

Autumn 1 Term Year 4 Geography Overview

The Water Cycle

Key facts

- Water changes state throughout the water cycle – It can be a liquid, gas (vapour) or a solid.
- It is called the water cycle because water continuously moves around the system. Rivers are part of this cycle.
- Energy from the Sun heats the surface of the Earth.
- Water is evaporated from oceans, rivers, lakes, etc.
- The warm, moist air rises because it is less dense.
- Condensation occurs when water vapour is turned back into water droplets as it cools down. Clouds are formed.
- Precipitation occurs as water droplets get bigger and heavier they begin to fall as rain, snow and sleet, etc.
- Some water flows across the surface of the ground - surface run-off. This happens when the surface doesn't allow water to penetrate. Surface run-off is more likely to occur if the ground is saturated with water or when the rock is impermeable. This water moves quickly to the river.

Resources

- The internet for research
- Books, photographs
- Resources to perform evaporation/condensation experiments.
- Maps/atlases to explore water cycle and precipitation of other countries.

Prior Knowledge

Children may have some understanding of the water cycle through experiences and learning at home. They will also have explored the water system in their Science lessons this term. They may have some understanding of key vocabulary covered, such as evaporation, temperature, rain and rivers.

Key Vocabulary

- Precipitation
- Evaporation
- Condensation
- Temperature
- Rainfall, cloud
- Ocean, river, lake
- Runoff
- Vapour

Brief summary/ overview

Children will investigate the water cycle and how it impacts the environment they live in. They will build upon their knowledge of states of matter from Science lessons to investigate how water changes state as it moves through the water cycle. They will carry out investigations and experiments to demonstrate the water cycle in practice and explain the process to others. They will look for and record evidence of the water cycle in their local area and through other sources of evidence.

Cross curricular links/visits

English: Write up leaflets, posters, reports and descriptions of the water cycle.
Maths: Produce tables and charts to record data.
Science: Explore the water cycle and states of matter through experiments.
Computing: Research the water cycle and present data digitally.