

# Adaptations

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

A thorny devil does not decide to grow water-channelled spines because the desert is dry. Adaptations are inherited characteristics shaped by natural selection over many generations because they increase fitness in a specific environment. This lesson distinguishes structural, physiological and behavioural adaptations and shows why similar environments can push unrelated organisms toward similar solutions.

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

## 2. Success Criteria

By the end, you should be able to:

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

## 3. Key Terms

### Adaptations

inherited characteristics shaped by natural selection over many generations because they increase fitness in a specific

### does that prove they

closely related?

### Immunological memory

specific; the body remembers previously encountered antigens, not all pathogens

### Understanding how systems interact

essential for HSC success

### adaptation

not just a useful feature

### that

not an adaptation because it is not inherited

## 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 Adaptations". Use one specific example from the lesson.

**BAND 3** **2 MARKS**

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

**BAND 4** **3 MARKS**

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

**BAND 5** **4 MARKS**

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## 6. Extend: Apply the Idea

BAND 5/6

5 MARKS

**A student gives a memorised answer about Adaptations 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.

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## 7. Multiple Choice

1. What is the best first step when answering a question about Adaptations?

- 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 Adaptations?

- 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 Adaptations**

**BAND 3**

**2 MARKS**

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### SUCCESS CRITERION 2

**Prove that you can: Relevant terminology and conventions**

**BAND 4**

**3 MARKS**

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### SUCCESS CRITERION 3

**Prove that you can: The concepts and principles underlying Adaptations**

**BAND 5**

**4 MARKS**

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**One thing I still need help with:**

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