

The need for transport and transport in plants: practice questions

3 questions · 8 marks · mark scheme at the back

For Edexcel International GCSE Science (Double Award) 4SD0.

Name

Total / 8

- 1** Which statement explains why a unicellular organism can rely on diffusion to move substances in and out of the cell? [1 mark]
- A. ☐ It has a large surface area compared with its volume, so diffusion distances are short
- B. ☐ It has a transport system to carry substances
- C. ☐ It has a small surface area compared with its volume
- D. ☐ It uses active transport for all substances

- 2** Explain why a large multicellular organism needs a transport system. [3 marks]

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- 3** State what is transported by (a) the xylem and (b) the phloem in a flowering plant. [4 marks]

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Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1]

A A (1)

2. [3]

- it has a small surface area : volume ratio (1)
- many cells are deep inside the body / far from the surface, so the diffusion distance is long (1)
- diffusion alone would be too slow to supply oxygen and food / remove waste (1)

3. [4]

- (a) water (1)
- mineral ions (1)
- (b) sucrose (1)
- amino acids (1)