

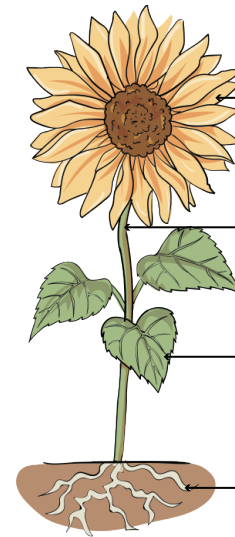
Plants Knowledge Organiser

To grow, plants need:

- water
- nutrients from the soil
- light
- air
- room to grow



Parts of a plant



flower

stem

leaf

roots

Roots

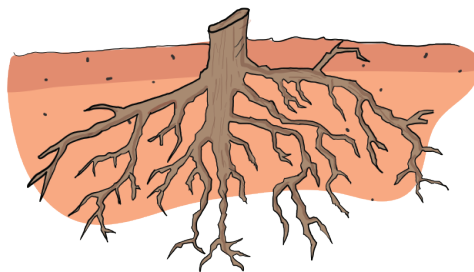
The roots have **different jobs**:

They take up **water** and **nutrients** from the soil.

They keep the plant **steady**.

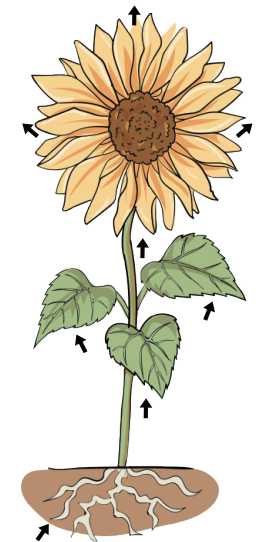
They keep the plant **upright**.

They “**anchor**” the plant.



Stem

The job of the stem is to **transport** water and nutrients from the soil to the leaves, flowers or fruit through tiny, thin tubes called the **xylem**.



Flower

The flower's main job is to create new seeds.

petal

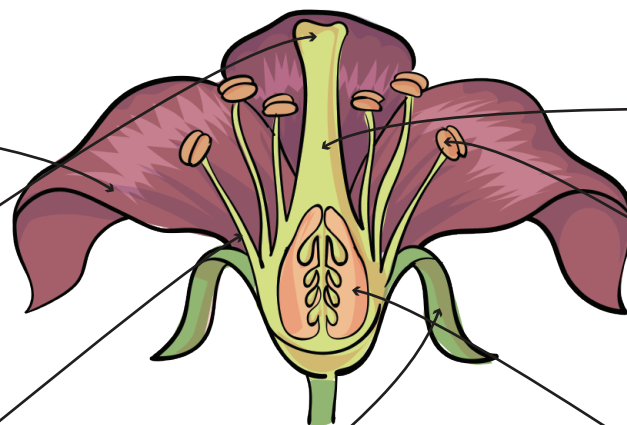
brightly coloured to attract **insects**

stigma

sticky to catch the **pollen** grains

filament

holds the **anther** up



style

holds up the **stigma** as pollen travels down it to the **ovary**

anther

contains the **pollen**

ovary

where the **seeds** are formed

sepal

protects the **flower** when it starts to grow

Pollination

Pollination needs to happen to make seeds.

Pollination is when **pollen** from the **anther** is transferred to the **stigma**.

This can happen in **different ways**:

Wind can **blow pollen** from one plant to another. **Pollinators** such as **bees** and **butterflies** visit flowers to drink nectar. When they are there, pollen sticks to them, and they then **transfer** that pollen to the **next flower**.

Once the **pollen** is transferred to the stigma, it travels down the style to the ovary, where the **seed grows**.

Seed dispersal

The **seeds** that have grown need to be **dispersed** to grow into new plants.

This can happen in **different ways**:

Explosion – some plants explode, making the seeds scatter.

Water – some plants that grow near water have seeds that float. Water will carry the seed until it is washed up.

Animals – some animals eat the fruit containing the seeds. When the animal excretes the waste, they also get rid of the seeds.

Wind – some seeds are light enough to be blown away and carried by the wind.

