

## 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 their .....1..... concentration to a region of their .....2..... concentration, .....3..... a concentration gradient.'

	1	2	3
<b>A</b>	higher	lower	up
<b>B</b>	higher	lower	down
<b>C</b>	lower	higher	up
<b>D</b>	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

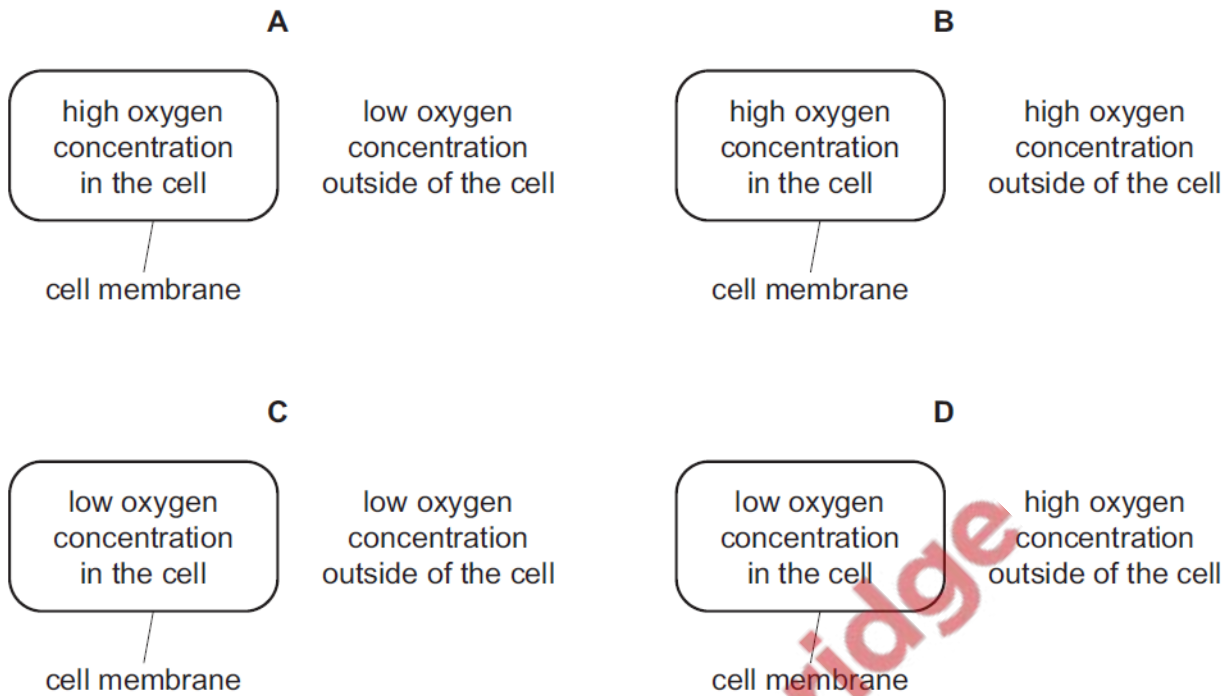
The cells in a plant root have a higher concentration of magnesium ions than in the surrounding soil.

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

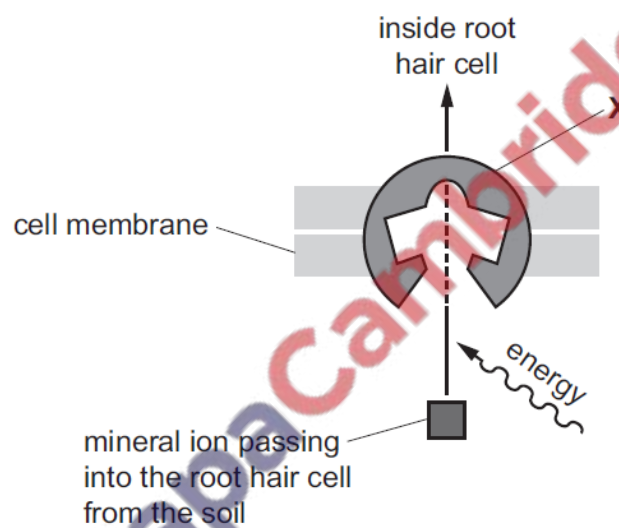
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9. Nov/2021/Paper\_22/No.7

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

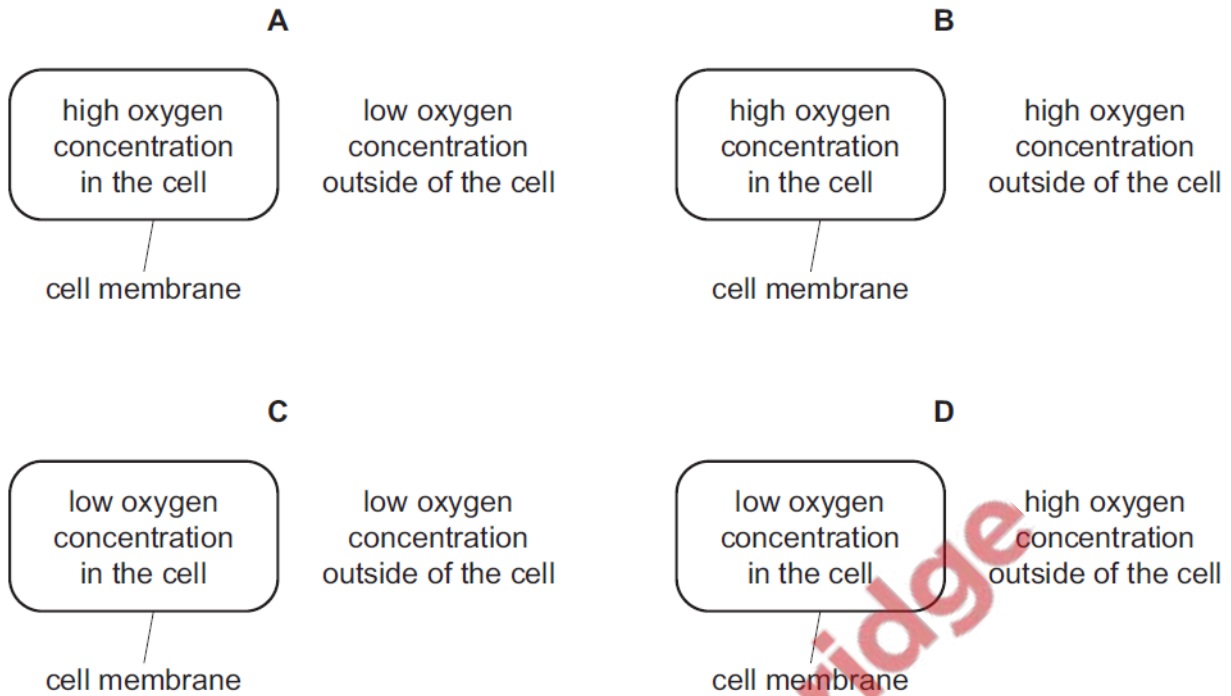


Which type of molecule is labelled **X** in the diagram?

- 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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