

Lilycroft Primary School

Science Knowledge Organiser

TOPIC: Plants YEAR: 3 STRAND: Living things and their habitats

What should I already know?

Names of the parts of a plant.
Plants need water, light and a suitable temperature to grow and stay healthy.
Seeds and bulbs grow into mature plants

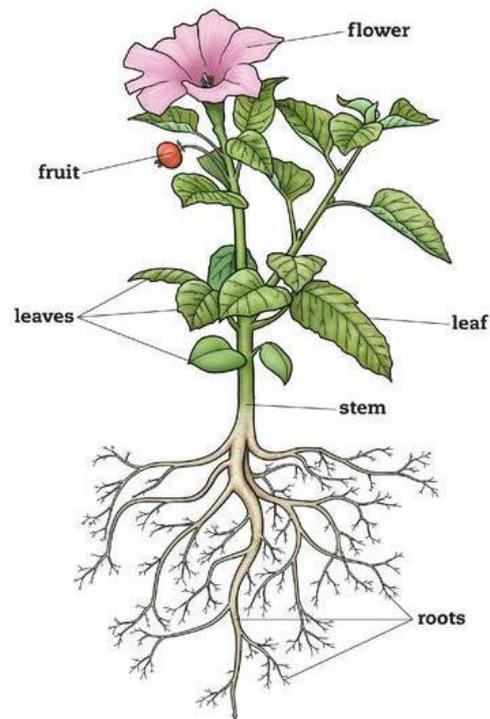
What will I know by the end of the unit?

Identify and describe functions of a flowering plant.
The Life cycle of a flowering plant
The requirements of a plant.
Osmosis is how water is transported through a plant.
Plants are living things, they produce oxygen and absorb carbon dioxide.

Investigate

- Will plants grow in the dark?
- Will plants grow without air?
- Water transportation within plants – soil, just water, osmosis
- How does a plant produce a seed?
- What part do insects play in producing new plants (the life cycle)?
- What part does weather (wind) play in the life cycle?
- How can plants help the environment? (absorption of carbon dioxide)

Diagram



Vocabulary

WORD	DEFINITION
Carbon dioxide	A gas produced by animals and people when they breathe out. Plants use carbon dioxide to make food.
Osmosis	This is how water is transported through a plant.
Oxygen	A gas that has no colour, smell, or taste. It is vital to all living things to exist.
Stamen	This is the male part of the flower. The anther and filament make up the stamen . It is the pollen producing part of a flower.
Anther	The anther is the part of the stamen where pollen is produced.
Filament	The filament holds up the anther .
Pollen	This is found on the anther . The insects pick up pollen from the flower, and carry it to the next flower they visit.
Carpel	This is the female part of the flower where the seeds are made. The

	carpel has 3 parts: the stigma , the style , and the ovary .
Stigma	The stigma is covered in a sticky substance. Its job is to "catch" the grains of pollen (which usually come from another flower).
Style	The style is the stalk that holds up the stigma .
Ovary	The ovary contains the ovules (or "eggs").
Sepals	Sepals are special types of leaves that form a ring around the petals . Their job is to protect the flower while it is still a bud.
Receptacle	The receptacle is the top part of the flower stem, where the parts of the flower are attached. It is often rounded in shape.
Xylem	Xylem are tubes that carry water up the stem. Every stem, whether thick or thin, has tubes of xylem inside to transport water up through the plant.