

THE WATER CYCLE

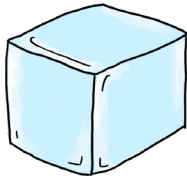
Pour yourself a glass of tap water and take a sip. Did you know that the water you've just drank is the same water that dinosaurs, King Tutankhamun and the other first humans drank? That's because the Earth has been recycling water for over 4 billion years!

What is the water cycle?

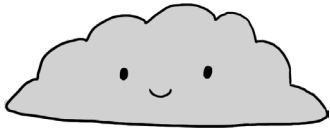
The world's water moves between lakes, rivers, oceans, the atmosphere and the land in an ongoing cycle called the water cycle. *As water travels it changes into different forms, what do you think these are?*



L _ _ _ _ _



S _ _ _ _ _

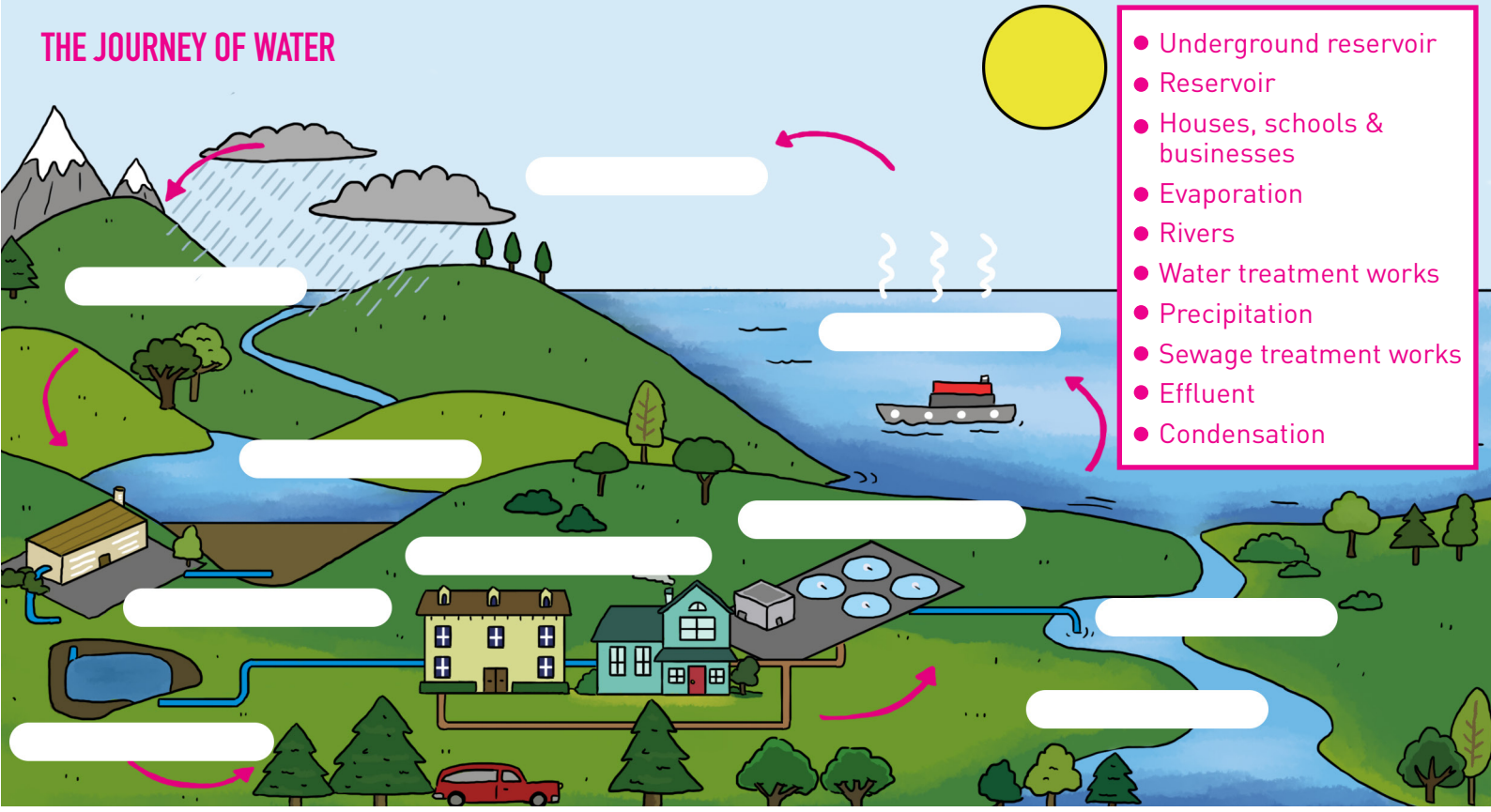


G _ _

Severn Trent plays a big part in the water cycle, making sure we have nice clean water to use and keep us healthy.

Match up the labels with the part of the water cycle they belong to:

THE JOURNEY OF WATER



- Underground reservoir
- Reservoir
- Houses, schools & businesses
- Evaporation
- Rivers
- Water treatment works
- Precipitation
- Sewage treatment works
- Effluent
- Condensation

There are 3 main stages which happen during the natural water cycle. Write which you think happens at each stage (use the picture above to help you!)

EVAPORATION, CONDENSATION AND PRECIPITATION

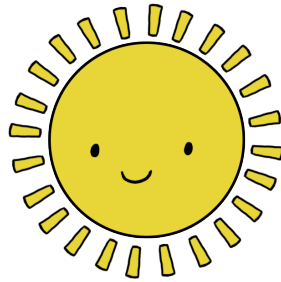
Do you know what the gas is called that water turns into during condensation?
