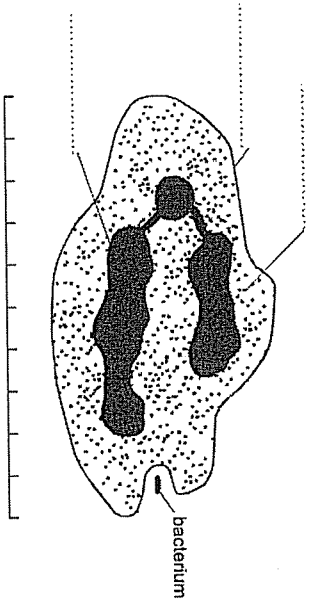


Cells and cell structure and dissolved substances

1. The drawing shows a white blood cell ingesting a bacterium.



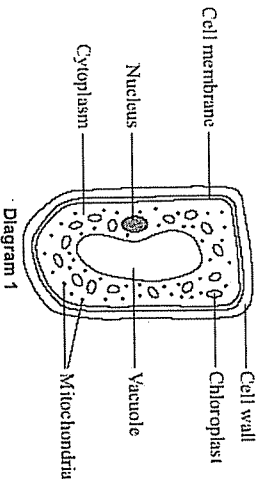
- (i) Use words from the list to label the parts of the white blood cell.
cell membrane cell wall cytoplasm nucleus vacuole

- (ii) The scale shows that the white blood cell is 10 micrometres long.
How long is the bacterium? Show your working.

..... micrometres

(2) (Total 5 marks)

2. Diagram 1 shows a cell from a leaf.



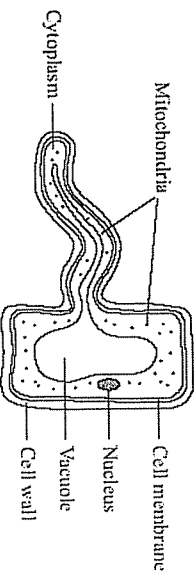
- (a) How is the leaf cell specialised to carry out photosynthesis?

Tick (✓) one box.

- It has a permanent vacuole.
- It has many chloroplasts.
- It has cytoplasm.
- It has many mitochondria.

(1)

- (b) Diagram 2 shows another type of plant cell.



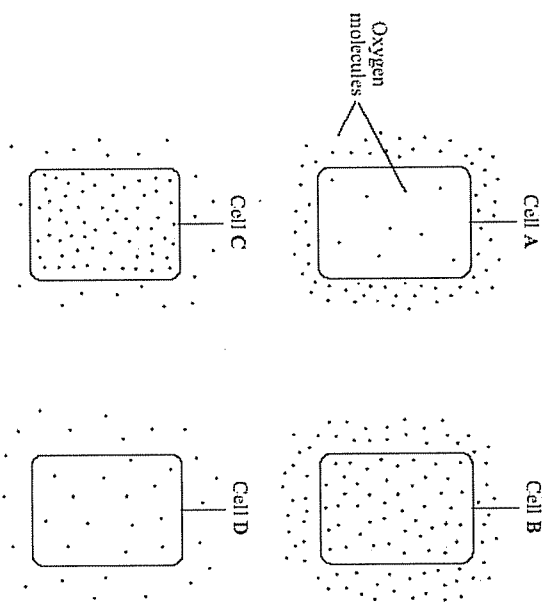
Give two ways in which this cell is different from an animal cell.

1.

2.

(2) (Total 3 marks)

3. (a) The diagrams show cells containing and surrounded by oxygen molecules. Oxygen can move into cells or out of cells.



Into which cell, A, B, C or D, will oxygen move the fastest?

Write your answer, A, B, C or D, in the box.

(1)

- (b) Draw a ring around the correct word to complete each sentence.

(i) Oxygen is taken into cells by the process of

diffusion
osmosis
respiration

(1)

(ii) Cells need oxygen for

breathing
photosynthesis
respiration

(1)

(iii) The parts of cells that use up the most oxygen are the

membranes
mitochondria
nuclei

(1)

(iv) Some cells produce oxygen in the process of

diffusion
photosynthesis
respiration

(1)

(Total 5 marks)