BIOLOGY YEAR 11 - MODULE 3 - LESSON 13

Speciation

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

When Australia broke away from Antarctica about 45 million years ago, the mammals isolated on that drifting landmass followed their own evolutionary path. Speciation is how one ancestral population can split into new species when isolation, mutation, selection and time push populations so far apart that they can no longer interbreed.

- Key facts and definitions for Speciation
- The concepts and principles underlying Speciation

2. Success Criteria

By the end, you should be able to:

- Key facts and definitions for Speciation
- Relevant terminology and conventions
- The concepts and principles underlying Speciation

3. Key Terms

Speciation
how one ancestral population can split into new species when isolation, mutation, selection and time push populations so

two populations
separated by a mountain range for thousands of generations, what would have to change before you would call them differe

mate but their offspring
sterile, are they the same species?

species
a group of organisms that can interbreed and produce fertile offspring

Why speciation
not goal-directed or intentional

Evolution
just a guess or a theory with no evidence

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: "Key facts and definitions for Speciation". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "Relevant terminology and conventions". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Speciation: "The concepts and principles underlying Speciation".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Speciation 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 Speciation?

☐ 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 Speciation?

☐ 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 definitions for Speciation

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: Relevant terminology and conventions

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: The concepts and principles underlying Speciation

BAND 5 4 MARKS

One thing I still need help with: