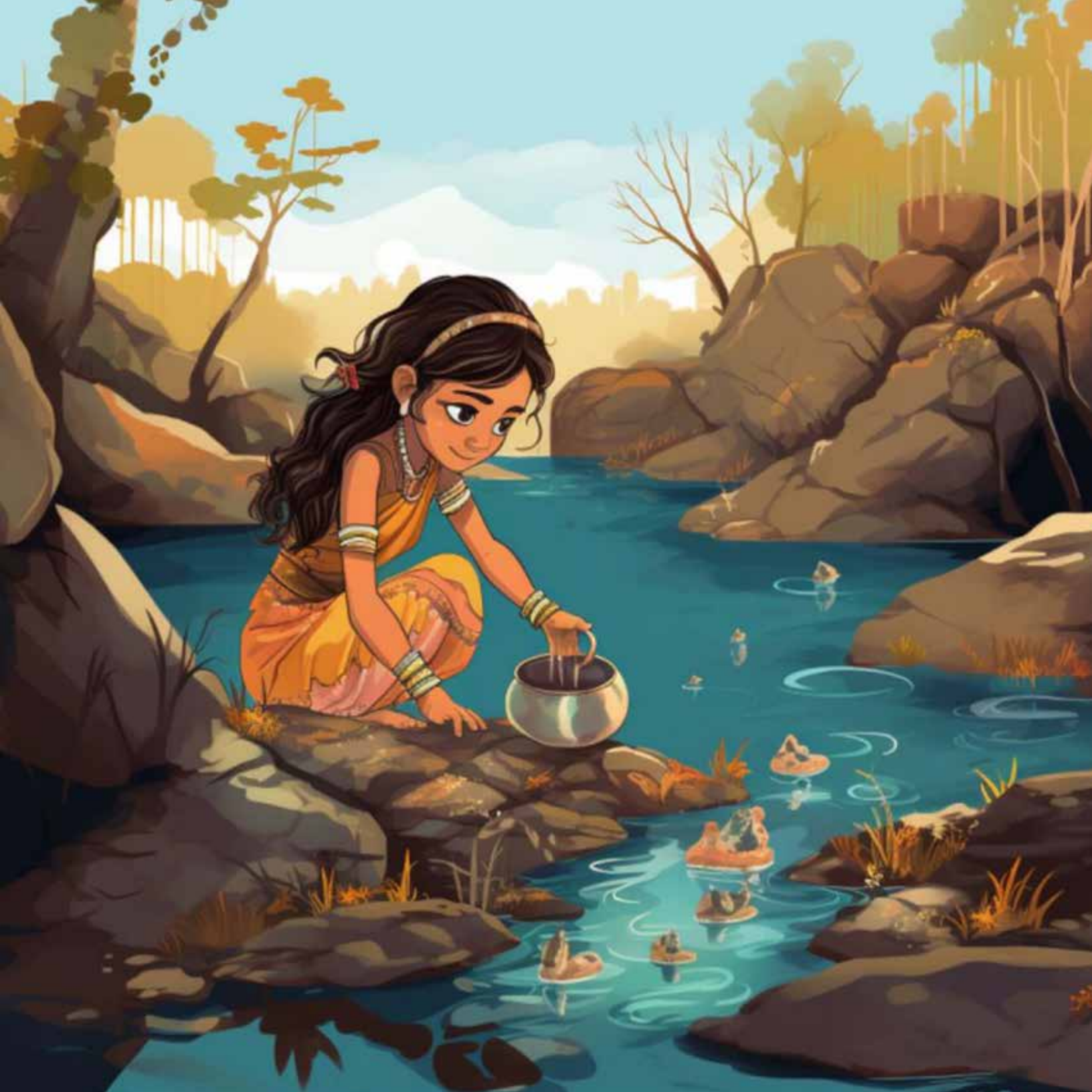
*Pollution affects the water itself and harms the land around it. When polluted water reaches the soil, it can harm plants and trees, making it difficult for them to grow and thrive.*



# Waterborne Diseases

*Did you know that some diseases spread through contaminated water?*

*Everyone needs clean and safe water to drink, but not everyone has it. More than 2 billion people in the world don't have clean water, and more than 4 billion people don't have working bathrooms. Drinking dirty water can make people sick with **waterborne diseases**, which are caused by germs that live in water.*







*Here are some tips to stay healthy:*

- 1. Boil water or use a filter to make it safe to drink.*
- 2. Wash your hands often.*
- 3. Keep your environment clean, and don't litter.*



# Are You Up For A Challenge?

## The Magical Water Purifier: A Water Warrior's Adventure

*You, as a Water Warrior, need to know how to make dirty water clean and safe to drink.*

### Materials needed:

- Plastic bottle (with the bottom cut off)
- Sand
- Gravel or small stones
- Cotton balls
- Coffee filter or cloth
- Dirty water (collected from a pond, puddle, or simulated with food coloring)

### Instructions:

1. Prepare your filtration setup by layering the materials in the plastic bottle. Start with a layer of gravel or small stones at the bottom.
2. Place a layer of sand on top of the gravel.
3. Add a layer of cotton balls on top of the sand.
4. Wrap a coffee filter or cloth around the neck of the bottle, securing it with a rubber band.
5. Pour the dirty water into the bottle and watch what happens.
6. Look at the filtered water that comes out at the bottom. Is it cleaner than the dirty water you started with?

