

All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

Plants

Spring 2

Igniting Prior Knowledge:

Year 2

- Plants may grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants. These mature plants may have flowers which then develop into seeds, berries or fruit.
- Most seeds need warmth and water to germinate, but do not need light.
- Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates.
- Some plants need full sunlight to grow and some plants grow better in partial or full shade.
- Plants also need different amounts of water and temperature to grow well and stay healthy.
- It is important to protect and care for plants and our environment. Plants are important for providing habitats for a huge number of species.

Key Vocabulary:

- Photosynthesis
- Producers
- Pollen
- Pollination
- Seed formation
- Seed dispersal
- Nutrients
- Transportation
- Absorb
- Attract

New Knowledge:

- Most plants, have roots, stems/trunks, leaves and flowers/blossom.
- The roots absorb water and nutrients from the soil and anchor the plant in place.
- Plants are producers; they make their own food. The leaves use sunlight, carbon dioxide and water to produce the plant's food. This is called photosynthesis.
- The flower attracts insects to pollinate the plant.
- The stem transports water and nutrients around the plant and holds the leaves and flowers up in the air to help photosynthesis, pollination, and seed dispersal.
- Different plants require different conditions for germination and growth.
- Plants need air, light, water, the right temperature, nutrients from the soil and room to grow and stay alive.
- The roots absorb water and the stem transports water and nutrients/minerals around the plant to the leaves.
- Water leaves the plant through the leaves.
- Some plants produce flowers which enable the plant to reproduce.
- Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination).
- This forms seeds, sometimes contained in berries or fruits. Seeds contain enough food for the plant's initial growth.
- Seed dispersal moves seeds away from the parent plant to improve a plant's chances of successful reproduction.
- Seeds can be dispersed by falling to the ground, animals (eaten/sticking to their fur), blown by the wind, water and exploding seed pods.

