

Unit 4 Sunshine and moisture

1. Whole class instruction

Objective: Students understand some aspects of the basic types of weather – sunshine and moisture (rain, dew, frost, snow). Students understand why there is more sunshine near the equator and some of the dangers of getting too much sun. Students explain how some of the different types of moisture are produced.



Bottle of sunscreen

1.1. Go to Textbook pages 12-13

“What do you like to do when the sun comes out?”

- ▶ Discuss some things people like to do when it is sunny, as an introduction to sunshine as a type of weather.
- ▶ Ask students what we get from the sun. They will probably mention light and heat. Discuss that there is something else that comes from the sun that we can't see or feel – ultraviolet rays.
- ▶ Discuss ways to stay safe in the summer sun. You may like to bring in a few bottles of sunscreen (or use pictures of the bottles). Point out the SPF (sun protection factor). Other types of sun protection include hats and UV-safe clothing.

The SPF tells you the amount of time the sunscreen will be effective. For example, an SPF of 20 means you can stay in the sun 20 times longer, without getting a sunburn, than you would be able to without sunscreen.

1.2. Go to Textbook pages 16-17

“What are some different forms of water?”

- ▶ Point out that water can come in three forms – liquid (rain and dew), solid (ice and snow) and vapour, or moisture (fog and mist).
- ▶ You can demonstrate the way that water evaporates by simply placing an ice cube on a plate. Over time, the solid water (ice) will melt and turn to liquid. If you then place this on a heat source, the liquid will evaporate and turn to moisture, or vapour.

Some ice, a glass, a plate, water and a source of heat (a hotplate, sunny day or a radiator will also work)

2a. Group exploration

2.1. Making fog

- ▶ Students can make their own fog in a jar. Each group will need a glass jar, strainer, warm or hot water and ice cubes. They should fill the jar up completely with hot water. Leave the water for around one minute. Then pour out all but one inch of the water. Quickly place the strainer on top of the jar and immediately put 3 or 4 ice cubes in the strainer. Fog or mist should form in the jar as the cool air from the ice condenses over the hot water.



Cross-curricular with
Science: Changing from
solids to liquids to gases
5D

2b. Literacy activity

Unit 4: The Great London Fog

- ▶ This workbook can also be used as part of a study of England in the 1950s. You may like to discuss how the killer fog in the story was what we would call smog today – a mixture of fog and smoke. This is what made it so dangerous – the moist, smoky air got into people's lungs and made them very ill.

Comprehension workbook 4 The Great London Fog

Cross-curricular with
History Modern Britain
1948-1969

3. Plenary session

- ▶ Review some of the positive and negative aspects of sunshine.

4. Further work/homework

- ▶ Students can make their own poster, diorama or diagram of the water cycle. They could make a '3D' version by using cotton wool for clouds, card for mountains and coloured sand or blue tissue paper for the water.

You may also like to have students review the water cycle by doing the "Try this interactivity" on screen 6 of the Weather Basics multimedia presentation.