

This is the **Higher Separate** version — includes all Higher Tier content (marked ★) and all Separate Science content.

Biodiversity is the variety of life in an ecosystem — high biodiversity means more stable, resilient ecosystems.

- Threats: habitat destruction, deforestation, pollution, climate change, overexploitation
- Conservation: nature reserves, breeding programmes, seed banks, sustainable fishing, reforestation
- Eutrophication: fertilisers → algal bloom → blocks light → plants die → O₂ depleted → aquatic life dies
- Deforestation: CO₂ release, habitat loss, reduced rainfall, soil erosion
- Global warming: rising CO₂ and methane → more heat trapped → rising temperatures, sea level rise

Key Terms

Biodiversity	Variety of species and genetic variation in an area
Eutrophication	Excess nutrients → algal bloom → oxygen depletion

■ **Exam Tip:** Eutrophication chain: fertilisers → water → algae → blocks light → plants die → bacteria decompose → use O₂ → fish die. Every link needed for full marks.