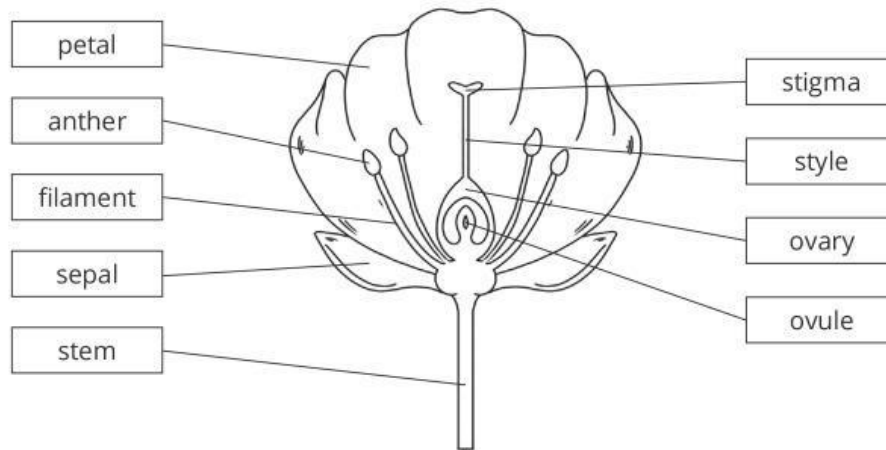




Plant Reproduction

Plants are living organisms. All living organisms demonstrate the seven life processes including respiration, nutrition, and excretion. Often a mnemonic is used to remember them; MRS GREN.

The diagram below shows the cross-section of a flower.



Different parts of the plant make up the male or female reproductive organs. The stamen is the collective name of the male reproductive parts and is made up of the filament and anther. The female part is named the pistil and is made up of the stigma, style, and ovary. The ovule is inside the ovary.

1. Read the description of each life process and write the name of the one being described.

_____ All living things require a source of nutrition.

_____ All living things excrete waste products.

_____ All living things produce offspring.

_____ All living things grow over time.

Pollination is the process of transferring pollen grains from the male sex organ of the plant to the female sex organ, to allow fertilisation to occur. When fertilisation occurs, the ovule develops into seeds and the ovary becomes the fruit.

2. Match each part of the flower to the function, by drawing a straight line.

anther	Covered in a sticky substance to trap pollen grains.
stigma	Contains the female sex cells and develops into a seed after fertilisation.
ovary	Contains pollen grains which carry the male sex cells.
ovule	Large female organ of the plant. It develops into the fruit surrounding the seed after fertilisation.



3. Describe how pollination occurs naturally.

Seeds must move away from the parent plant so that they have enough space and nutrients to develop into new plants. This is called dispersal. Seeds are dispersed in different ways and have special features and adaptations which make them more efficient at certain methods of seed dispersal. Once they have been successfully dispersed away from the parent plant, seeds grow and develop into new plants.

4. Read the statements below about fertilisation. Tick all the statements which are **true**.

- ☐ The ovule develops into a seed.
- ☐ The ovary develops into a seed.
- ☐ The ovule develops into a fruit.
- ☐ The ovary develops into a fruit.
- ☐ A pollen tube grows from the pollen grain, down the style.
- ☐ A pollen tube grows from the pollen grain, down the stem.
- ☐ Pollen becomes attached to the stigma.
- ☐ Pollen becomes attached to the ovary.

5. Look at each seed below. Tick one box for each seed to say which dispersal method it is adapted to.

		
dandelion	avocado	maple seed
☐ animal fur ☐ explosion ☐ ingestion (eating) ☐ wind	☐ animal fur ☐ explosion ☐ ingestion (eating) ☐ wind	☐ animal fur ☐ explosion ☐ ingestion (eating) ☐ wind