

The Mammalian Digestive System — Physical and Chemical Digestion

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

You're about to meet a patient whose digestive system isn't working. Understanding why will teach you exactly how a healthy one does.

- Trace the full pathway of food from mouth to large intestine
- Trace the digestion of foods in a mammalian digestive system

2. Success Criteria

By the end, you should be able to:

- Trace the full pathway of food from mouth to large intestine
- Distinguish physical digestion from chemical digestion
- Name the enzymes, substrates, and products at each digestive region

3. Key Terms

steps do you think

involved, and where do they happen?

Explain how pH conditions

matched to enzyme function

their substrates and products

tested in almost every HSC paper — Section I (1–2 marks) and Section II (3–4 marks)

Bile emulsification

the most commonly tested physical digestion example after chewing

this matches enzyme optima

tested as a 2–3 mark application question — often with a graph of enzyme activity vs pH

Salivary amylase

denatured by stomach acid, and lipid digestion only begins in the small intestine with bile

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: "Trace the full pathway of food from mouth to large intestine". Use one specific example from the lesson.

BAND 3

2 MARKS

2. Apply this idea to a new example: "Distinguish physical digestion from chemical digestion". Show your reasoning clearly.

BAND 4

3 MARKS

3. Analyse why this idea matters for understanding The Mammalian Digestive System — Physical and Chemical Digestion: "Name the enzymes, substrates, and products at each digestive region".

BAND 5

4 MARKS

6. Extend: Apply the Idea

BAND 5/6

5 MARKS

A student gives a memorised answer about The Mammalian Digestive System — Physical and Chemical Digestion 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 The Mammalian Digestive System — Physical and Chemical Digestion?

- 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 The Mammalian Digestive System — Physical and Chemical Digestion?

- 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: Trace the full pathway of food from mouth to large intestine

BAND 3 **2 MARKS**

SUCCESS CRITERION 2

Prove that you can: Distinguish physical digestion from chemical digestion

BAND 4 **3 MARKS**

SUCCESS CRITERION 3

Prove that you can: Name the enzymes, substrates, and products at each digestive region

BAND 5 **4 MARKS**

One thing I still need help with:
