

2.5 Specialised animal cells

1. The missing words are: cells; respiration; multicellular; specialised; structure; function.
2. A3; B1; C2; D5; E4
3. Filled with haemoglobin: red substance/molecule that carries oxygen.

Small and flexible: can pass through tiny blood vessels to carry oxygen to the cells.

No nucleus: makes more space for haemoglobin to carry oxygen.

Biconcave: gives a large surface area to pick up oxygen.

2.6 Specialised plant cells

1. a. Photosynthesis.

b. (Adaptations can be given in any order)

Adaptation/explanation 1: Cells are located near top of the leaf/so they get as much sunlight as possible. Adaptation/explanation 2:

cells are brick-shaped/so they can be packed together as tightly as possible. Adaptation/explanation 3: they contain large numbers of chloroplasts/to capture light for photosynthesis and make food.

2. a. Root hair cell.

b. Take in water and mineral salts from the soil.

c. Your labels should be the same as Fig 2.6C in your Student Book. Your notes on the diagram should include: long microscopic hair to give a big surface area to take in water and mineral salts; found on outside of the root – to grow into the soil and reach the soil water; large sap-filled vacuole which helps move water from the soil into the root.