

# Investigating Living Systems

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

Scientists do not just describe living systems. They investigate them. This lesson shows how to ask a living-systems question, plan a safe method, collect or use data, identify patterns and write an evidence-based conclusion.

- living-systems investigations need a question, method, data and conclusion
- investigation is more than just observing once

## 2. Success Criteria

By the end, you should be able to:

- living-systems investigations need a question, method, data and conclusion
- safe and fair procedures matter
- conclusions should come from evidence

## 3. Key Terms

### Investigation

A planned way to answer a scientific question using evidence.

### Prediction

A statement about what you think may happen and why.

### Method

The steps used to carry out an investigation safely and fairly.

### Data

Information collected during an investigation or from a secondary source.

### Pattern

A trend or relationship found in the data.

### Conclusion

A judgement based on the evidence collected.

## 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: "living-systems investigations need a question, method, data and conclusion". Use one specific example from the lesson.

CORE

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2. Apply this idea to a new example: "safe and fair procedures matter". Show your reasoning clearly.

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3. Analyse why this idea matters for understanding Investigating Living Systems: "conclusions should come from evidence".

REASONING

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## 6. Extend: Apply the Idea

**A student says, "I understand Investigating Living Systems because I memorised the definition."**

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

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## 7. Multiple Choice

1. What is the best first step when answering a question about Investigating Living Systems?

- 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 Investigating Living Systems?

- 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: living-systems investigations need a question, method, data and conclusion**

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### SUCCESS CRITERION 2

**Prove that you can: safe and fair procedures matter**

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### SUCCESS CRITERION 3

**Prove that you can: conclusions should come from evidence**

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

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