

Water on Earth is constantly moving. It moves between lakes, rivers, oceans, the atmosphere and the land in an ongoing cycle. As it goes through this continuous system, it can be a liquid (water), a gas (vapour) or a solid (ice). It is recycled over and over again. This recycling process is called the **water cycle**.

In the Great British Water Project box, we have enclosed a water cycle poster to pin on your classroom's wall. The explains the main processes of the water cycle:

# 1. Water evaporates into the air

The sun heats up water on land, in rivers, lakes and seas and turns it into water vapour. The water vapour rises into the air.

### 2. Water vapour condenses into clouds

Water vapour in the air cools down and changes back into tiny drops of liquid water, forming clouds.

### 3. Water falls as precipitation

The clouds get heavy and water falls back to the ground in the form of rain or snow.

#### 4. Water returns to the sea

Rain water runs over the land and collects in lakes or rivers, which take it back to the sea. The cycle starts all over again.

## **CLASSROOM ACTIVITY 1: Mini Water Cycle**

You can create your very own 'mini water cycle' for your classroom window!

Take a clear, ziplock plastic bag. Paint a sun and clouds on the outside to represent the atmosphere.

Pour in a little rainwater to represent the ocean. Half a cupful is usually enough (depending upon the size of your bag). Add a few drops of blue food colouring (or use a blue felt tip pen to colour the water). Use a

Use stick tape to affix your mini water cycle bag to your classroom window!

Have a close look on a sunny day - can you see evidence of evaporation? What do you think the droplets running down the inside of the bag represent?

Try and imagine the scale of the entire world's water cycle. Water is evaporating, condensing and falling as rain over 12,000 km away on the other side of Earth!





# **CLASSROOM ACTIVITY 2: Where's My School on the Water Cycle?**

Ask your students to draw their own water cycle (using the enclosed poster). Encourage the students to personalise the water cycle by connecting it to features near your school. A recommended way to do this is zooming in to your location on Google Earth, then zooming out, discussing key geographic features nearby mountains, lakes, and rivers. Encourage the students to explain how these features connect to the nearest ocean.

Point out to students how most large cities are located near sources of water, and explain that humans have historically settled near water sources. Is your school located close to the water cycle sources (e.g. hills and mountains) or close to the sea?

# **CLASSROOM ACTIVITY 3: The Journey of a drop of water!**

Encourage students to work independently to each write a story about one water drop's journey.

Tell students that they are now going to write a story about the experiences of one water drop as it travels through the water cycle. Have them write from the drop's point of view. You may want to assign students water drops that began their journeys in different places, such as a puddle on a farm, a mountain lake, a stream in a meadow, or a large ocean. Encourage students to use what they just learned, as well as their imaginations, to tell an interesting story. To spark imaginations, prompt students with these questions:

Where did the water drop go on its journey?

What did it see? What adventures did the drop have?

How did it feel at different times?

Did the drop meet any plants, animals, or people? If so, how did the water drop help them?

How long did the drop's trip take?

Where does the water drop want to go on its next journey?

The above activity is part of a National Geographic water cycle lesson plan. Many other water cycle related activities are available via: **www.nationalgeographic.org/activity/earths-water-cycle/** 

Don't forget: our partner, the Wildfowl and Wetlands Trust, has generously offered **free teacher visits** to WWT sites so you can discover more of the UK's native wetlands wildlife! **Please see enclosed document for details of this free offer!** 

