

Knowledge organiser for Year 3 Science Topic: Plants

Key Ideas:

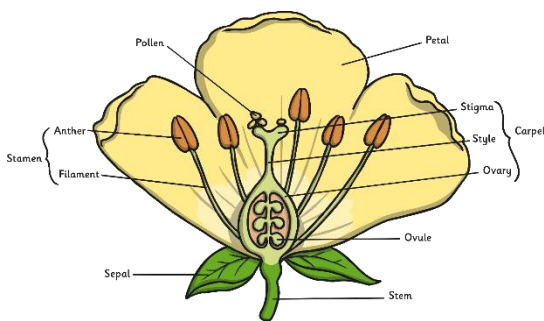
- Identify and describe the functions of different parts of flowering plants
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- Investigate the way in which water is transported within plants
- Explore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

Key Vocabulary:

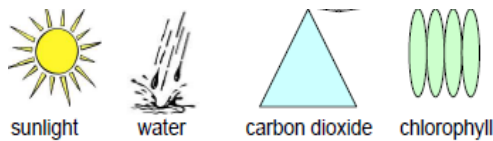
Roots	Anchor the plant in the ground and absorb water and nutrients from the soil
Stem	Transports water and nutrients to different parts of the plant
Leaves	The place where photosynthesis takes place
Petals	The separate leaves that form the outside part of a flower head and usually attract insects
Flowers	The part of a plant which allows it to reproduce
Seed	Produced the fertilisation ovule, seeds allow a plant to reproduce
Ovule	The egg cell which joins with pollen to produce seeds and allows plants to reproduce.
Stamen	The male part of a plant. Consists of the anther (produces pollen) and the filament (which holds the anther up).
Pistil	The female part of a plant. Made up of the stigma , style and ovary (which contains the egg cells called ovules).
Pollen	The product of a male part of a plant which allows it to produce seeds
Pollination	The process by which pollen is transferred to the female parts of the plant which means the plants can make seeds and reproduce
Fertilisation	When pollen joins with the ovule (egg), a new seed is created
Seed dispersal	The movement or transport of seeds away from the parent plant.
Photosynthesis	The process by which green plants use the sun's energy from sunlight along with water and carbon dioxide to produce their own food in the form of glucose (sugar).

Characteristics of living things

Movement	Animals move around, plants grow toward light and their roots grow into the soil.
Respiration	The process of using oxygen to turn food into energy.
Sensitivity	Living things react to their environment.
Nutrition	Food provides energy for plants and animals to live.
Excretion	Removing waste products from the body.
Reproduction	Animals have babies & plants grow from seeds.
Growth	Animals and plants both develop over time.



The requirements for photosynthesis:



Chlorophyll is a green substance found inside leaves which is responsible for absorbing light.