

Tissues

Chapter 3: Tissues · Topic 1

Key Concept

Plant tissues include meristematic tissue (for growth), xylem (water transport), phloem (food transport), and parenchyma (storage and photosynthesis).

Animal tissues include epithelial tissue (covering and protection), connective tissue (support), muscle tissue (movement), and nervous tissue (signalling).

Each tissue type has cells specialised for its specific function, showing how cellular specialisation supports the organism's overall needs.

Understanding tissues helps us see how organs and organ systems are built from specialised cells working together.

Quick Revision Notes

- Plant tissues: meristematic, xylem, phloem, parenchyma.
- Meristematic tissue enables growth.
- Xylem transports water; phloem transports food.
- Animal tissues: epithelial, connective, muscle, nervous.
- Epithelial tissue covers and protects.
- Connective tissue provides support.
- Muscle tissue enables movement.
- Nervous tissue enables signalling.

Practice Questions

- 1 List four plant tissue types and their functions.
- 2 List four animal tissue types and their functions.
- 3 Discuss why cells specialise into tissues.
- 4 Research meristematic tissue's role.
- 5 Explain the connection between tissues and organs.
- 6 Compare plant and animal tissue types.