



Coral Reef Ecosystem **Comprehension** Questions

1. What are coral reefs? Include **two** named organisms in your answer.

2. Why are coral reefs mainly found in tropical waters?

3. Describe how corals get the glucose needed for respiration.

4. Why are the oceans becoming acidic?

5. What is coral bleaching and why is it happening?

6. Describe **two** ways that humans can have a negative impact on coral reefs

1. _____

2. _____

7. Describe the impact of crown-of-thorns starfish on coral reefs.



8. Describe **two** reasons why coral reefs are important.

1. _____

2. _____

9. Explain why sediment traps near coral reefs are important.

10. Suggest how a school could help save coral reefs.





Coral Reef Ecosystem **Comprehension**

Questions Answers

1. What are coral reefs? Include **two** named organisms in your answer.

Coral reefs are ecosystems built by corals that support 25% of all marine life, including algae, fish, sea sponges, starfish and crabs.

2. Why are coral reefs mainly found in tropical waters?

Warm, clear, shallow water provides an ideal environment for the algae to obtain energy from the sun to allow them to photosynthesise.

3. Describe how corals get the glucose needed for respiration.

The algae that live inside the corals produce glucose by photosynthesis.

4. Why are the oceans becoming acidic?

Carbon dioxide produced from the burning of fossil fuels dissolves in oceans.

5. What is coral bleaching and why is it happening?

The corals expel the algae that live within them, causing them to lose their colour and turn white. Coral bleaching can occur due to an increase in sea temperatures or water pollution.

6. Describe **two** ways that humans can have a negative impact on coral reefs

Any two from:

- **burning fossil fuels, causing an increase in atmospheric carbon dioxide concentration**
- **water pollution, e.g. from chemicals in sun cream**
- **increase of sediment in the runoff from surrounding areas**
- **divers touching the coral/taking souvenirs**

Allow any other sensible suggestion.

7. Describe the impact of crown-of-thorns starfish on coral reefs.

The starfish feed on corals at a faster rate than the corals can reproduce, causing damage to the coral reef.

8. Describe **two** reasons why coral reefs are important.

Any two from:

- **they are home to a quarter of all marine species/they have high biodiversity**
- **they remove carbon dioxide from the atmosphere/fix carbon**
- **they provide people with fish/seafood**
- **they protect shorelines from hurricanes/storms/waves**
- **they can be used for drugs to help treat disease**
- **they attract tourists**

Allow any other sensible suggestion.

9. Explain why sediment traps near coral reefs are important.

Trapping sediment will prevent it from smothering the coral reefs. This means the sediment will not block sunlight from reaching the algae so they can continue to photosynthesise and provide glucose for the corals to grow.

10. Suggest how a school could help save coral reefs.

- **recycle paper and plastics**
- **promote using coral reef friendly sun cream**
- **serve sustainably sourced fish and seafood**
- **teach the importance of not touching the coral reefs or taking souvenirs**

Allow any other sensible suggestion.

