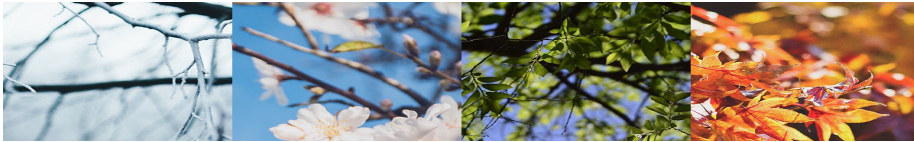


Year Group: 1 Term: ongoing focus through year

Seasonal Changes



National Curriculum objectives

S1.2c Observe changes across the four seasons.

S1.2d Observe and describe weather associated with the seasons and how day length varies.

Specific substantive knowledge—what we want learners to know in this year group?

- Days are longer in the summer and shorter in winter. (In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.)
- Weather changes through the year, getting hotter in the summer and colder in the winter
- The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and drier in the summer.
- Change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people.
- Know that the winter is likely to bring ice on the ground when water freezes due to the cold
- The Earth orbits the Sun with one orbit constituting a year of 365/366 days
- *Connect learning to plants / trees—how these change in seasons*

What prior knowledge is this building upon? What should they focus on to build to age related? (Use with knowledge ladder)

- The weather is colder in winter and warmer in summer.
- Ways to describe daily weather include sunny, rainy, warm or cold.
- Weather is warmer in the summer and colder in the winter. Say what the daily weather is like.
- In the winter, the evenings get darker earlier. In the summer, the evening stay lighter for longer.
- The weather can change throughout the day, week and month. The weather is different at different times in the year.

Key questions for AFL:

- *Can you name the four different seasons in the year?*
- *What is the weather typically like in the season of...?*
- *Is it always hot and dry in the summer? Is it always freezing in the winter?*
- *What happens to water (such as rain or puddles) when it is hot or cold outside?*
- *How does the amount of daylight we have change with the seasons?*

Where is this learning progressing to? (Use with knowledge ladder)

- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light)
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 - Earth and space)
- The temperature at which materials change state varies depending on the material. Water changes state from solid (ice), liquid (water) at 0°C and from liquid (water), gas (water vapour) at 100°C—relationship to freezing water outside (Year 4)
- The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3)

Relationship to Geography:

- G1.2b Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles (KS1)

Common misconceptions

Some children may think:

- it always snows in winter
- it is always sunny in the summer
- there are only flowers in spring and summer •
- it rains most in the winter.

Working scientifically focuses

S1.1b Observe closely, using simple equipment performing simple tests

S1.1d Use their observations and ideas to suggest answers to questions

S1.1e Gather and record data to help in answering questions

What types of enquiry will we be undertaking?

Observation, observations over time, pattern seeking

Process for enquiry or investigation

- Collect information about the weather regularly throughout the year. Present this information in tables and charts to compare the weather across the seasons.
- Collect information, regularly throughout the year, of features that change with the seasons e.g. plants, animals, humans. Present this information in different ways to compare the seasons.
- Gather data about day length regularly throughout the year and present this to compare the seasons.
- Start to use some simple equipment to measure alongside observations—use of an outdoor thermometer to read numbers to see if the temperature is increasing or decreasing (bigger and smaller numbers). Setting an example of accurate measurements—using more than one thermometer, does it read the same number?
- Looking for patterns over time—is it getting colder as we get further into winter? Is it getting warmer as we get further into summer? Are the days getting longer / shorter over the winter / spring / summer

How does it help learners develop their knowledge?

By conducting observations over time and noticing the patterns, children will be able to discuss their enquiry findings in relation to the knowledge they have developed about seasons / day length and weather. They may observe short term differences which can help explain how seasons / weather may not always be predictable, and therefore be used to discuss any misconceptions.

Key Vocabulary

Weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length