Unscramble these 2 words to find out!

RAEWT POUVAR _ _ _ _ _ _ _ _ _ _

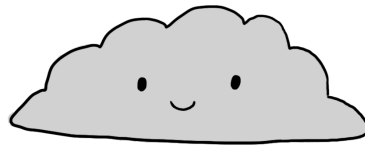
THE WATER CYCLE

So how much have you learnt about the water cycle? Fill in all of the missing words to create your own definition of the process.

The Water Cycle is the continuous water take from the sea to the to the land and back to the sea. This process goes on all the time, it never stops!



Water from the earth's surface is up by the sun which causes it to change into a and rise up into the air. This is called .



High in the sky, the gas begins to and turns back into a liquid. This stage is called .

The water droplets form which become heavy and fall back from the sky in the form of rain, snow, hail and . This is called .



COOL

EVAPORATION

GAS

PRECIPITATION

HEATED

RISE

JOURNEY

SNOW

SKY

CONDENSATION

MAKE YOUR OWN WATER CYCLE

The water cycle is an important process in all our lives! Without water we couldn't survive!

Try making your very own water cycle, you will see it happening right before your eyes!

What you'll need:

- A ziplock plastic bag or a clear water bottle
- Water
- Tape
- Coloured permanent markers
- Blue food colouring (optional)

What to do:

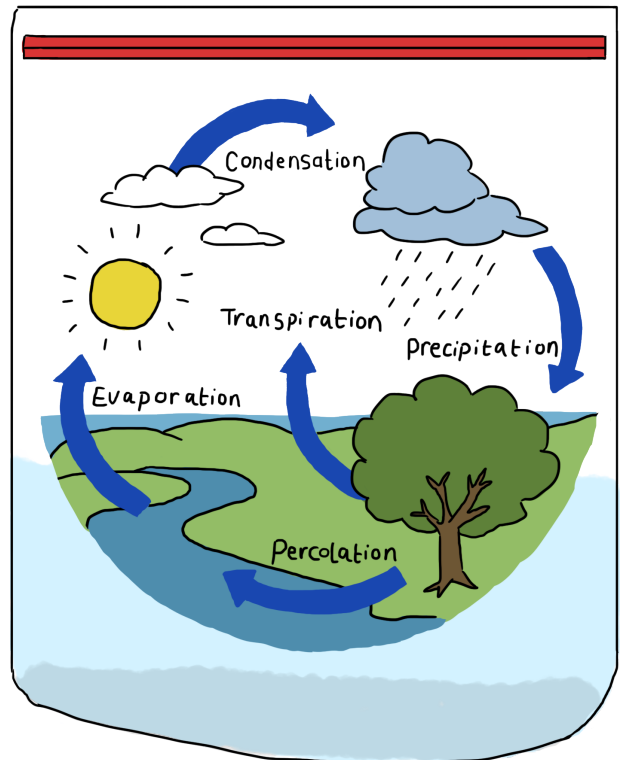
Draw the water cycle diagram on your bag or bottle. Make sure to include; sun, clouds, water accumulation (water at the bottom of the bag)

