

Full Higher Separate content. ★ = Higher Tier. ◆ = Separate Science only.

Q1. Describe THREE consequences of global warming for ecosystems.

[3 marks]

Q2. Explain how burning fossil fuels contributes to global warming.

[3 marks]

★ HIGHER TIER

Q3. ★ Explain what is meant by a positive feedback loop in the context of global warming. Give ONE example.

[2 marks]

Total: 8 marks

Q1 (3 marks)

Describe THREE consequences of global warming for ecosystems.

- Rising sea levels (glaciers melt) → coastal habitat destruction [1]
- Species shift ranges poleward / habitat changes → some species go extinct [1]
- More extreme weather events → greater ecosystem disruption [1]

Q2 (3 marks)

Explain how burning fossil fuels contributes to global warming.

- Burning fossil fuels releases CO₂ (carbon stored millions of years ago) [1]
- CO₂ is a greenhouse gas — absorbs and re-emits infrared radiation [1]
- Increased CO₂ → more heat trapped in atmosphere → rising global temperatures [1]

Q3 (2 marks) [★ HT]

★ Explain what is meant by a positive feedback loop in the context of global warming. Give...

- Positive feedback: a change triggers a response that amplifies (worsens) the original change [1]
- Example: warming → permafrost melts → releases methane (greenhouse gas) → more warming → more melting [1]