

Edexcel (A) Biology A-level

1.1 + 1.2 - Mass Transport

Flashcards

This work by [PMT Education](https://www.pmt.education) is licensed under [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)



Give features of a mass transport system.



Give features of a mass transport system.

- Vessels
- Transport medium
- Maintains speed



Why do some organisms require a mass transport system?



Why do some organisms require a mass transport system?

Larger animals have a smaller surface area to volume ratio and a higher metabolic rate. Diffusion alone is insufficient to supply all cells with the substances they need.



What makes water a dipolar molecule?



What makes water a dipolar molecule?

O is more electronegative than H, so attracts the electron density in the covalent bond more strongly. Forms $O^{\delta-}$ (slight negative charge) and $H^{\delta+}$ (slight positive charge).



How is water used in transport?



How is water used in transport?

Due to its polar nature it acts as a solvent, allowing transport of biological molecules.



How does public perception of risk differ from actual risk?



How does public perception of risk differ from actual risk?

- People overestimate risk if something is not under their control, is unfamiliar, or has particularly severe consequences.
- People underestimate risk if something only has an effect in the long-term.



Give some ethical issues surrounding the use of invertebrates in research.



Give some ethical issues surrounding the use of invertebrates in research.

Some consider it wrong to harm any living creature. However others argue that invertebrates are not complex enough to suffer stress or pain.

