BIOLOGY YEAR 11 - MODULE 4 - LESSON 13

Predation and Herbivory — Population Structure and Ecosystem Effects

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name _____

Date _____

Class _____

1. Key Ideas

In the 1960s, overfishing removed tiger sharks from the waters around Shark Bay, Western Australia. Without their predator, dugong populations surged. The dugongs grazed seagrass meadows to bare sand. Fish, turtles, and dolphins that depended on the seagrass disappeared. One species lost changed everything. This is the power of predation — and the danger of ignoring it.

- Key facts and terms for Predation and Herbivory — Population Structure and Ecosystem Effects
- How the main ideas in Predation and Herbivory — Population Structure and Ecosystem Effects connect

2. Success Criteria

By the end, you should be able to:

- Key facts and terms for Predation and Herbivory — Population Structure and Ecosystem Effects
- Where this lesson fits in Module 4
- How the main ideas in Predation and Herbivory — Population Structure and Ecosystem Effects connect

3. Key Terms

Key idea
The central concept from Predation and Herbivory — Population Structure and Ecosystem Effects.

Evidence
Information, observations or calculations used to support an answer.

Explain
Give a reasoned answer that links cause and effect.

Apply
Use a learned idea in a new example, problem or scenario.

4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

5. Short Answer Questions

1. Q1. In a national park, all dingoes are removed to protect livestock on neighbouring properties. Predict what will happen to kangaroo populations, grass cover, and soil erosion over the next 10 years. Explain the chain of causation at each step.

BAND 3 3 MARKS

2. Q2. A farmer notices that caterpillars are eating his crop leaves. He sprays pesticide and kills 95% of the caterpillars. Predict what might happen to the crop over the following two years if the farmer continues spraying every season. Consider both direct and indirect effects.

BAND 4 3 MARKS

3. Q1. In a national park, all dingoes are removed to protect livestock on neighbouring properties. Predict what will happen to kangaroo populations, grass cover, and soil erosion over the next 10 years. Explain the chain of causation at each step.

BAND 5 3 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Predation and Herbivory — Population Structure and Ecosystem Effects but does not use evidence or reasoning.

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

7. Multiple Choice

1. What is the best first step when answering a question about Predation and Herbivory — Population Structure and Ecosystem Effects?

☐ A. Identify the key concept being tested

☐ B. Write every fact from memory

☐ C. Ignore the command word

☐ D. Skip examples and evidence

2. Which answer would show stronger understanding of Predation and Herbivory — Population Structure and Ecosystem Effects?

☐ A. An answer with accurate terms and reasoning

☐ B. A copied definition only

☐ C. A single-word response

☐ D. An answer with no example

3. What should you do if a question asks you to explain?

☐ A. Link the idea to a reason or cause

☐ B. List unrelated facts

☐ C. Only draw a diagram

☐ D. Write the shortest possible answer

8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

SUCCESS CRITERION 1

Prove that you can: Key facts and terms for Predation and Herbivory — Population Structure and Ecosystem Effects

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: Where this lesson fits in Module 4

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: How the main ideas in Predation and Herbivory — Population Structure and Ecosystem Effects connect

BAND 5 4 MARKS

One thing I still need help with: