

Year: 1

Term: Autumn (ongoing)

Science - Seasons

Prior Knowledge

Understand the key features of the life cycle of a plant and an animal. (EYFS – Plants & Animals, excluding humans)

Explore the natural world around them. (EYFS – Seasonal changes)

Describe what they see, hear and feel whilst outside. (EYFS – Seasonal changes)

Understand the effect of changing seasons on the natural world around them. (EYFS – Seasonal changes)

Key Knowledge:

What is a season?

The year is divided into four parts according to the weather and daylight hours. Each part is called a season.

How are the seasons different?

Compare the weather and changes across the different seasons by making observations.

Describe the weather that is associated with different seasons.

The length of the day varies from season to season – there are longer days in the summer and there are shorter days in the winter.

Does the whole world have the same seasons?

No - the seasons happen at different times in the top half of the world (Northern Hemisphere) compared with the bottom half of the world (Southern Hemisphere)

Where are we?

In England, we are in the Northern Hemisphere.

What are the seasons called?

Autumn- September, October, November Winter- December, January, February Spring- March, April, May Summer- June, July, August

Autumn - Temperatures get progressively colder, the weather is very changeable and there is 12 hours of light per day on average.

Winter – Temperatures are at their coldest, and the weather is generally wet, windy and cloudy at the start of the season becoming drier and much colder in the later part of the season. There are 8 hours of light per day on average.

Spring – Early spring can be quite cold, and occasionally the lowest temperatures of the year can occur in March. There is a fair chance of snow earlier in the season often in March, temperatures get progressively warmer throughout the season and there is 13 hours of light per day on average.

Summer – The warmest and sunniest of the seasons. Thunderstorms are more likely in the Summer and there is 16 hours of light per day on average.

Key Vocabulary

Prior vocabulary - rain, sun, cloudy, cold, warm Working scientifically key vocabulary – observe, test, record, equipment

Weather	The conditions outside.
Temperature	The measure of how hot something is.
Seasons	The parts a year is divided into.
Spring	Season between winter and summer when the weather becomes warmer, leaves and plants start to grow again and flowers appear.
Summer	Season between spring and autumn when the weather is warmest.
Autumn	Season between summer and winter when fruits and crops become ready to eat and are picked, and leaves fall.
Winter	Season between autumn and spring when the weather is coldest.
Leaves	Usually flat and green growing from a stem or branch.

Autumn	Leaves begin to change colours to oranges, reds and browns and fall from the tree.
Winter	Trees are bare without leaves. Branches and twigs are most visible.
Spring	New leaves and buds begin to grow.
Summer	Trees appear full of leaves.

Additional vocabulary to discuss across the unit - thunderstorm, freezing, melting, orbit, clouds, wind, snow, ice

<u>Deepening and broadening the knowledge and understanding for GDS learners:</u>

- names and correctly orders the four seasons
- knows that certain plants and animals respond to seasonal change, e.g. some birds migrate, some animals hibernate
- describes the effect that the changing seasons has on their own life, e.g. can play outside longer in summer
- describes typical weather and temperature in Great Britain associated with each of the seasons
- knows that the weather in another country, at the same time of the year, may be very different to the weather in Great Britain
- knows that the length of the day (hours of daylight), in another country at the same time of the year, may be very different to the length of a day in Great Britain

Key Outcomes

1. What are seasons and which season is my birthday in?

Children will create a seasons wheel and use simple data of children's birthdays and investigate how many pupils birthdays are in each season dependent on their month of birth. and present their findings in a simple chart.

2. What happens in the different seasons?

Children will research what happens generally during the spring, summer, autumn and winter moths including weather, plants (deciduous trees), new life (in spring etc.) They will come up with their own questions about the seasons and weather associated with them.

3. How much daylight do we get in different seasons?

Children will illustrate seasonal changes and how daylight length change over the course of a year (e.g. creating a four seasons weather disc)

4. Can I explain changes in weather in different seasons?

Children will explore and explain how weather varies in different seasons (e.g. through creating weather reports and recording them)

5. How can I predict and measure changes in weather over time?

Children will explore and make predictions about the weather by measuring (e.g. rainfall or temperature over a week), recording results in a simple chart and then describing their results. Can they then suggest another line of enquiry to measure weather (e.g. direction of wind)?

6. Are our seasons changing?

Children will use their findings about temperature, rainfall and new growth from the seasons and compare and contrast this simple data with data from

•	describes how the length of the day
	(hours of daylight) changes from season
	to season

• says which months are associated with each season

in the past to investigate whether our seasons are changing (due to climate change) e.g. is winter becoming warmer? Does spring start earlier?

Key Skills:

Knowledge Skills

- Observe and describe weather associated with the seasons and how day length varies.
- Observe changes across the four seasons.

Working scientifically

- making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.
- Keep records of how plants have changed over time e.g. leaves falling off trees and buds opening.

Future Learning

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 seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3)