

Heredity and Evolution

Chapter 11: Heredity and Evolution · Topic 1

Key Concept

Genetic inheritance follows patterns established by Mendel's laws, with dominant and recessive alleles determining observable traits in offspring.

Evolution occurs through natural selection, where organisms with advantageous traits are more likely to survive and reproduce.

Evidence for evolution includes fossil records, comparative anatomy, and genetic similarities between related species.

Understanding heredity and evolution helps explain biodiversity, adaptation, and the interconnectedness of all living organisms.

Quick Revision Notes

- Genetic inheritance: Mendel's laws.
- Dominant, recessive alleles determine traits.
- Evolution: natural selection process.
- Advantageous traits favour survival, reproduction.
- Evidence: fossils, comparative anatomy.
- Also genetic similarities between species.
- Understanding explains biodiversity, adaptation.
- Shows interconnectedness of living organisms.

Practice Questions

- 1 Discuss Mendel's laws with an example.
- 2 Discuss natural selection with an example.
- 3 Research fossil evidence for evolution.
- 4 Discuss genetic similarities between related species.
- 5 Explain how heredity and evolution are connected.
- 6 Discuss an example of adaptation in nature.