*How does this filter work? The filter has different layers, each of which traps different types of particles. The gravel layer traps the largest particles, the sand layer traps the smaller particles, and the cotton balls trap the smallest particles. As the dirty water flows through each layer of the filter, it becomes cleaner and cleaner.*



# Solutions

*Now that we understand the challenges of the water crisis, it's time to take action!*

*Do you know what sustainability means? Sustainability means taking care of our planet so we can keep it healthy and beautiful for a long, long time.*

*The 5 Rs of sustainability are:*

- 1. Refuse (say no to harmful things)*
- 2. Reuse (use again and again)*
- 3. Repurpose (find new uses)*
- 4. Recycle (turn old things into new)*
- 5. Reduce (use less)*







There are many ways we can help save water! We can take quick showers, turn off the faucet while we brush our teeth, and fix any leaks in our homes. We can also water our plants when it's not too hot outside, so the water doesn't evaporate too fast. Plus, we can use water from our sinks and showers to help our plants grow. This is called "greywater," and it's a clever way to save water!

There are other things we can do to help take care of the Earth. We can plant trees because they take in bad air and give out good air, and they provide shade and homes to animals. We can save ponds because they are homes to animals and help control the flow of water. We can collect rainwater. "Rainwater harvesting," as it is called, is when we collect rain to use for things like watering plants and washing clothes.

We can also work together to protect our water resources. This means not throwing trash in rivers, lakes, and oceans and making sure that factories and farms don't put harmful chemicals in the water. By helping each other, we can make sure that everyone has clean and safe water.



# Are You Ready To Take Action?

## “Zero Waste”

*Water is vital for all living things on our planet, and there is no Planet B. Everyone should have clean and safe water to drink. It is our fundamental right, but sadly, many people still don't have access to it. We must work together to make sure everyone has enough water. We can do this by using water wisely and not wasting it. We can also help by keeping our rivers, lakes, and oceans clean. Let's work together to protect our water resources and make sure everyone has access to clean water.*



*Imagine a happy Earth where waste is minimized and resources are conserved. Color the Earth with bright and joyful colors to show your commitment to a zero-waste lifestyle and a happier planet!*



*As our adventure comes to an end, remember...*

*Water is a precious resource we must cherish. Be grateful for every drop and do your part to conserve water, keep it clean, and help those who need it most. You are now a certified Water Warrior, ready to face any water challenge that comes your way!*

*Complete the Saving Water Pledge that follows, and promise to conserve water every day.*

*Water is very important, and we should protect it. Let's make sure Day Zero never happens by saving water and working together to keep our water resources clean!*

# The Water Quiz

1. What is the formula for water?

---

2. What are the three forms of water?

---

3. What percentage of water is available for drinking?

---

4. How can you prevent waterborne diseases?

---

---

---

---

5. Which is the longest river on Earth?

---

6. Which is the biggest ocean on Earth?

---



7. What is the boiling point for water?

-----

8. How can you help protect the oceans?

-----

-----

9. What is the water cycle?

-----

-----

-----

10. How can you conserve water?

-----

-----

-----

-----

-----

Answers on page 73

# Fun Facts

1. Did you know that the human body is about 60% water? That's a lot of water inside us!
2. Wow! About 71% of the Earth's surface is covered in water. The Pacific Ocean is the biggest ocean and covers

more than 30% of the Earth's surface.

3. Almost all of the water on Earth is saltwater. Only 3% is freshwater, which we need to survive!



4. Water can change its shape. It can be a solid (ice), a liquid (water), or a gas (water vapor).
5. When water freezes, it expands and takes up more space. That's why ice floats on water.
6. Water is essential for all living things to survive, including plants, animals, and humans.
7. Water is really good at dissolving things. It's called the "universal solvent" because it can dissolve many different substances.
8. Water is tasteless, odorless, and colorless. It's like a magic liquid!
9. India's national river is the Ganga. It's really important to Hindus and provides water to millions of people.
10. The Indian Ocean is home to many different types of animals and plants. It's the third-largest ocean in the world!
11. In India, there's a fun festival called Holi, where people throw colored water and powder at each other. It's like a big water fight!



Find some facts you think are cool about water and write them down!

A vibrant illustration of five children of various ethnicities smiling and holding water bottles, standing in front of a large, ornate building. The children are diverse in age and appearance, all looking happy and healthy. The background shows a large, ornate building with a tall spire, possibly a school or a community center, under a bright, sunny sky. The children are holding water bottles, suggesting they are staying hydrated during their outdoor activities.