Draw arrows and labels onto the bag. Make sure you include the 3 stages (evaporation, condensation, precipitation)

Fill about a quarter of the bag with water

Place 2 drops of food colouring into the water

Seal the bag with tape and place it by a window where it can get lots of sunshine. Leave it there for at least 1 hour



Results:

Tick the box when you see:

What stage is happening?

Describe what you see and how this might look in nature:

Water rising upwards

Water droplets inside the bag

Water droplets getting bigger and sliding downwards

MAKE YOUR OWN CLOUDS

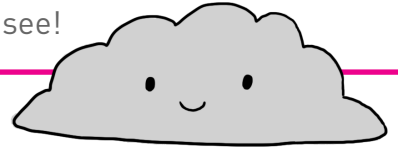
Water is everywhere, even in the air around us, we just can't see it! It's invisible because it has turned into a gas called water vapour.

Water vapour helps to make clouds, but if it's invisible, how can we see them?

To make a cloud warm air rises up into the sky, getting bigger and colder.

Cold air can't hold as much water vapour so some of the water vapour sticks onto tiny pieces of dust in the air.

This makes tiny droplets around each bit of dust. The droplets then merge together and makes a cloud that we can see!



Try making your own clouds! See what happens close up!

HOW TO MAKE CLOUDS

What you'll need:

- Warm water
- Jar with a lid
- Aerosol hairspray
- Ice cubes

What to do:

1. Pour warm water (*not boiling*) into a jar, swirl it around the whole jar to warm it up.
2. Turn the lid upside down and place several ice cubes in it and replace the lid on the jar.
3. Quickly remove the lid, give it a quick spray of hairspray and replace the lid.
4. Then remove the lid and watch the cloud escape.



HOW TO MAKE RAINING CLOUDS

Remember this is called precipitation!

What you'll need:

- Glass jar
- Shaving foam
- Straw
- Water
- Blue food colouring

What to do:

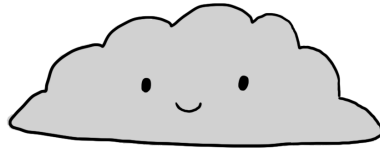
1. Complete the sheet on the next page. Pour water into the glass jar so it is 3/4 full.
2. Add a small amount of blue food colouring. Just before you're ready, add a good amount of shaving foam onto the top of water.
3. Take a droplet/straw full of blue water and drop onto the top of the shaving foam. After a couple of drops watch what happens.



MY PREDICTIONS

Before you start the experiment make a prediction about what you're going to see.

I think the cloud will hold _____ drops



It held _____ drops

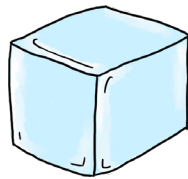
Draw your experiment below:

There are four forms of water that come from a cloud, draw them below:

