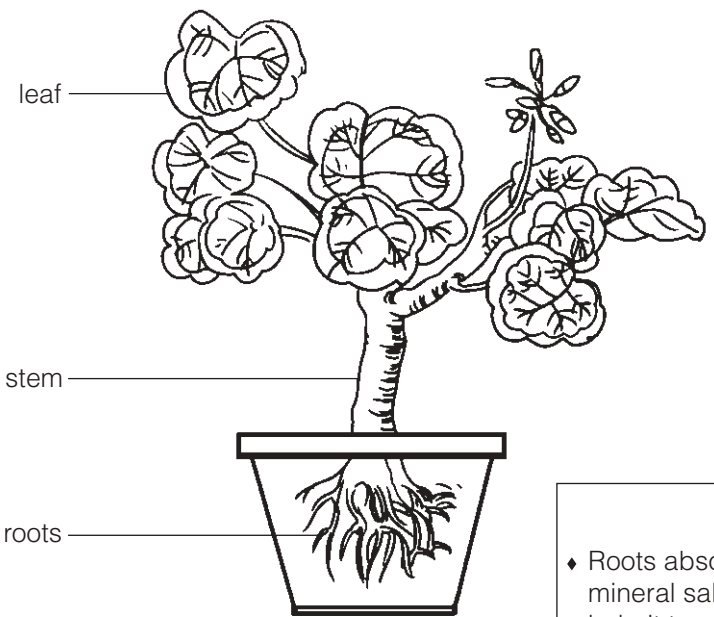
Plant Systems

Leaves

- Leaves help to make food for the plant during a process called photosynthesis.
- Leaves have chlorophyll (a green pigment) in them.
- The food made by the leaves is a form of sugar (glucose). It is then converted into starch to be stored in various parts of the plant.
- Water is lost through the leaves by a process called transpiration. To minimize water loss in desert plants like cacti, their leaves are needle-like and have a very small surface area.



Stems

- The stem supports the plant and holds it upright.
- The stem transports water and nutrients from the roots of a plant to its leaves and other parts of the plant.
- The stem transports food made by the leaves to all parts of the plant.
- The main stem branches out into smaller stems to support the leaves, flowers and fruit. The leaves are spread out so as to enable them to receive the maximum amount of sunlight to make food for the plant.
- Some plants use their stems for storage. Desert cacti have swollen stems which store water. Underground stems like the potato store food that we can eat.
- Trees have thick, woody stems called trunks.

Roots

- Roots absorb water and nutrients (dissolved mineral salts) from the soil into the plant to help it to grow.
- They help to support and anchor the plant firmly in the ground.
- There are breathing roots, clasping roots, prop roots and underground storage roots. Each of them has a special function.

Adapted:
Science Partner Lower Block 5/6