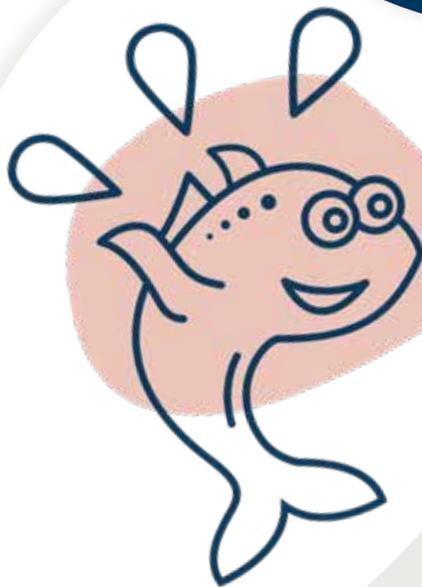


# UNLOCKING THE SEVERN

## Activity Pack

### Wonderful Water Cycle

**FOR  
KIDS!**



# Wonderful Water Cycle



UNLOCKING  
THE SEVERN

## Background information:

Our rivers are amazing! They are full of water and lots of incredible creatures, like shad, eels, crayfish, otters and pearl mussels which all rely on the river for their home. Rivers are important for people too, so we must look after them. We know that water is precious and wonderful ...but how does the water get into the rivers and where does it come from?

Well the simple answer is ... the water cycle! The water cycle is the continuous movement of water on, above and below the surface of the Earth, and it is crucial to all life on our planet.

In this activity pack you will learn all about wonderful water and how it moves around our world.

## What you will need:

Pencils (writing and coloured), paper and lots of imagination.



## Activity!

Using the images on this page and your own ideas, jot down three ways in which water is important to the planet, and why we need to learn about its cycle.



## Stores of water from around the world:

Within this system, water may be stored in any of three states: gas (vapour), liquid or solid. The change between these states can take place within seconds or over much longer time periods.



### Activity!

Let's begin by thinking about the different places water is stored. Can you match the terms at the bottom of the page with the pictures?

### Fun Fact

Did you know the fancy term for the ice store of water is the cryosphere! Can you learn how to spell this and test yourself tomorrow?



**Oceans**  
**Atmosphere**

**Lakes**  
**Ice**

**Plants**  
**Soil**



## Moving water around the world:

Water is moved between these stores by lots of different processes. Read the information below and complete the activity on the next page to find out how this amazing system works!

