

Social, Economic and Cultural Contexts - Could Populations Be Changed Forever?

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

The science alone does not decide the future of a biotechnology. Long-term population change depends on whether technologies are adopted, regulated, funded, accepted, resisted or limited by society. This lesson synthesizes the whole module by linking biology with social, economic and cultural context.

- Technology uptake is shaped by more than scientific effectiveness.
- A scientifically possible technology may still have limited population impact.

2. Success Criteria

By the end, you should be able to:

- Technology uptake is shaped by more than scientific effectiveness.
- Access, cost, regulation, ownership and public acceptance matter.
- Indigenous and community perspectives are part of biotechnology context.

3. Key Terms

Social context

How public values, acceptance, community priorities and lived impacts shape use of a technology.

Economic context

How cost, funding, ownership, access and commercial incentives affect uptake.

Cultural context

How beliefs, traditions, identities and community knowledge systems influence responses to biotechnology.

Regulation

Rules and governance that allow, limit or condition use of a technology.

Uptake

The extent to which a technology is actually adopted and used in real populations.

Long-term population change

A lasting shift in genetic patterns or biological outcomes across many generations.

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: "Technology uptake is shaped by more than scientific effectiveness.". Use one specific example from the lesson.

BAND 3 **2 MARKS**

2. Apply this idea to a new example: "Access, cost, regulation, ownership and public acceptance matter.". Show your reasoning clearly.

BAND 4 **3 MARKS**

3. Analyse why this idea matters for understanding Social, Economic and Cultural Contexts - Could Populations Be Changed Forever?: "Indigenous and community perspectives are part of biotechnology context.".

BAND 5 **4 MARKS**

6. Extend: Apply the Idea

BAND 5/6

5 MARKS

A student gives a memorised answer about Social, Economic and Cultural Contexts - Could Populations Be Changed Forever? 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 Social, Economic and Cultural Contexts - Could Populations Be Changed Forever??

- 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 Social, Economic and Cultural Contexts - Could Populations Be Changed Forever??

- 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: Technology uptake is shaped by more than scientific effectiveness.

BAND 3 **2 MARKS**

SUCCESS CRITERION 2

Prove that you can: Access, cost, regulation, ownership and public acceptance matter.

BAND 4 **3 MARKS**

SUCCESS CRITERION 3

Prove that you can: Indigenous and community perspectives are part of biotechnology context.

BAND 5 **4 MARKS**

One thing I still need help with:
