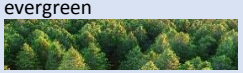
Our Changing World

What are the key biological facts that I need to know?

Scientific Fact 1	Scientific Fact 2	Scientific Fact 3	Scientific Fact 4	Scientific Fact 5	Scientific Fact 6
A season is a part of a year. In most areas of the world, there are four seasons in a year: spring, summer, autumn and winter.	We have seasons because the earth spins around the sun on a tilt.	Summer is hottest among the four seasons. In this season, the days are longer than the nights.	When summer arrives in the southern hemisphere, then it is winter in the northern hemisphere. Many crops, like wheat, are harvested near the summer end.	Autumn is the conversion period between the summer and the winter. The temperature starts to drop and leaves fall and change their colour to pale yellow.	Winter is the coldest season. It snows in many places and the nights are longer than a day. Many animals migrate from one place to other to reach the warmer areas.

Key Scientific Vocabulary - words that are related to the topic you are investigating and that must be used in your work

Word	Definition
deciduous 	A tree that loses its leaves annually is an example of a deciduous tree.
evergreen 	An evergreen plant, bush, or tree has leaves for the whole year.
habitat 	The natural environment in which an animal or plant usually lives.
nectar 	A sweet liquid produced by flowers and collected by bees and other insects.
pollen 	A powder, produced by the male part of a flower.
pollinate 	To take pollen from one plant or part of a plant to another so that new plant seeds can be produced.
seasonal change 	Changes that take place as a result of the weather during a particular period of the year.
variation 	A change in amount or level.

Sticky Knowledge- what we want you to know at the end of the unit

To know that our senses helps us explore the world around us.

To know the leaves on deciduous trees change over the year

- in spring the first leaf buds appear
- in the summer, the tree is full of thick green leaves
- during the autumn and winter months the tree cannot make much food and so the leaves start to change colour and eventually die

To know that different seeds are dispersed in different ways

- light seeds are dispersed by the wind
- heavy and larger seeds use the water
- some seeds are dispersed by animals

To know the different parts of a flower

- male part of the flower is the stamen
- female part is the stigma

To know how different plants are pollinated

- Pollination forms part of the life cycle of plants.
- Insects, birds, bats and the wind take pollen between flowering plants, so plants can make new seeds

To know why trees are important

- as the biggest plants on the planet, they give us oxygen, store carbon, stabilise the soil and give life to the world's wildlife
- they also provide us with the materials for tools and shelter

To know the life cycle of a plant

- name the main parts of the plant life cycle
- explain what happens at each point

The scientific skills that you will be learning to use to answer the scientific questions

What is science?
Science is the exciting study of the nature and behaviour of natural things and the knowledge that we obtain about them. We ask questions that need answers. In order to answer these questions successfully, you will lean to use all these skills.

Observing changes over time:
You will determine how plants change over time.
How do flowers in a vase change over time?
Can you explain your answer?

Noticing patterns:
Pattern-seeking enquiries involve you making measurements or observations to explore situations where there are variables that they cannot easily control.
How often to insects visit plants?
Can you explain your answer?

Making careful and systematic observations:
You will learn to make careful observations during the experiment. This year you will focus on ensuring that you make these observations in a logical manner.
What happens to sunflower seeds over time?
What do they need to grow?
Can you explain your answer?