BIOLOGY YEAR 12 - MODULE 7 - LESSON 13

Primary and Secondary Immune Response

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 1796, Edward Jenner noticed that milkmaids who caught cowpox never seemed to get smallpox. He didn't know about B cells, T cells, or memory lymphocytes. He just noticed the pattern — and acted on it. The mechanism he accidentally discovered is the same one behind every vaccine ever made.

- What happens during the primary immune response
- Why the secondary response is faster and stronger

2. Success Criteria

By the end, you should be able to:

- What happens during the primary immune response
- What happens during the secondary immune response
- The role of memory cells in both B and T cell responses

3. Key Terms

mechanism he accidentally discovered
the same one behind every vaccine ever made

Why the secondary response
faster and stronger

Evolution
just a guess or a theory with no evidence

The primary immune response
the body's first encounter with a specific antigen

The secondary response
every subsequent encounter with the same antigen

which
given in a series to build adequate memory

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. Explain this lesson goal in your own words: "What happens during the primary immune response". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "What happens during the secondary immune response". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Primary and Secondary Immune Response: "The role of memory cells in both B and T cell responses".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Primary and Secondary Immune Response 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 Primary and Secondary Immune Response?

☐ 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 Primary and Secondary Immune Response?

☐ 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: What happens during the primary immune response

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: What happens during the secondary immune response

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: The role of memory cells in both B and T cell responses

BAND 5 4 MARKS

One thing I still need help with: