

## 2.3 Animal and plant cells

1. A nucleus, B cell membrane, C cytoplasm, D mitochondria.
2. A cell wall, B cell membrane, C vacuole, D nucleus, E cytoplasm, F mitochondria, G chloroplasts
3. A3; B5; C7; D1; E4; F2; G6

### Student Book answers

1. **a.** Organism; organ system; organ; tissue; cell; nucleus [3]
- b.** plant organs: root and leaf; structure found in a plant cell: sap vacuole [3]
2. **a.** microscope [1]
- b.** Looking at specimens too small to be seen with the eyes alone [1]

**c.**

Part	Function
eyepiece	To look into the microscope and to magnify the specimen
objective lens	To magnify the specimen
stage	To put the specimen on so the light passes through it
coarse focus knob	To bring the specimen into focus
fine focus knob	To sharpen the image/improve the focus

- 3. a.** Nucleus A, cell wall B, cell membrane C, cytoplasm D, mitochondria E, sap vacuole F, chloroplast G, nucleus H, cytoplasm J, cell membrane K and mitochondria L [5]

- b.** Cell wall: supports the cell/protects the cell contents and gives the plant strength Sap vacuole: contains cell sap and presses against the cell wall to keep the cell firm and supported [4]