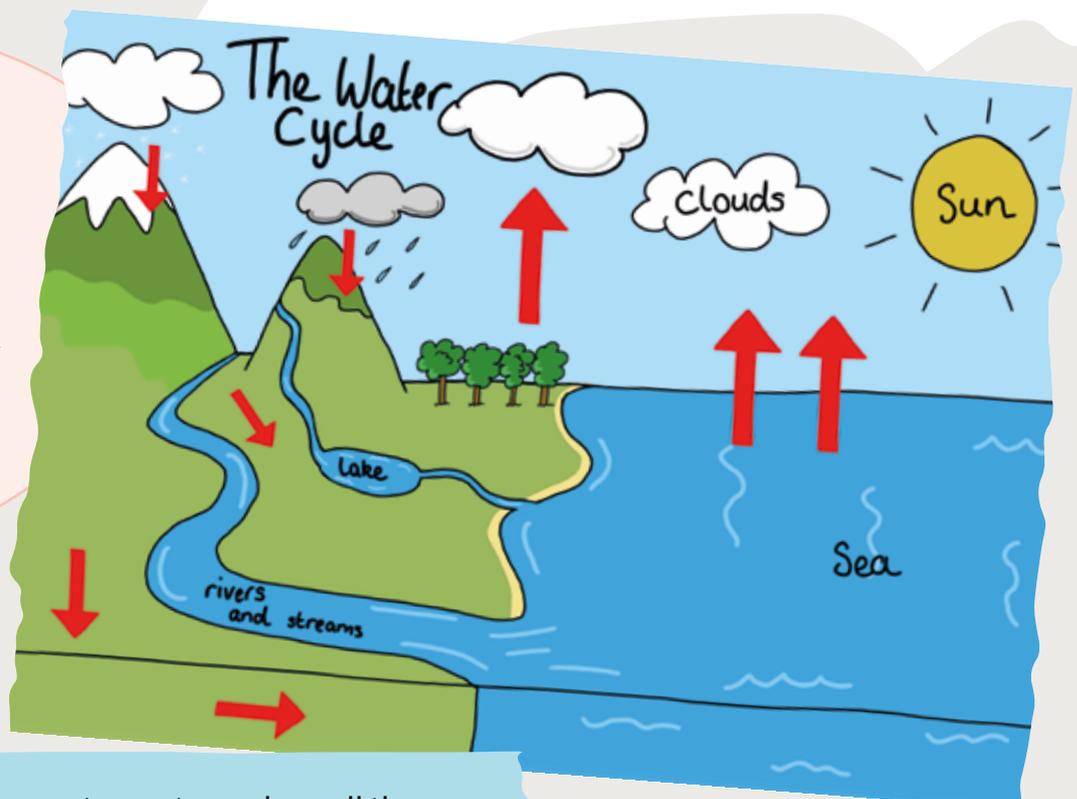


The sun, which drives the water cycle, heats water in the oceans. The heated water turns into water vapour, transferring it to the air in a process called **evaporation**. Some water vapour is also released into the air from the leaves of plants via **transpiration**. Rising air currents take the water vapour high into the atmosphere, causing it to cool. As it cools the water vapour turns into water droplets which form clouds, a process known as **condensation**. Inside the clouds these water droplets group together and grow bigger. Once they are large and heavy enough, they fall to the ground as **precipitation**. Precipitation can be rain, sleet, hail and snow. Most precipitation falls straight back into the oceans. Some precipitation falls onto land, where gravity causes it to make its way back to the sea either over land in rivers (**surface runoff**) or sinks into the soil (**infiltration**) and travels under the ground (**groundwater flow**).



## Remember!

Evaporation can happen at lots of different points in the water cycle, not just over the ocean – think about how puddles are dried up by the sun after it has been raining...



Continue onto the next page to see how all these key terms fit onto the water cycle diagram!

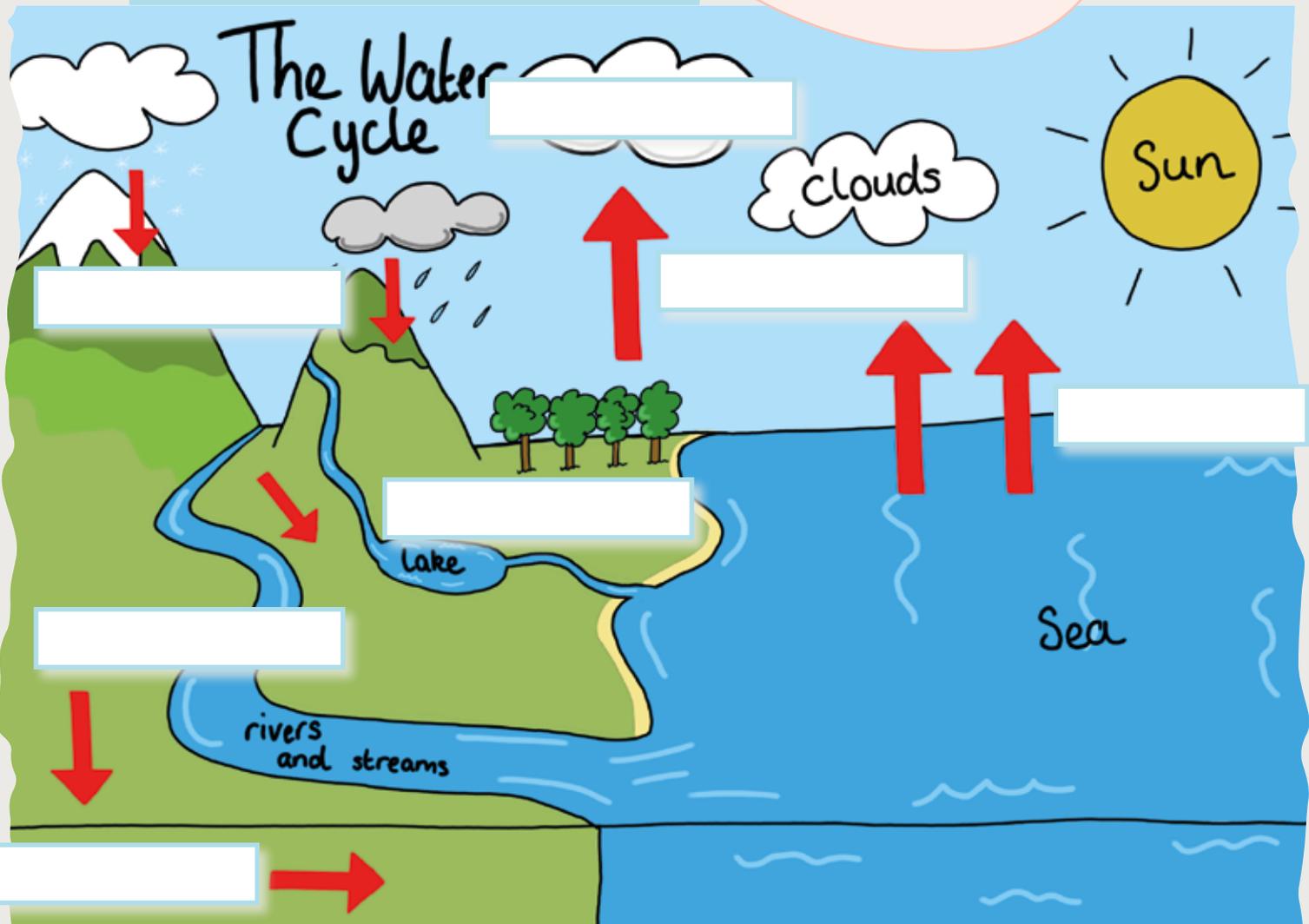


### Activity!

Carefully read the explanation on the previous page and write the key terms in the correct place on the diagram below. Some of these are tricky so make sure you check the spelling and cross them off as you go!

