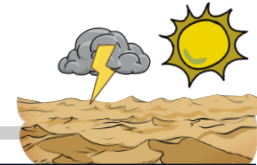




How can we collect weather data?

Geography – Y2 – Lesson 3



Geographical Knowledge and Concepts

Physical Geography, Geography Skills and Fieldwork
Physical Processes

Resources

- PPT
- Challenge worksheets
- Stop and jot worksheets
- Activity 1 worksheets (LA, MA, HA)

Teaching Input

- **How can we record and measure weather phenomena?** – Go through the key questions and the geographical knowledge and concepts used to answer those questions.
- **Key vocabulary for this lesson** – Go through the key vocabulary and their definitions. Have any of the children heard these words before? Did they already know their meanings?
- **Let's discuss** – Children are to discuss how to group the kinds of weather into categories with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed. Go through the 'New word alert!' and its definition. The children will collect data on four kinds of weather: precipitation, wind, cloud and temperature.
- **How do meteorologists measure weather?** – Introduce Jada. Choose a child to be Jada and let them read what she says about how meteorologists measure weather. She explains the fieldwork skills the children will be using to measure weather. Go through the 'New word alert!' and its definition.
- **How do meteorologists measure precipitation?** – Read through the information displayed on the slide. Explain that rain gauges can be used to measure rainfall and explain how they work.
- **How will we measure precipitation?** – Read through the information displayed on the slide.
- **How do meteorologists measure wind direction?** – Read through the information displayed on the slide. Explain weathervanes can be used to measure wind direction and explain how they work.
- **Make a weathervane** – Children are to make a weathervane following the steps on the slide.
- **How do meteorologists measure cloud cover?** – Read through the information displayed on the slide. Explain oktas can be used to measure cloud cover and explain how they work. Children are to cut out eight squares in a piece of card to measure cloud cover.
- **Stop and jot 1** – Let the children measure cloud cover in their location. Children are then to complete their stop and jot 1 worksheets.
- **How does a meteorologist measure temperature?** – Read through the information displayed on the following two slides. Explain that thermometers can be used to measure temperatures and explain how they work.
- **How will we measure temperature?** – Children are to discuss the questions on the slide with their learning partners, in groups or as a class. Take feedback from the class before the answers are revealed.
- **Activity 1** – Children are to fill in details on the diagrams and missing words to describe the weather on different days on their activity 1 worksheets. They are differentiated in three ways.
- **Challenge** – Children are to fill in details on the diagrams and fill in missing words on a blank weather chart, to describe the weather on a typical day in winter on their challenge worksheets.

LA

With support, children demonstrate how to measure precipitation, cloud, wind and temperature over one day.

MA

Children demonstrate an understanding of how to measure precipitation, cloud, wind and temperature over two days.

HA

Children demonstrate an understanding of how to measure precipitation, cloud, wind and temperature over two days. They interpret the data to deduce the season and the reasons for temperature fluctuations.

Challenge

Create weather data to match a typical weather day in winter.

Key Vocabulary

weather – a description of what the conditions are like in a particular place over a short time
meteorologist – a type of scientist that studies the atmosphere to predict and understand Earth's weather
precipitation – water vapour or moisture that falls from the clouds in the form of rain, sleet, snow or hail

temperature – the measure of how hot or cold an area is, measured in degrees Celsius (°C)
thermometer – an instrument used to measure temperature
weathervane – an instrument used to measure wind direction
rain gauge – an instrument used to measure rainfall and snowfall
okta – a unit of measurement used to describe the amount of cloud cover

Self-assessment

I can name instruments used to measure different kinds of weather.
I can decide which instruments are most suitable for measuring weather and where to locate them.

Assessment Questions

What kind of weather will we measure?
What instruments will we use?
What fieldwork skills will we use?

