

Movement into and out of cells – 2021 IGCSE 0610**1. Nov/2021/Paper_11/No.7**

Which words complete the definition of diffusion?

'Diffusion is the net movement of particles from a region of their1..... concentration to a region of their2..... concentration,3..... a concentration gradient.'

	1	2	3
A	higher	lower	up
B	higher	lower	down
C	lower	higher	up
D	lower	higher	down

2. Nov/2021/Paper_11/No.8

Cyanide is a poison that stops respiration. A paramecium is a single-celled freshwater organism.

What is the most likely effect of cyanide in a paramecium?

- A** increased active transport
- B** decreased osmosis
- C** decreased active transport
- D** increased osmosis

3. Nov/2021/Paper_12/No.7

Which statement about diffusion is correct?

- A** The process requires energy from respiration.
- B** The particles must cross a cell membrane.
- C** The net movement of particles is up a concentration gradient.
- D** The process involves the random movement of particles.

4. Nov/2021/Paper_12/No.8

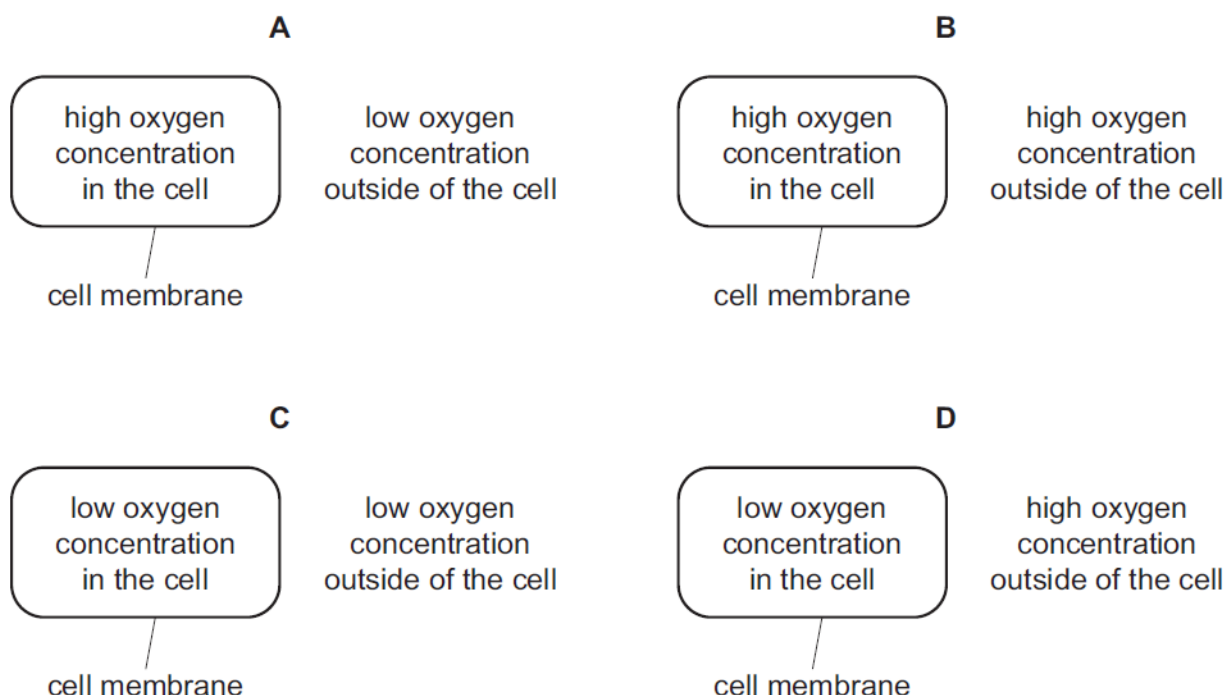
The cells in a plant root have a higher concentration of magnesium ions than in the surrounding soil.

Which process will move the magnesium ions into the root?

- A** active transport
- B** diffusion
- C** osmosis
- D** transpiration

5. Nov/2021/Paper_13/No.7

In which diagram would oxygen diffuse into the cell?



6. Nov/2021/Paper_13/No.8

Which statement about the role of the pressure of water in supporting plants is correct?

- A The pressure of water inside the cells presses inwards on the cell wall.
- B The pressure of water outside the cells presses inwards on the cell wall.
- C The pressure of water inside the cells presses outwards on the cell wall.
- D The pressure of water outside the cells presses outwards on the cell wall.

7. Nov/2021/Paper_21/No.6

Which statement about turgor pressure is correct?