### Fun Fact

Sometimes water falls as snow and can be stored as ice for tens of thousands of years!...do you remember what that store is called?

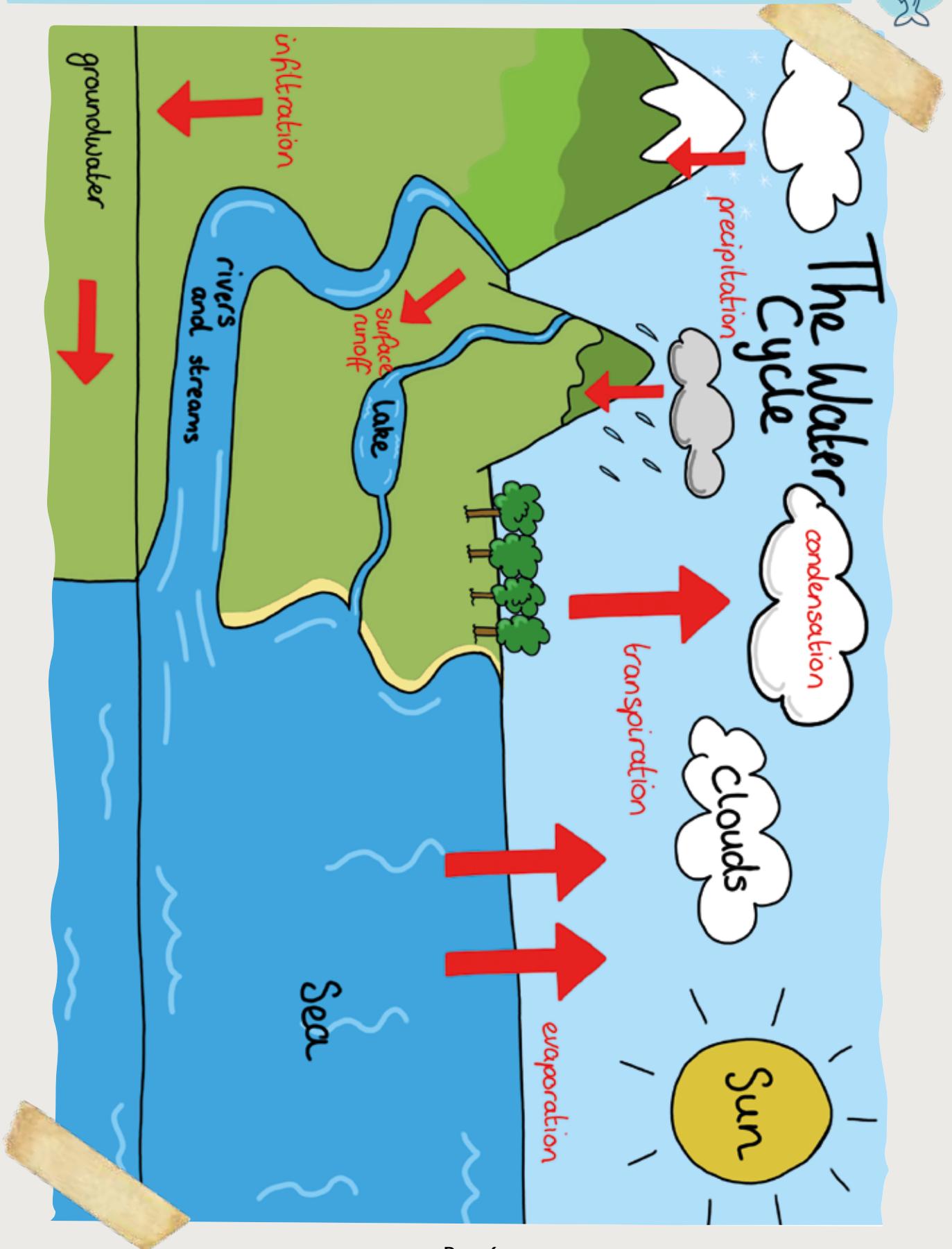


**Evaporation    Transpiration    Condensation    Precipitation**  
**Surface Runoff    Infiltration    Groundwater Flow**



### Activity!

How did you get on? Make any changes to your own diagram.



