



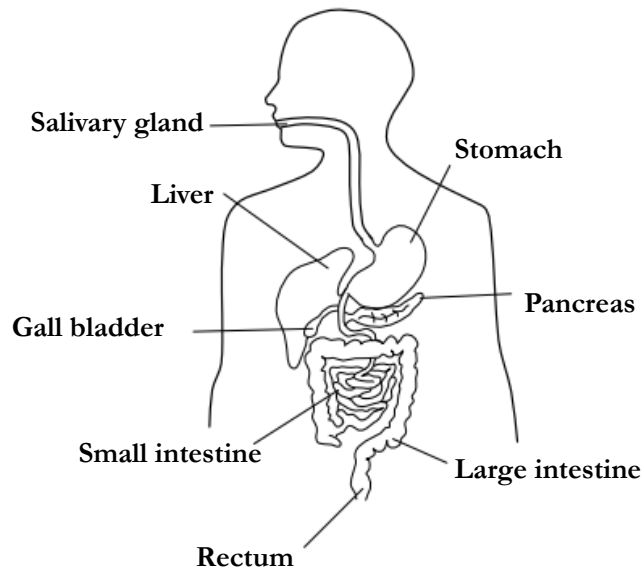
Digestion

1 What is the role of the digestive system?

To break down the food we eat into smaller soluble molecules.
Then absorb these nutrients into the body.

[2 marks]

2 Label the follow image of the digestive system



[6 marks]

3 Give an example of physical breakdown and explain why it is necessary

Chewing - Increases surface area for enzymes

Churning of stomach - Mixing of food to increase surface area for enzymes

[2 marks]

4 State where bile is made and stored. Then describe and explain it's two main roles.

Made: Liver

Stored: Gall bladder

1) Neutralising acids from the stomach (as bile is alkaline) so that digestive enzymes can function well

2) Emulsifying (breaking apart) fats to increase their surface for enzymes

[6 marks]

GCSE Biology

5 Give 2 roles of the stomach

- 1) Produces hydrochloric acids to kill bacteria / provide pH for pepsin
- 2) Produces proteases to digest proteins

[2 marks]

6 What is the role of the pancreas?

Releases digestive enzymes - carbohydrases, proteases, lipases.

[1 mark]

7 What is the role of the large intestine?

To absorb water from the undigested bowel contents, forming faeces.

[1 mark]

8 What are the roles of the small intestine and how is it adapted to these functions?

Aid digestion

By producing digestive enzymes

Absorption/ exchange of nutrients

Villi create a large surface area

Walls are only one cell thick, so short diffusion distance

Good blood supply

[5 marks]

[Total - 25 marks]