Cells

1 Which of these are true about all living things? Underline the true ones.
A They think.
B They have muscles.
C They grow.
D They chew.
E They are made of cells.

2 Complete these sentences by crossing out the wrong words.
   a Magnification means to make a specimen look bigger/smaller.
   b The magnification of your eyepiece lens is ×10.
      The magnification of your objective lens is ×10.
      The total magnification is ×10/×100.

3 Label the diagram of the animal cell and plant cell using these words.

4 Draw lines to match each feature to its function (job) in a cell.

   **Feature**          **Function**
   nucleus ⬠         ● chemical changes happen here
   cytoplasm ⬠         ● makes food using light
   cell wall ⬠         ● controls what happens in the cell
   chloroplast ⬠         ● supports the cell
   vacuole ⬠         ● lets things in and out of the cell
   cell membrane ⬠         ● contains liquid to keep the cell firm
Cells (continued)

5 In the box, write ‘A’ if it’s an animal organ and ‘P’ if it’s a plant organ. Then draw lines to match each organ to its function (job).

<table>
<thead>
<tr>
<th>A or P Organ</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>heart ⬤</td>
<td>• takes in water and anchors the plant</td>
</tr>
<tr>
<td>male and female organs in flower ⬤</td>
<td>• moves the body</td>
</tr>
<tr>
<td>muscle ⬤</td>
<td>• pumps blood around the body</td>
</tr>
<tr>
<td>leaf ⬤</td>
<td>• makes the plant’s food</td>
</tr>
<tr>
<td>tooth ⬤</td>
<td>• make seeds for reproduction</td>
</tr>
<tr>
<td>root ⬤</td>
<td>• breaks up food</td>
</tr>
</tbody>
</table>

6 Complete these sentences by crossing out the wrong words.

a A tissue is made of lots of cells/organs.

b An organ is made of lots of tissues/keys.

c The outer layer of skin (epidermis) is a tissue/an organ.

d The heart is a cell/a tissue/an organ.

e A leaf is a tissue/an organ.

7 New cells are made by cell division. Which part of the cell divides first during cell division? Circle the correct letter.

A cytoplasm    B nucleus    C cell membrane

8 Complete these sentences using these words. You may use words once, more than once or not at all.

a Pollination happens when a pollen grain lands on the ......................... of another plant.

b The pollen grain grows a ....................... which grows down through the style to the ovary.

c The pollen grain ....................... moves down the pollen tube into the ovary.

d When fertilisation happens in plants, the nucleus of a ....................... ........................
          joins together with the nucleus of an ........................ .........................