



Cambridge IGCSE™ Biology



Interactive Worksheet: The Human Digestive System & Nutrient Absorption

Student Name: _____

Date: _____

Class Score: _____

1. PICTURE IDENTIFICATION & FUNCTION MATCH

Task 1: Look closely at the multi-colored picture of the human digestive system below. Use the letter codes pointing to the specific structures to fill in the interactive matching challenge boxes!

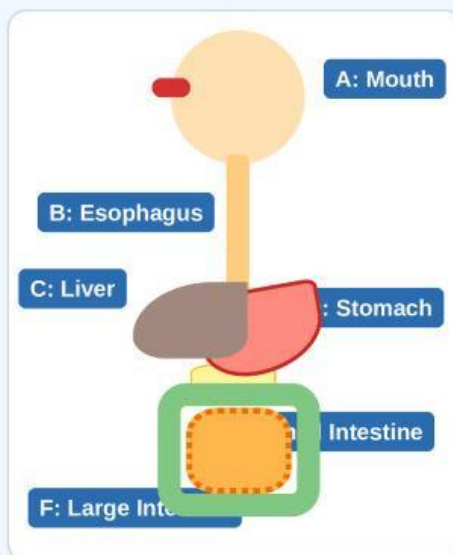


Figure 1: Anatomy of the Alimentary Canal

1. Churns food with HCl acid to destroy pathogens

Write the correct matching letter (A to F) inside the box on the left!

2. Principal zone for chemical absorption of nutrients

Hint: This structure contains thousands of tiny villi.

3. Reabsorbs water and compacts structural waste

This is the final colon pathway before excretion.

2. COMPLETE THE ENZYME MATRIX

Syllabus Check: Complete the orange dashed boxes inside this colorful table to identify how organic food substrates break down.

Enzyme Class	Production Site	Site of Action	Substrate Treated	Final Product(s)
Amylase	Salivary Glands	Mouth Cavity	[Write Substrate]	Maltose / Glucose
Protease	Stomach Wall	Stomach	Proteins	[Write Product]
Lipase	Pancreas	Small Intestine	Lipids (Fats)	[Write Product]

3. MICROSCOPIC PICTURES: THE INTESTINAL VILLUS

Extended Level Analysis: Examine the magnified picture model of a villus structure below, then answer the structural biology questions.

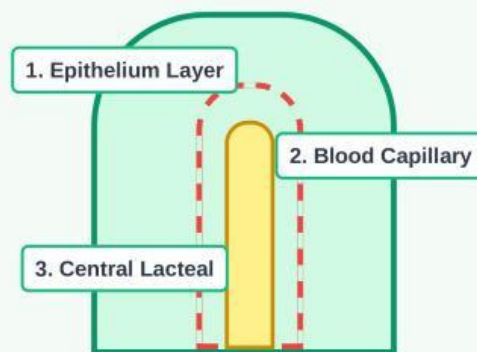


Figure 2: Micro-Anatomy of Absorption Surface

Question 3.1: State two structural adaptations visible in the **villus picture** that increase the speed of chemical transport into the circulatory system:

Adaptation 1:

Adaptation 2:

Extended Syllabus

Question 3.2: Based on the picture diagram, name the specific nutrient molecules absorbed directly by the yellow ****Central Lacteal (3)**** compared to the red ****Blood Capillary (2)****.

Lacteal absorbs:

Capillary network absorbs: