

**Macmillan**  
**Science**  
**Workbook**

**6**

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**MACMILLAN**

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# Discovering cells

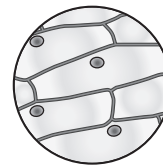
**1. Match the definitions with the words in the box.**

cell    microscopic    multi-cellular    unicellular

- a Something so small it can only be seen with the aid of a microscope. \_\_\_\_\_
- b The basic unit from which living things are built. \_\_\_\_\_
- c A living thing that consists of a single cell. \_\_\_\_\_
- d A living thing built from many cells. \_\_\_\_\_

**2. These specimens are as seen through a microscope. Write the type of specimen under each picture. Use the words in the box.**

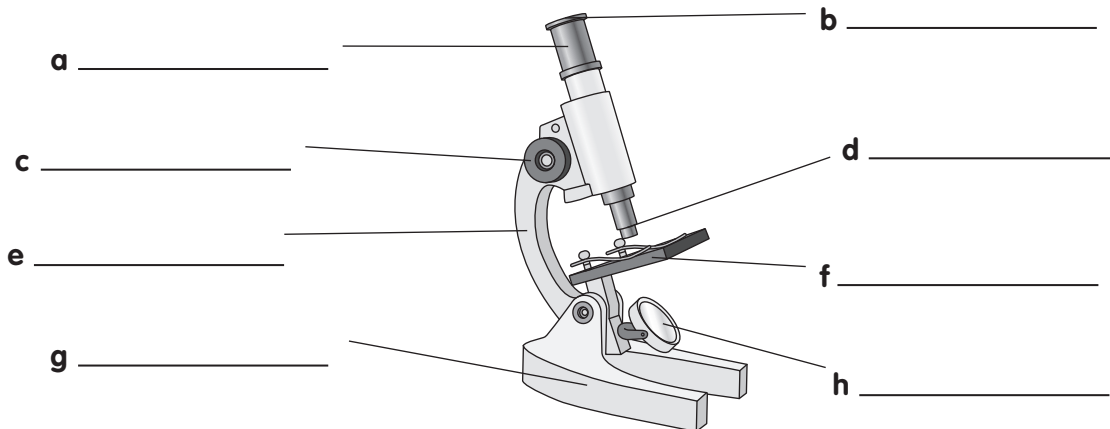
human cheek cell    onion skin cells    micro-organism



- a \_\_\_\_\_
- b \_\_\_\_\_
- c \_\_\_\_\_

**3. Label the parts of this microscope using the words in the box.**

eyepiece    tube    focusing knob    limb  
objective lens    stage    mirror    base



**4. Explain briefly:**

a How you should carry a microscope.

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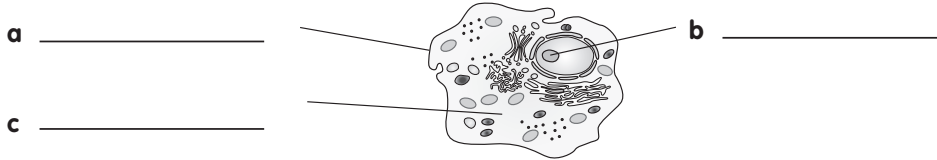
b How and when you use the coarse and fine focusing knobs to focus on a specimen.

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# Comparing plant and animal cells

1. Is this cell from a plant or an animal? Ring the correct word.

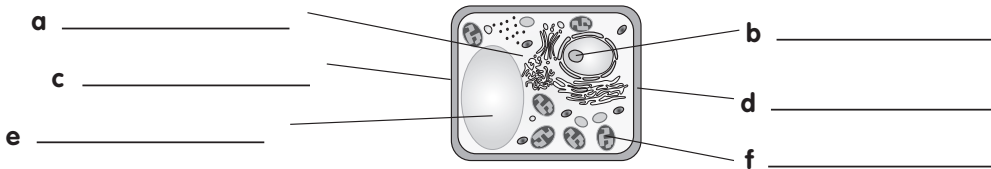


This is a PLANT / ANIMAL cell.

Label the parts of the cell using the words in the box.

nucleus cell membrane cytoplasm

2. Is this cell from a plant or an animal? Ring the correct word.



This is a PLANT / ANIMAL cell.

Label the parts of the cell using the words in the box.

cell membrane nucleus cytoplasm cell wall chloroplast cell vacuole

3. List *three* features of a plant cell that you would not see in an animal cell.

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4. Match the definitions with the words in the box.

cell membrane nucleus chloroplast cytoplasm

a The liquid that fills most of a cell and in which chemical reactions take place.

\_\_\_\_\_

b The cell's control centre. \_\_\_\_\_

c One of the discs that enables a plant cell to trap the energy of sunlight.

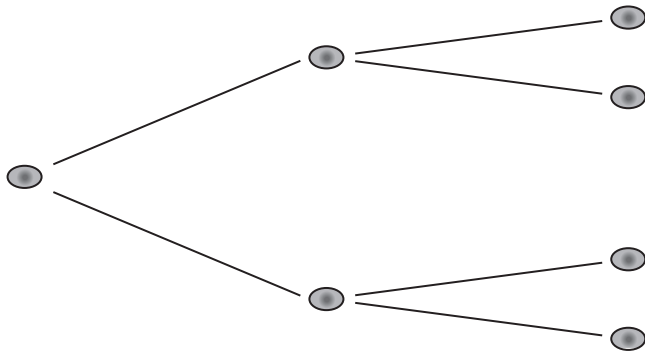
\_\_\_\_\_

d The surface through which substances enter and leave the cell. \_\_\_\_\_



# Building tissues

1. This diagram shows how one cell divides to become two, and two cells divide to become four. Continue the diagram for three more generations and complete the table.



Generation						
Number of cells						

2. Mark each of these statements as true (✓) or false (✗).

- a Every cell in the body is the same.
- b There are ten million million cells in the human body.
- c It takes one thousand generations of cell division to produce one million cells.
- d A group of cells of the same kind working together form a tissue.

3. Match the definitions with the words in the box.

differentiate   divide   epithelial

- a The type of cells that line the inside surfaces of the body. \_\_\_\_\_
- b Describes how cells reproduce by splitting in two. \_\_\_\_\_
- c Describes the way in which cells become different to perform different tasks.  
\_\_\_\_\_



4. Write the names of the cells under each picture. Use the words in the box.

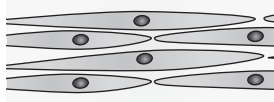
red blood cells    nerve cell    muscle cells    epithelial cells

a



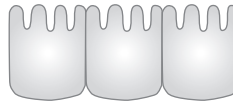
\_\_\_\_\_

b



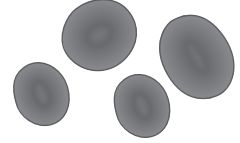
\_\_\_\_\_

c



\_\_\_\_\_

d



\_\_\_\_\_