Discovering cells

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

cell microscopic multi-cellular unicelluar

a Something so small it can only be seen with the aid of a microscope. _____

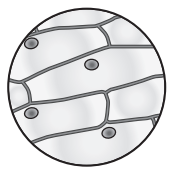
b The basic unit from which living things are built. _____

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.

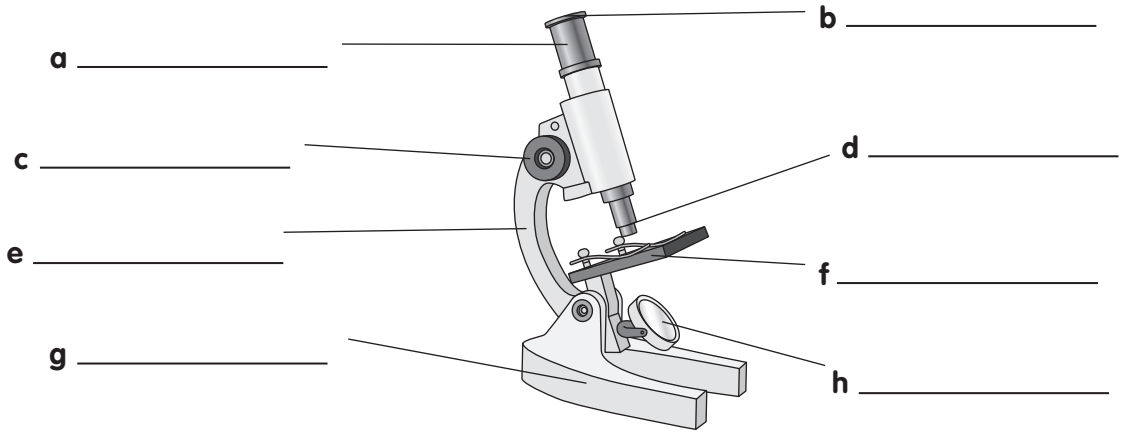
human cheek cell onion skin cells micro-organism



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.

_____

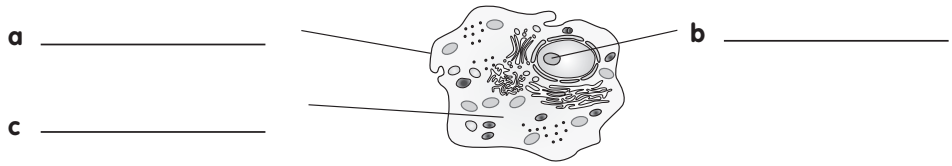
b How and when you use the coarse and fine focusing knobs to focus on a specimen.

_____

_____

Comparing plant and animal cells

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

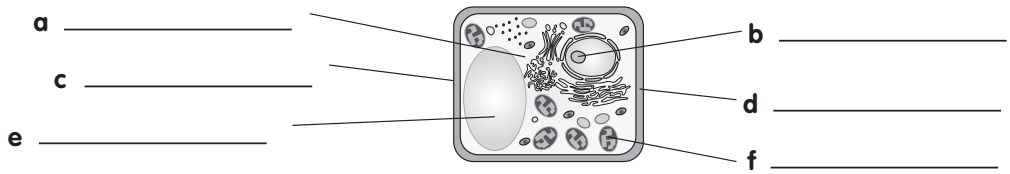


This is a PLANT / ANIMAL cell.

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.

_____

_____

_____

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.
_____

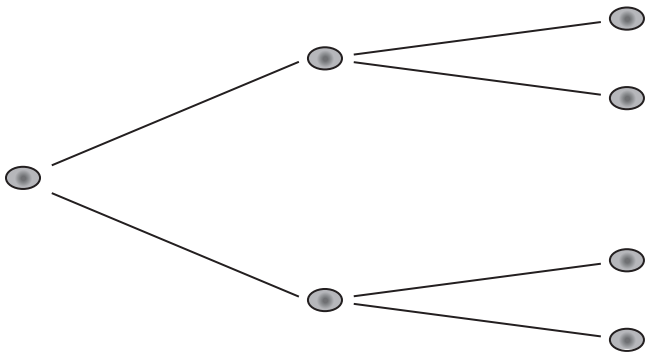
b The cell's control centre. _____

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. _____

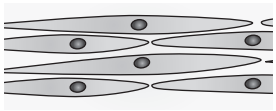
4. **Write the names of the cells under each picture. Use the words in the box.**

red blood cells nerve cell muscle cells epithelial cells

a

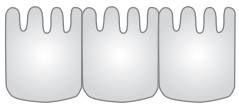
_____

b



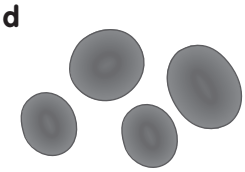
_____

c



_____

d



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