



Western Australian Waters & Microplastics

Marine microplastics are an environmental pollution issue of growing concern. Through the 'What are Marine Microplastics' YouTube video and corresponding quiz, students will get an understanding of how microplastics are formed and the impacts of microplastics on health and the natural environment.



Watch the video [Marine Microplastics](#) then answer the following questions.

Part 1: Understanding Microplastics

1. What are microplastics? Write your own definition based on the video.

2. Where do microplastics come from? What percentage of plastics come from land?

3. List two ways that plastics break down into microplastics.



Part 2: Effects on Marine Life

4. Microplastics can have an impact on animals. List two examples of how this can happen.

5. Explain how humans can be impacted by microplastics.

Part 3: Solutions and Actions

6. List three solutions and actions we have access to right now.

7. What can you do in your life to reduce the microplastic use?



Marking Key: Western Australian Waters & Microplastics

Part 1 Understanding Microplastics

1. What are microplastics? Write your own definition based on the video.

Answer: Small plastic particles less than 5mm in size that result from the breakdown of larger plastics or are manufactured for specific uses.

(Answers will vary. Award marks for including key ideas such as "small plastic particles" and "resulting from breakdown or manufacturing.")

2. Where do microplastics come from? What percentage of plastics come from land?

Answer: 80% of plastics in the ocean originate from land-based sources.

3. List two ways that plastics break down to microplastics.

Answer: Physical breakdown due to sunlight (UV radiation) and mechanical action such as wave movement.

Part 2 Effects on marine life

4. Microplastics can have an impact on animals. List two examples of how this can happen.

Answer: Example 1: Marine animals ingest microplastics, mistaking them for food, leading to starvation or internal injuries.

Example 2: Microplastics can accumulate toxins, which are then absorbed by animals and move up the food chain.

5. Explain how humans can be impacted by microplastics.

Answer: Microplastics in seafood can enter the human body, potentially causing health issues due to toxins associated with the plastics.

Part 3 Solutions and Actions

6. List three solutions and actions we have access to right now.



Answer:

1. Ocean cleanup initiatives, such as using large-scale cleanup systems (e.g., The Ocean Cleanup project).

2. Alternative Materials:

Biodegradable plastics.

Materials derived from seaweed or other natural resources.

3. Community Action:

Beach cleanup events.

Education programs to reduce single-use plastics.

7. What can you do in your life to reduce the microplastic use?

Answer: Use reusable shopping bags.

Avoid products with microbeads.

(Answers will vary; award marks for practical and realistic suggestions.)