

# Absorption and Elimination — The Mystery Solved

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

Digestion breaks food down. Absorption gets it into the body. Follow a glucose molecule from the inside of your small intestine all the way to a liver cell — and find out exactly why our patient from Lesson 11 is malnourished despite eating well.

- Describe the structure of villi and microvilli and explain their role
- Absorption of nutrients, minerals, and water

## 2. Success Criteria

By the end, you should be able to:

- Describe the structure of villi and microvilli and explain their role
- Explain how glucose, amino acids, fatty acids, minerals and water are absorbed
- Trace absorbed nutrients from intestinal lumen to bloodstream

## 3. Key Terms

### think happens after glucose

produced in the small intestine

### why villi and microvilli

essential using SA:V principle

### maximises absorption surface area

tested in nearly every HSC paper — 3–5 marks in Section II

### solution

the same: fold a large surface area into a small space

### the small intestine

not smooth — it is thrown into large circular folds called

### surface of each plica

covered in thousands of

## 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: "Describe the structure of villi and microvilli and explain their role". Use one specific example from the lesson.

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

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2. Apply this idea to a new example: "Explain how glucose, amino acids, fatty acids, minerals and water are absorbed". Show your reasoning clearly.

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

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3. Analyse why this idea matters for understanding Absorption and Elimination — The Mystery Solved: "Trace absorbed nutrients from intestinal lumen to bloodstream".

**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 Absorption and Elimination — The Mystery Solved 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 Absorption and Elimination — The Mystery Solved?

- 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 Absorption and Elimination — The Mystery Solved?

- 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: Describe the structure of villi and microvilli and explain their role**

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

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### SUCCESS CRITERION 2

**Prove that you can: Explain how glucose, amino acids, fatty acids, minerals and water are absorbed**

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

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### SUCCESS CRITERION 3

**Prove that you can: Trace absorbed nutrients from intestinal lumen to bloodstream**

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

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

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