## Activity!

Create your own glossary of terms by writing a definition in your own words below:



**Water Vapour** \_\_\_\_\_  
\_\_\_\_\_

**Evaporation** \_\_\_\_\_  
\_\_\_\_\_

**Transpiration** \_\_\_\_\_  
\_\_\_\_\_

**Condensation** \_\_\_\_\_  
\_\_\_\_\_

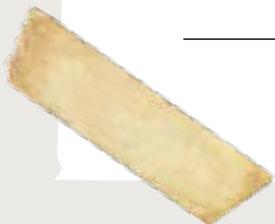
**Precipitation** \_\_\_\_\_  
\_\_\_\_\_

**Surface Runoff** \_\_\_\_\_  
\_\_\_\_\_

**Infiltration** \_\_\_\_\_  
\_\_\_\_\_

**Groundwater Flow** \_\_\_\_\_  
\_\_\_\_\_

**Bonus term: Cryosphere!** \_\_\_\_\_  
\_\_\_\_\_



## Incredible Journeys

What an incredible journey the water has from the sea to the mountains and back again. Imagine being a water droplet in the sea, one minute you're there with jellyfish and crabs for company, then the next thing you're up in the air! Create your own amazing water drop character and describe your journey through the water cycle. Write your life story in the storyboard boxes below or on your own paper, and draw pictures to illustrate it too! Let your imagination take flight like a water vapour!!



**Tip:** Think about all the things that happen to you. Changes in temperature, how fast you go, how high to climb and then how far to fall! How would all this feel?



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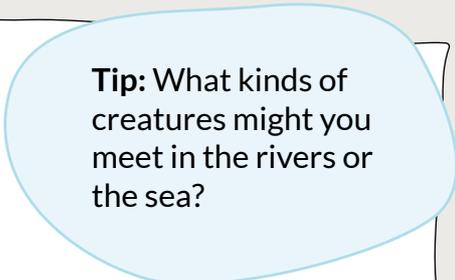
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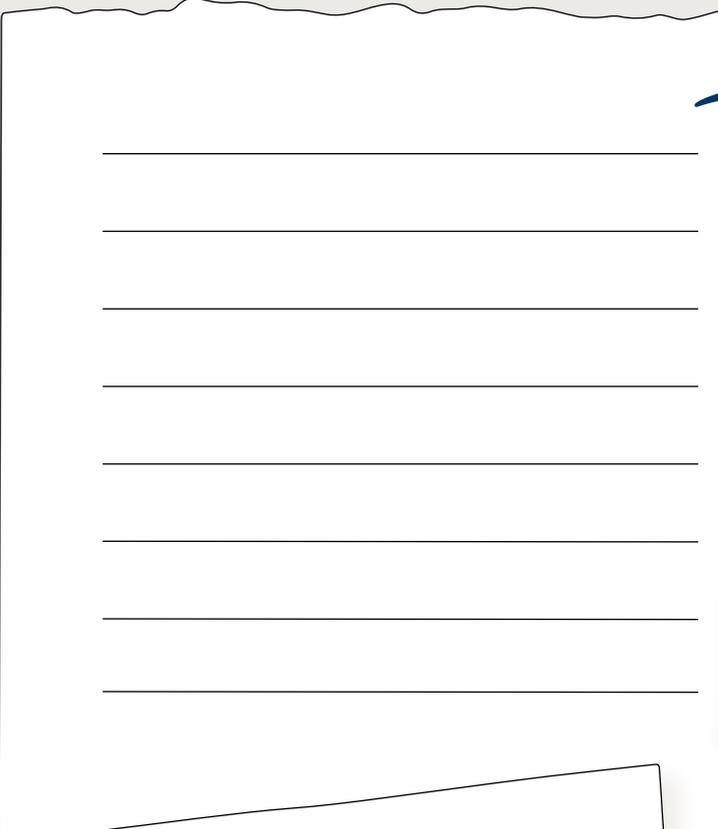
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**Tip:** What might you see and hear as you float as a cloud drifting over cities, people or the countryside?



**Tip:** What kinds of creatures might you meet in the rivers or the sea?



Hand-drawn paper with horizontal lines for writing.



**Fun Fact:**



Our water is older than you think, the Earth has been recycling water for over 4 billion years! So, the water you drink or wash with today could be the same water that dinosaurs drank millions of years ago!



Hand-drawn paper with horizontal lines for writing.



## Take it further:

Turn your storyboard into a real story using props and materials you can find at home. Present it to your family and teach them about the water cycle too. You could even film it!

Think of 5 ways you use water at home, could you be more careful not to waste it? Write notes reminding yourself and put them around the house, like by the tap for brushing your teeth!

Complete the other exciting activity packs found on the Unlocking the Severn website by visiting <https://www.unlockingthesevern.co.uk/>

