SCIENCE YEAR 8 - UNIT 1 - LESSON 16

Stable Internal Conditions - Entry to Homeostasis

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

Living things function best when important internal conditions stay within a suitable range. This lesson introduces the Stage 4 idea of homeostasis using familiar examples such as body temperature and water balance.

- homeostasis is about keeping internal conditions within a suitable range
- living systems work best when important internal conditions stay within limits

2. Success Criteria

By the end, you should be able to:

- homeostasis is about keeping internal conditions within a suitable range
- body temperature and water balance are familiar examples
- stable does not mean completely unchanging

3. Key Terms

Homeostasis
Keeping internal conditions within a suitable range so living things can function effectively.

Stable internal conditions
Internal conditions that do not change too much from the level needed for effective function.

Body temperature
A familiar example of an internal condition that needs to stay within a suitable range.

Water balance
Keeping the amount of water in the body or organism within a suitable range.

Range
A set of values or conditions that are suitable rather than just one exact number.

Function
The way a living system or structure works to support life.

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: "homeostasis is about keeping internal conditions within a suitable range". Use one specific example from the lesson.

CORE

2. Apply this idea to a new example: "body temperature and water balance are familiar examples". Show your reasoning clearly.

CORE

3. Analyse why this idea matters for understanding Stable Internal Conditions - Entry to Homeostasis: "stable does not mean completely unchanging".

REASONING

6. Extend: Apply the Idea

A student says, "I understand Stable Internal Conditions - Entry to Homeostasis because I memorised the definition."

Explain why memorising a definition is not enough. Use an example from the lesson to show deeper understanding.

7. Multiple Choice

1. What is the best first step when answering a question about Stable Internal Conditions - Entry to Homeostasis?

- [ ] 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 Stable Internal Conditions - Entry to Homeostasis?

- [ ] 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: homeostasis is about keeping internal conditions within a suitable range

SUCCESS CRITERION 2

Prove that you can: body temperature and water balance are familiar examples

SUCCESS CRITERION 3

Prove that you can: stable does not mean completely unchanging

One thing I still need help with: