BIOLOGY YEAR 12 - MODULE 5 - LESSON 1

Reproduction and Continuity of Species

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

Cavendish bananas are propagated almost entirely by cloning. That makes global production efficient, but it also means one pathogen can threaten plantations across continents. Reproduction keeps a species going, but the way reproduction happens changes how resilient that species is to change.

- How reproduction maintains continuity of a species.
- Why sexual reproduction tends to increase variation.

2. Success Criteria

By the end, you should be able to:

- How reproduction maintains continuity of a species.
- The defining features of sexual and asexual reproduction.
- Why inheritance of DNA is central to continuity.

3. Key Terms

Reproduction
The biological process by which organisms produce offspring and transfer hereditary information to the next generation.

Continuity of species
The ongoing existence of a species across generations through successful reproduction and inheritance of DNA.

Sexual reproduction
Reproduction involving fusion of gametes, usually from two parents, producing genetically variable offspring.

Asexual reproduction
Reproduction from one parent without gamete fusion, usually producing genetically identical offspring.

Variation
Differences in characteristics between individuals in a population, often linked to differences in alleles.

Gamete
A haploid sex cell, such as a sperm or egg, that fuses during fertilisation.

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 reproduction maintains continuity of a species.". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "The defining features of sexual and asexual reproduction.". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Reproduction and Continuity of Species: "Why inheritance of DNA is central to continuity.".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Reproduction and Continuity of Species 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 Reproduction and Continuity of Species?

☐ 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 Reproduction and Continuity of Species?

☐ 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 reproduction maintains continuity of a species.

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: The defining features of sexual and asexual reproduction.

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: Why inheritance of DNA is central to continuity.

BAND 5 4 MARKS

One thing I still need help with: