

Prior knowledge:

In Year 1, you learnt about the weather during different seasons. Throughout the year, you observed what the weather was like, representing it with different symbols as well as recording the temperature in °C. You also looked at the effect the weather had on plants and animals during the year, including the changing trees and the life cycles of certain animals. In Year 4, you also studied the water cycle and understood the part it plays in weather. You learnt about the different types of clouds which can occur and the weather conditions associated with them.

National Curriculum:

Place Knowledge:

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom

Human and physical geography:

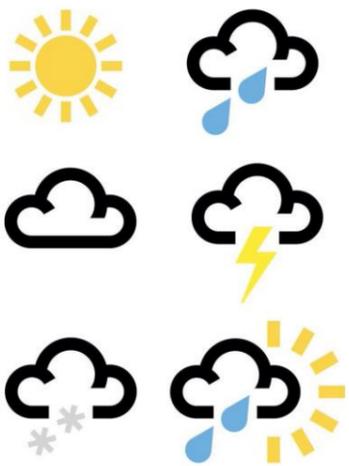
- describe and understand key aspects of climate zones and the water cycle

Geographical skills and fieldwork:

- use fieldwork to observe, measure, record and present the physical features in the local area using a range of methods

Vocabulary you will use:

Word	Definition
Altitude	the height of an object or point in relation to sea level or ground level.
Climate	this is the averaging out of weather conditions over a period of years (usually over 30 years)
Cirrus	wispy clouds at high altitudes
Cumulus	classic 'fluffy' clouds at middle altitudes and there are different types of cumulus clouds including cumulonimbus or storm clouds
Meteorologists	a weather forecaster
Precipitation	is the amount (in mm) and form in which water falls (rain, hail, sleet and snow).
Season	is a division of the year, marked by average changes in the weather. In the UK these are named as spring, summer, autumn and winter
Stratus	layers of cloud, at relatively low altitudes
Temperature	is the measure of how hot or cold an area is.
Weather	the atmospheric conditions we experience in a place at a point in time, which can change frequently.
Wind direction	is the direction from which the wind is blowing.
Wind speed	is a measure (in mph) of how fast or slow the wind is blowing



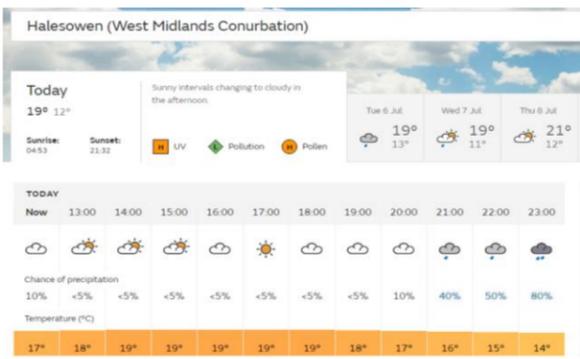
Quick Summary

During this unit, you will

- observe and record what the weather is in your school grounds (or local area), including temperature, wind speed and direction, precipitation, cloud type and altitude and any other weather features
- use different weather instruments to record information about the weather.
- look at how weather varies at different times (e.g. daily, weekly, seasonally)
- present and analyse data to understand how weather varies over time and to draw conclusions



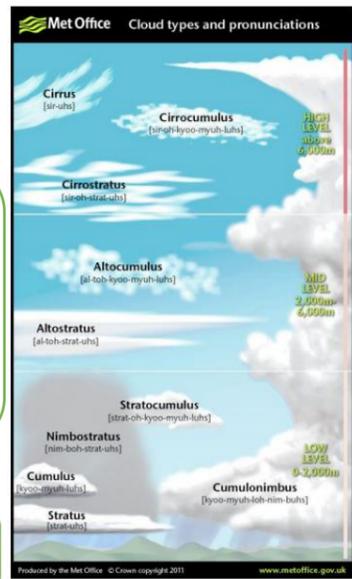
Weather vocabulary



Temperature		Precipitation		Wind		Precipitation	
hot	cold	wet	rain	windy	calm	overcast	cloudy
dry	warm	snow	hail	settled	gusty	clear	thin
frosty	icy	fog	mist	breeze	storm	heavy	stratus
cool	sunny	dew	drizzle	light winds	gale	cumulus	cirrus
freezing		showers	blizzard			cumulonimbus	(thunder clouds)
		sleet					
		thunder and lightning					

The [Met Office](#) website or the [BBC weather](#) site show regular weather reports and forecasts for locations across the UK. How many of the terms below can you read or hear in their reports, which we could also use in our own observations?

Equipment



Thermometer – to measure temperature, usually in °C. They will usually record a positive reading, but can fall to minus figures (below freezing).

Anemometer – to measure wind speed. Types can vary but they usually give a reading in mph.

Wind vane – to measure wind direction. They point in the direction in which the wind is blowing from. You may also need a compass to identify the direction.

Rain gauge – to measure how much precipitation has fallen (or not), usually over a 24 hour period.

Cloud observation guide – to identify the main types of cloud, using Met Office information.

Observations and recordings

Are there any results which you find surprising?

How do our observations compare to what was forecast in the weather reports?

w/c date:								Cloud altitude	Additional
Season:	Temperature	Wind speed	Wind direction	Precipitation type	Precipitation amount	Cloud type	(low, medium, high)	notes (e.g. rainbows)	
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									

In what ways can we present our measurements over time?

Which graph type would be best for which measurement?

What patterns do you notice in the weather depending on the season?

What statements can we make about UK weather based on our recordings?