- A It creates a pull in the xylem which allows water to move upwards.
- B It allows sucrose and amino acids to travel upwards and downwards in the phloem.
- C It is a pressure that is only found in cells containing chloroplasts.
- D It is pressure that helps to provide support for plants.

8. Nov/2021/Paper_21/No.7

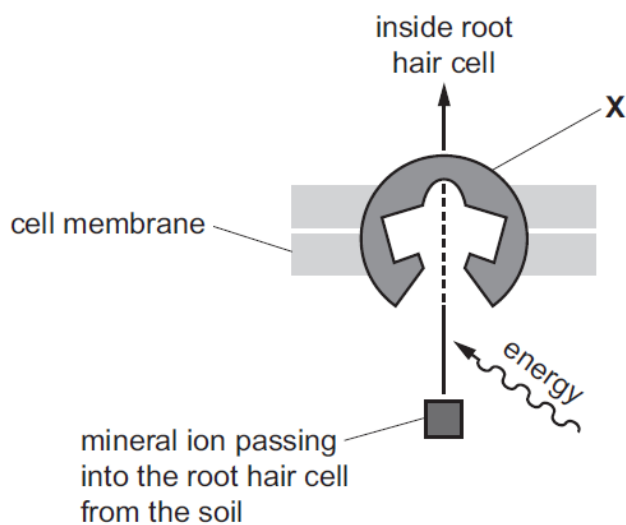
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9. Nov/2021/Paper_22/No.7

The diagram shows the uptake of mineral ions by root hair cells.

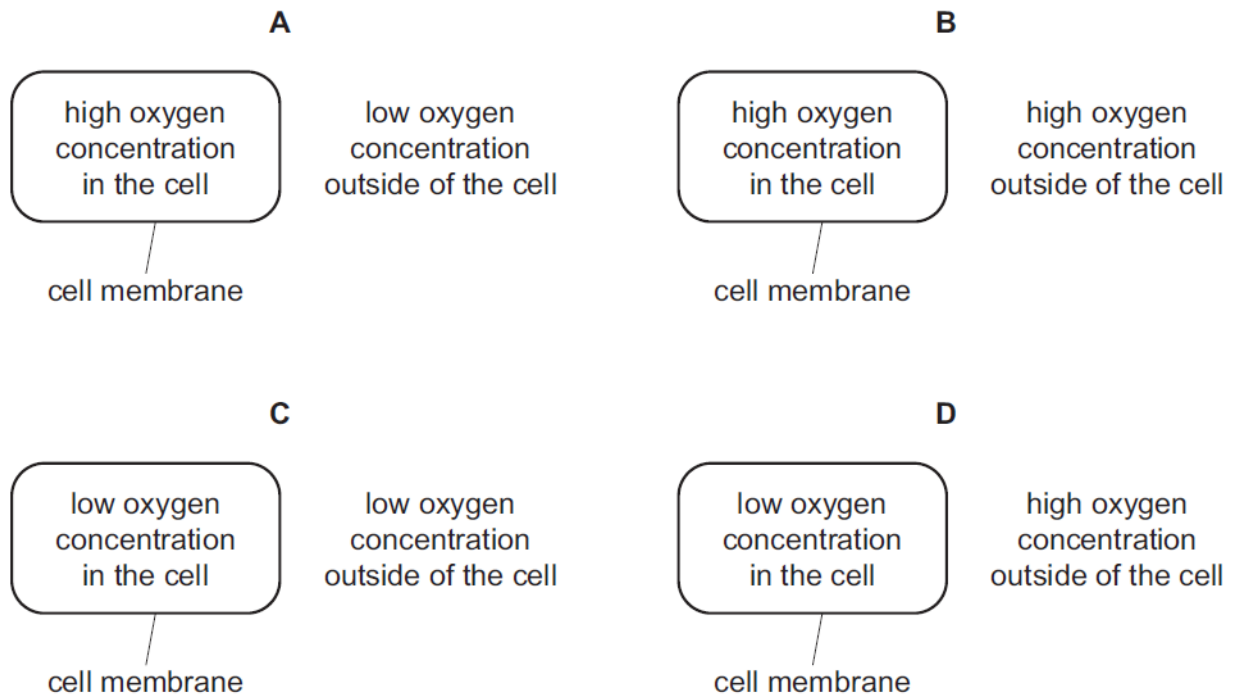


Which type of molecule is labelled **X** in the diagram?

- A** glucose
- B** lipid
- C** protein
- D** starch

10. Nov/2021/Paper_23/No.6

In which diagram would oxygen diffuse into the cell?

**11. Nov/2021/Paper_23/No.7**

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