THE WATER CYCLE ANSWERS



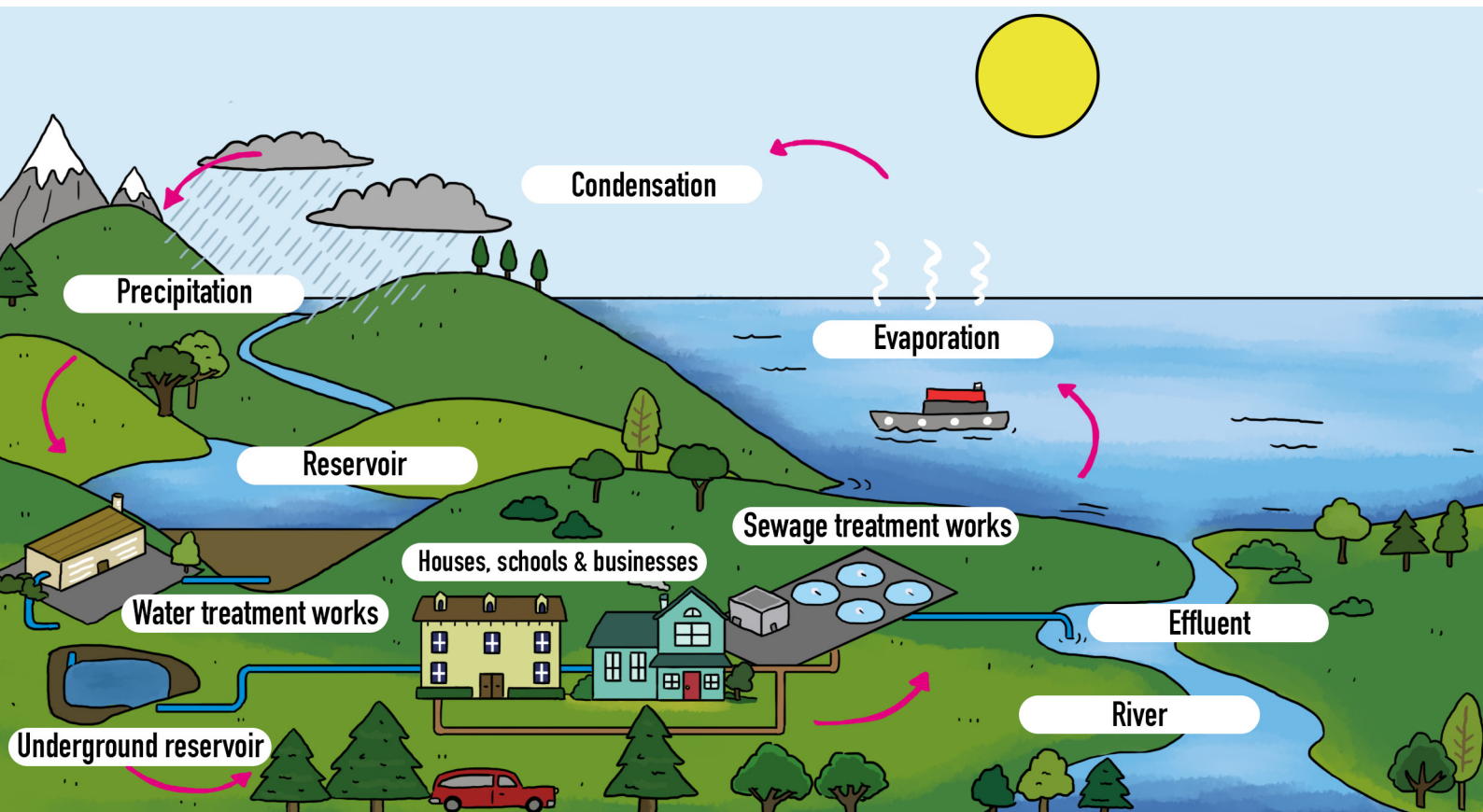
LIQUID



SOLID



GAS



Water rises into the sky and changes from a liquid to a gas called water vapour

The water vapour cools down and turns into a liquid again

Water in the clouds becomes heavy and is released through rain, hail, sleet or snow

RAEWT POUVAR = WATER VAPOUR

The Water Cycle is the continuous **JOURNEY** water take from the sea to the **SKY** to the land and back to the sea. This process goes on all the time, it never stops!

Water from the earth's surface is **HEATED** up by the sun which causes it to change into a **GAS** and rise up into the air. This is called **EVAPORATION**.

High in the sky, the gas begins to **COOL** and turns back into a liquid. This stage is called **CONDENSATION**.

The water droplets form **CLOUDS** which become heavy and fall back from the sky in the form of rain, sleep, hail and **SNOW**.

This is called **PRECIPITATION**.