Big Question:

What do different plants need to grow in different places?

Exeter

Key Vocabulary

Plants: living things that grow from the soil and turn light from the Sun into food.

Germination: the process by which a plant grows from a seed.

Pollination: the process that allows plants to reproduce.

Seed dispersal: the way seeds get away from the parent plant to a new place.

Habitat: a place that a living thing lives.

Xylem: a tissue in vascular plants.

Roots: a part of a plant that is usually hidden underground.

Seeds: A seed contains a miniature plant.

Science knowledge from previous years that will help me on my journey:

In Year 1, you learnt that:

Plants are living things. Common plants include the daisy, daffodil and grass. Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees (e.g. oak, beech and rowan). Trees that keep their leaves all year round are called evergreen trees (e.g. holly and pine).

Science knowledge from previous years that will help me on my journey:

In Year 2, you learnt that:

Plants grow from seeds and bulbs. Seeds and bulbs need nutrients from soil, water and warmth to start growing (germinate). As the plant grows bigger, it develops leaves and flowers.

Plants need water, light and a suitable temperature to grow and stay healthy. Without any one of these things, they will die.

Science knowledge that will support my learning:

Different plants have different needs depending on their habitat. Examples include cacti, which need less water than is typical, and ferns, which can grow in lower light levels.

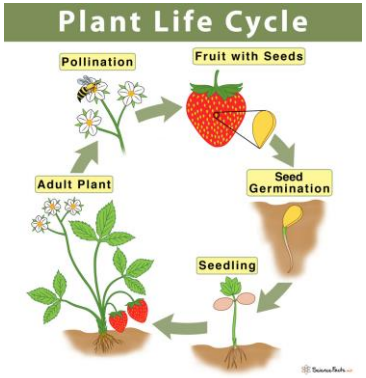
Water is transported in plants from the roots, through the stem and to the leaves, through tiny tubes called xylem.

The plant's roots anchor the plant in the ground and transport water and minerals from the ground to the plant. The stem (or trunk) support the plant above the ground. The leaves collect energy from the Sun and make food for the plant. Flowers make seeds to produce new plants.

Science knowledge that will support my learning:

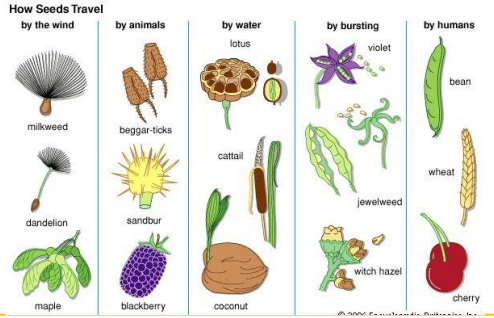
Flowers are important in the life cycle of flowering plants.

The stages of a plant's life cycle include germination, flower production, pollination, fertilisation, seed formation and seed dispersal.



Insects and the wind can transfer pollen from one plant to another (pollination).

Animals, wind, water and explosions can disperse seeds away from the parent plant (seed dispersal).



As an scientist, by the end of our topic, I will know that:	Date
Plants need air, light, water, minerals from the soil and room to grow, in order to survive. Different plants have different needs depending on their habitat. Examples include cacti, which need less water than is typical, and ferns, which can grow in lower light levels.	
Tests can be set up and carried out by following or planning a set of instructions. A prediction is a best guess for what might happen in an investigation based on some prior knowledge.	
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Flowers are important in the life cycle of flowering plants. The stages of a plant's life cycle include germination, flower production, pollination, fertilisation, seed formation and seed dispersal. Insects and the wind can transfer pollen from one plant to another (pollination). Animals, wind, water and explosions can disperse seeds away from the parent plant (seed dispersal).	
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