

Quick guide

Age range

7+

45 mins



Indoor activity



Covers topics on:

Science
Observation

Individual activity



Rainstorm in a jar

Task

Use condensation to replicate a rainstorm.

You will need

- A wide-mouthed jar
- A small bowl
- Ice cubes

What to do

1. Carefully half-fill the wide-mouthed jar with hot water.
2. Sit the small bowl on top of the jar and leave it for five minutes.
3. Put some ice cubes in the bowl on top of the jar.
4. Observe the jar every five minutes. Note how long it takes for the rain to fall.

While you are waiting for the water to condense, you could watch the animation of the water cycle on the DVD.

You can also discuss how rainwater gets polluted and needs to be treated before it can be used for drinking.

You could make a simple water filter and demonstrate how water can be cleaned in this way (see water filter activity sheet).

Fun fact

Raindrops can fall at speeds of up to 22 miles per hour

Leaders' notes

This experiment will demonstrate the water cycle. When you fill the jar with hot water, some of the water evaporates and rises. The vapour hits the ice-cold bowl and condenses into tiny droplets. As the droplets collide they grow and become heavier. They hang from the bowl until they are heavy enough to fall.

When water evaporates, it forms vapour in the air. Air currents carry water vapour high into the atmosphere, where the air is cooler. As vapour cools, it condenses and forms clouds. Millions of cloud droplets are needed to make one drop of rain.

Water cycle diagram

