Year 2/3 Science: Plants.

Morda CE Primary School

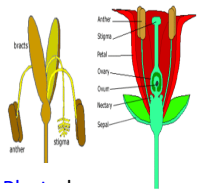
Key Learning

Y2: Observe and describe how seeds and bulbs grow into mature plants.
Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Y3: Identify and describe the functions of different parts of flowering plants: roots; stem/trunk; leaves; and flowers.
Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
Investigate the way in which water is transported within plants.
Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. The roots absorb water and nutrients from the soil and anchor the plant in place. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. The leaves use sunlight and water to produce the plant's food. 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

Plants.



Key Scientific Vocabulary

Photosynthesis	Green plants use sunlight to synthesise nutrients from carbon dioxide and water
Pollen	A fine powder discharged from male part of flower
insect/wind pollination,	Transfer of pollen from anther of one plant to stigma of another by wind/insect
male, female	
seed formation	Reproduction in plants produces seeds
seed dispersal (wind, animal, water)	The way that seeds are scattered
air	Invisible gaseous substance surrounding the earth
nutrients	Nourishment essential for life and growth
minerals	A substance needed for good health
soil	Layer of earth in which plants grow
absorb	Take in or soak up
transport	Take or carry from one place to another

which are then dispersed in different ways. Different plants require different conditions for germination and growth.

Investigation Questions

Investigate what happens to plants when they are put in different conditions e.g. in darkness, in the cold, deprived of air, different types of soil, different fertilisers, varying amount of space.

Observe the effect of putting cut white carnations or celery in coloured water.

Common Misconceptions

- seeds are not alive
- seeds and bulbs need sunlight to germinate
- plants eat food
- food comes from the soil via the roots
- flowers are decorative rather than a vital part of reproduction
- plants only need sunlight to keep them warm
- roots suck in water, which is then sucked up the stem