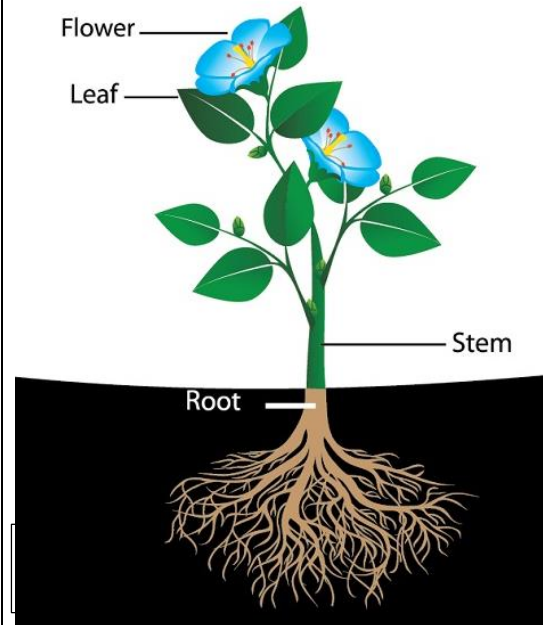




Key Knowledge

- The main parts of a flowering plant are: the **roots**, the **stem**, the **leaves** the **flower**.
- For plants to grow healthy they need a number of things, such as: **water**, **light**, **air**, **sufficient space**, a supply of **minerals** and **other nutrients**.
- Seeds do *not* need light to grow; just water and warmth.
- The leaves are where the plant makes its food. They take in carbon dioxide from the air and water from rain, converting them into oxygen and a sugar called glucose.
- Water moves upward to the top of the plant through long, thin tubes running up from the roots through the stems and leaves.
- Flowers are the reproductive organs of the plant. They produce pollen and eggs, which then produce seeds that the plant then disperses (spreads away from the plant) so new plants can grow.
- Most flowers have both male and female parts. The **male** parts produce the **pollen** and the **female** parts produce the **ova** (eggs). Both the pollen and eggs contain half the genetic information necessary to make a new plant, in the same way that sperm and eggs do in animals.

Diagrams



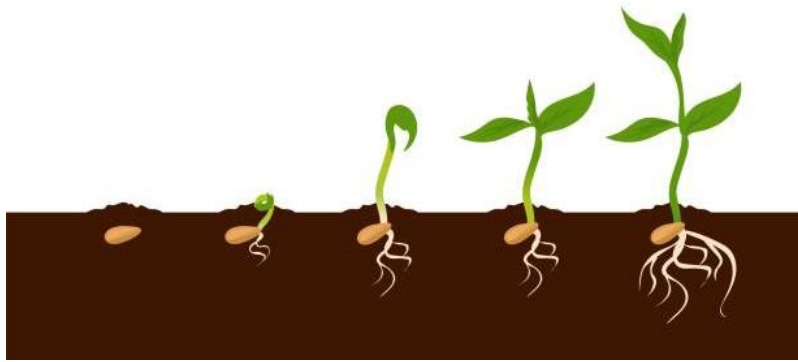
Water Transportation

From the roots the water is taken up through thin tubes in the stem called **xylem**. These tubes act like straws and draw the water up through the stem to the leaves and flowers.

