BIOLOGY YEAR 12 - MODULE 7 - LESSON 2

Classifying Pathogens

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

HIV, influenza, and a tapeworm all cause infectious disease — but an antibiotic cures none of them. Understanding why requires knowing not just what a pathogen does, but what it fundamentally is.

- How to classify pathogens causing disease in plants and animals
- Why pathogen classification determines treatment strategy

2. Success Criteria

By the end, you should be able to:

- How to classify pathogens causing disease in plants and animals
- The key structural and biological features of each pathogen type
- Specific adaptations of pathogens for host entry and transmission

3. Key Terms

This
the locksmith problem: every pathogen type has a different biological structure, and effective treatment requires a tool

Accurate pathogen classification
therefore not an academic exercise

Viroids
RNA-based, plant-only pathogens

Prions
protein-based, animal-only pathogens

They
not the same thing — and the HSC will test whether you can distinguish them

Entering one host
only half the challenge — a successful pathogen must also spread to new hosts

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: "How to classify pathogens causing disease in plants and animals". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "The key structural and biological features of each pathogen type". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Classifying Pathogens: "Specific adaptations of pathogens for host entry and transmission".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Classifying Pathogens 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 Classifying Pathogens?

☐ 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 Classifying Pathogens?

☐ 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: How to classify pathogens causing disease in plants and animals

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: The key structural and biological features of each pathogen type

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: Specific adaptations of pathogens for host entry and transmission

BAND 5 4 MARKS

One thing I still need help with: