

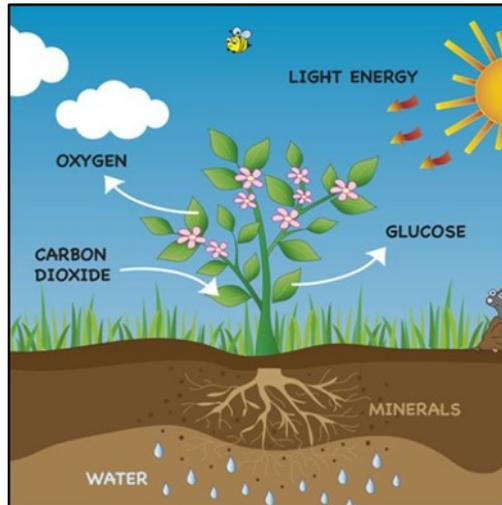


## Science: Orange Class – Flowering Plants

### How Did That Blossom Become An Apple?

#### Key Vocabulary—Flowering Plants

Roots	Anchor the plant in the ground and absorbs water and nutrients from the soil.
Stem	Transports water and nutrients to different parts of the plant.
Leaves	The place where photosynthesis takes place.
Petal	The separate leaves that form the outside part of a flower and usually attract insects.
Flower	The part of a plant that allows it to reproduce.
Seed	The part of a plant that can grow into a new plant.
Pollen	The substance that causes plants to form seeds.
Ovule	Ovules produce the female reproductive cells which get fertilized during reproduction in seed plants.
Stamen	The part of the flower that produces pollen.
Pistil	The female part of the flower. It contains the carpel and the stigma.
Nutrient	A substance that is needed for healthy growth, development, and functioning
Pollination	Pollen produced by a flower is carried by insects or blown by the wind to another flower.
Fertilisation	When the pollen reaches another flower, it travels to the ovary where it fertilises the egg cells to make seeds.



#### Key knowledge

Plants need air, light, water, nutrients, temperature and space in order to live and grow. The amounts needed of each of these requirements varies from plant to plant.

-A plant that is kept in a dark place will grow tall and spindly, as it searches for light.

-A plant that is not watered will have a weak stem. Its leaves will dry up and eventually it will die.

-A plant that is not given enough space will have stunted growth, and may die if it cannot reach enough light.

-A seed will not germinate at all if the temperature is too cold.

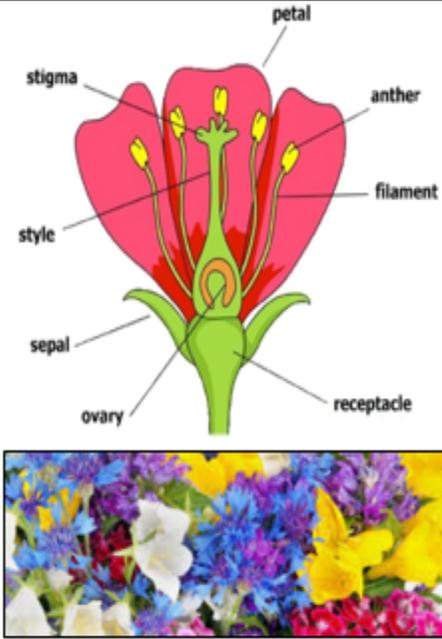
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### How Did That Blossom Become An Apple?

#### Key Knowledge: Functions of Plant Parts

 <p><b>Roots</b></p> <ul style="list-style-type: none"> <li>-The roots grow into the ground. They are responsible for pulling water and minerals to the plant.</li> <li>-They expand into the ground to widen the area they can find water. They also help to anchor the plant into the ground.</li> </ul>	 <p><b>Stem/Trunk</b></p> <ul style="list-style-type: none"> <li>-The stem/trunk carries the water and nutrients up to the leaves.</li> <li>-The stem also carries food from the leaves to the rest of the plant.</li> <li>-Stems grow upwards, reaching up for the sun.</li> </ul>
 <p><b>Leaves</b></p> <ul style="list-style-type: none"> <li>-Leaves are responsible for catching sunlight. They also allow both air and water to enter the plant.</li> <li>-Leaves have veins inside them, to allow water and nutrients to flow. There are many different sizes &amp; shapes of leaves, to fit the plant's needs.</li> </ul>	 <p><b>Flowers</b></p> <ul style="list-style-type: none"> <li>-Flowers are the parts of plants that are responsible for making both food and seeds.</li> <li>-The petals of a flower attract insects for pollination. The flower has male and female parts, which work together to make seeds.</li> </ul>

#### Key Knowledge: Flowers



- Flowers play an important role in the reproduction of plants.
- The male part of a flower is called a stamen – it is made up of a filament and an anther. The anther contains pollen.
- The female part of a flower is called a carpel. It is made of a stigma, a style and an ovary.
- When the male pollen lands on the female stigma pollination occurs.
- This process means that a seed is produced.
- Insects are drawn to flowers by bright petals. When they feed on the flower's nectar they are dusted with pollen. They then spread this to other places when they leave.

#### Key Knowledge: How Water Is Transported In Plants

- Water is found in the soil by the roots.
- The water is drawn up from the roots to the stem.
- The water travels up small tubes in the stem called xylem.
- Water reaches the leaves and flowers, keeping them hydrated.
- Water escapes from the plant as vapour (a gas) through tiny holes.