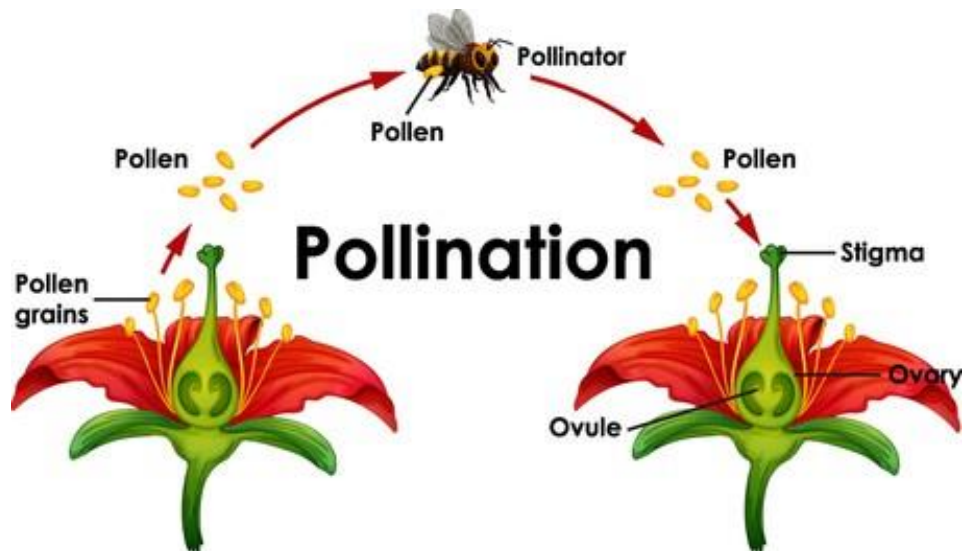
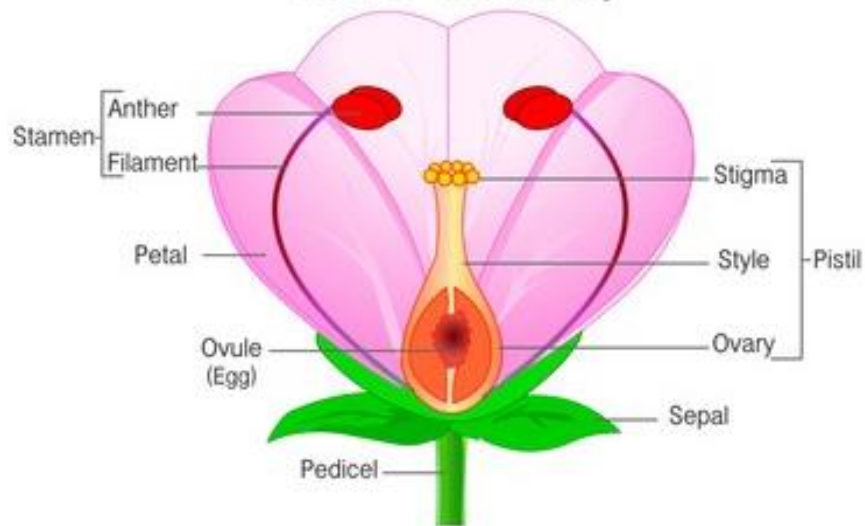


Vocabulary

root	helps anchor the plant into the soil; takes up water and nutrients
root hairs	tiny hairs on a root that take water and nutrients from the soil
leaves	catch sunlight and use this to make food
stem	holds the plant upright and supports the leaves; it contains tubes that allow water to travel from the roots to the rest of the plant
flower	the part of the plant where seeds are made
veins	tubes in the leaf that carry water and food
petal	part of the flower that attracts insects, often brightly coloured
sepals	protect the rest of the flower as it grows
carpel	female part of the flower - made of stigma, style and ovary
stigma	part of the carpel that pollen grains attach to during pollination



Flower Anatomy



style	the middle part of the carpel, connecting the ovary to the stigma
ovary	the part of the flower that contains the ovules
ovule	these are like eggs; they develop into seeds
stamen	the male part of the flower which produces pollen
pollen	dust-like powder made in the stamen of a flower
pollination	transferring pollen grains from the male anther of a flower to the female stigma so that new plants can be made
seed dispersal	the way seeds get from the parent plant to a new place so that they can grow
germinate	when a seed starts to grow and produce a root and shoot
life cycle	the stages a living thing goes through during its life
photosynthesis	how green plants make their own food
nutrients	materials in the soil that help to nourish plants