## Book Activity Answers...

*On page 20: Page 18 is saltwater, Page 21 is freshwater*

*On page 23 and 23: 1) water, 2) water vapor, 3) ice*

*On page 31: Pacific, Atlantic, Indian, Arctic, and Southern Oceans*

*On page 52: Brushing your teeth takes 6 liters. Taking a shower takes 90 liters. Washing your hands throughout the day takes 25 liters. Watering a plant takes 2 liters!*

## Quiz Answers

1. Answer: H<sub>2</sub>O
2. Answer: Solid (ice), liquid (water), and gas (water vapor)
3. Answer: Only about 1% of the Earth's water is suitable for drinking.
4. Answer: Drinking clean water, washing your hands often, avoiding swimming or playing in dirty water, and keeping your environment clean.
5. Answer: The Nile River is the longest river in the world.
6. Answer: The Pacific Ocean is the largest ocean in the world.
7. Answer: The boiling point for water is 100 degrees Celsius or 212 degrees Fahrenheit.
8. Answer: You can help protect the ocean by not dumping harmful chemicals or waste into waterways, properly disposing of trash, and reducing your use of plastic products.
9. Answer: The water cycle is when water evaporates from bodies of water, forms clouds, falls back to the ground as precipitation, and eventually returns to the Earth's bodies of water.
10. Answer: You can conserve water at home by turning off the tap when brushing your teeth, not wasting water when washing dishes or doing laundry, taking shorter showers, and watering plants in the morning or evening when it is cooler.

SOLUTION**Water**

R	.	S	.	A	W	.	.	.	.	.	.
A	.	H	.	Q	A	.	.	.	.	.	.
I	.	A	.	U	T	.	P	O	N	D	F
N	.	R	N	I	E	.	.	.	.	.	R
.	.	K	I	F	R	R	I	V	E	R	O
.	.	.	L	E	.	O	C	E	A	N	G
.	.	.	E	R	.	.	B	A	S	S	S
.	.	.	.	.	.	.	.	.	.	.	.

Word directions and start points are formatted: (Direction, X, Y)

AQUIFER (S,5,1)

BASS (E,8,7)

FROGS (S,12,3)

NILE (S,4,4)

OCEAN (E,7,6)

POND (E,8,3)

RAIN (S,1,1)

RIVER (E,7,5)

SHARK (S,3,1)

WATER (S,6,1)



# Saving Water Pledge

*You can make a difference by conserving water!*

*Take the Saving Water Pledge by promising to follow these water-saving actions:*

- 1. Turn off the tap while brushing your teeth.*
- 2. Take shorter showers.*
- 3. Collect rainwater to water plants.*
- 4. Find and stop water leaks in your home.*
- 5. Use a bucket instead of a hose when washing your bike.*

*Once you've taken the pledge, get a parent or guardian to sign it with you. Hang it on your wall as a reminder to save water every day!*

*Mom/Dad/Teacher:* \_\_\_\_\_

*Me (Water Warrior):* \_\_\_\_\_

*You are now a Water Hero, equipped  
with the knowledge and commitment  
to make a positive impact on  
our water resources!*

*Thank you for  
“Making the Invisible Visible!”*

*And a special thanks to our collaborators Jhanvi and  
Pranav for their incredible contributions and creative  
input that brought this book to life. Your unique touch and  
enthusiasm have made this journey even more extraordinary.  
Thank you for being a part of this amazing adventure!*

## Water Warrior Certificate

---

*Child's Name*

*has successfully completed this book and has demonstrated their understanding of the importance of water, water scarcity, pollution, and solutions. They have also taken the Saving Water Pledge, promising to be mindful of their water usage and conserve water in their daily lives.*

*They officially embody the slogan "Making the invisible visible" by raising awareness about the invisible environmental impact of excessive water usage and making water conservation visible. Now, they better-understand water and the different forms it takes.*

*We, the undersigned, commend their efforts in becoming responsible Water Warriors and encourage them to continue their journey in protecting this precious resource.*

*Water Warrior Signature:* \_\_\_\_\_

*Parent/Guardian Signature:* \_\_\_\_\_

*Date:* \_\_\_\_\_





# About the Authors

*Bhuvi and Tejas are environmental advocates who founded the non-profit organization H2O 365.*

*Passionate about water conservation and understanding its significance for our future, Bhuvi and Tejas aim to inspire young minds through their book,*

*“Jal Hai to Kal Hai” If There is Water, There is Tomorrow, which is written to educate children about the importance of water and the need for conservation.*

*With informative content and engaging storytelling, they encourage children to become water warriors and make a positive impact on the world.*

*As environmental advocates, Bhuvi and Tejas are actively involved in community projects, planting trees, restoring ponds and lakes, and building wells to increase access to clean water. Through their organization H2O 365, they invite other students to join the cause in combating the global water crisis.*

