

Activity 1: What's the weather like today?

Introduction

This short opener raises learners' awareness of some of the challenges we face when handling information and data about something as complex as the weather.

Learners use a graphic organiser to identify the features of today's weather, describe each one in everyday language and then translate this information into an item of weather data.

The activity is an essential precursor for **Activity 3: Coding the weather**.

Although simple to organise, the activity requires careful use of questioning and skilled use of prompts, leaving learners enough space to formulate their own answers.

Learning objectives

Learners should be able to:

- identify the difference between weather information and weather data
- describe some of the complex data handling issues involved in dealing with the weather.

Learners will also be able to practise their analytical thinking skills and group discussion skills.

Resources required

- Interactive whiteboard (optional).
- A diagram of a Sunshine wheel (see below).
- Flip chart paper and pens.

Starting points

This opener forms the starting point for a series of activities around the theme of weather forecasting. Learners will be able to use any prior knowledge they have about making weather observations, but such knowledge is not essential.

Suggested approach

Stage 1: Starting the thought process

Ask learners to answer a simple question: "What's the weather like today?"

Encourage them to look out the window to gather information about current weather.

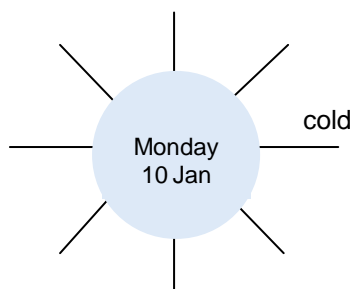
Learners should come up with answers such as: cold, windy, cloudy, raining, sunny and so on. Allow them to use everyday language at this point. Even terms such as 'horrible' or 'nice' are acceptable. The words they come up with can be put at random onto an interactive whiteboard or flip chart, if desired.

Stage 2: Weather information

Learners work in pairs or small groups using flip chart paper and pens.

Show learners a diagram of a Sunshine wheel. Explain that they are going to construct a diagram of today's weather. They can have as many lines coming from the sun as they wish, but five to seven will suffice.

You can help learners get started by drawing this diagram.



Learners put the date in the middle and label each of the sun's rays with one of the features of today's weather.

Stage 3: Weather data

Learners now have to try to add the relevant item of weather data to each of the sun's rays that they have labelled. For instance, if they have used the term 'warm' they might add '20 degrees Celsius (20°C)'.

Learners can obtain some of the data by making their own observations. For instance, they can look at the sky and quantify cloud cover as a percentage. They may be able to estimate the temperature and visibility. They can also supplement their observations by using a weather website, such as the BBC site, where they can enter the postcode and obtain local weather data for today.

Learners may not be able to find a suitable piece of data to go with each of the rays that they have labelled – for instance, if they have said the weather is 'nice'. You might prompt them by asking questions such as: "Can you turn 'nice' into data? Why is it hard?"

Assessment for learning

You will be able to listen to learners' discussions to find out how much they understand about the data handling concepts that arise during the activity. This will enable you to plan how to handle the next stage.

Stage 4: Consolidating and checking learning

The completed Sunshine wheels are displayed and discussed.

Possible questions to prompt discussion.

- Which items of data were easiest to obtain? Why?
- Were there any features of the weather that you could not turn into a piece of weather data? Why?
- What is the difference between information about the weather and weather data?
- What are the advantages of turning weather information into weather data?

What learners might do next

Although this activity is intended as an opener for **Activity 2: The story of a weather forecast**, **Activity 3: Coding the weather** and **Activity 4: Weather web page challenge**, it could also be used as an opener for any topic requiring learners to grasp the difference between information and data. In addition, it can lead into work on databases, with the day as the entity and the various weather features as the attributes. A weather database could then be constructed.