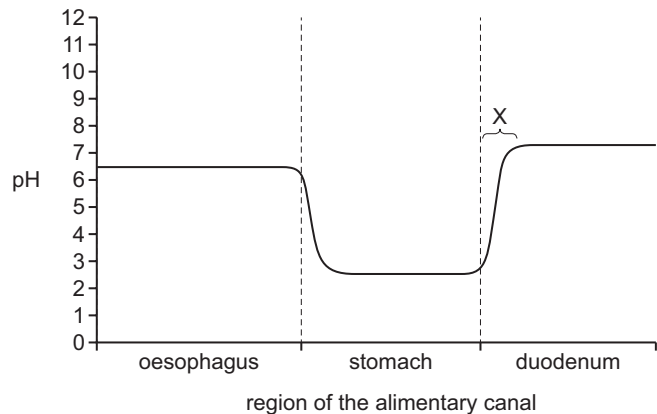


- 10 What is a role of bile?
- A It contains enzymes that digest starch.
 - B It emulsifies fats, increasing their surface area.
 - C It kills bacteria in food.
 - D It provides the optimum pH for pepsin activity.

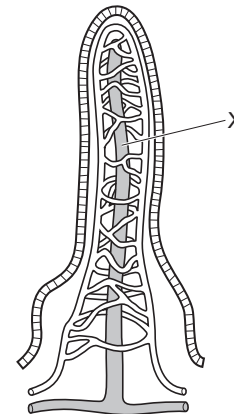
- 8 The graph shows the changes in pH in the oesophagus, stomach and duodenum.



Which substance causes the change in pH at the point labelled X?

- A bile
- B gastric juice
- C glucagon
- D trypsin

- 12 The diagram shows a villus.



Which row shows the name and function of the part labelled X?

	name	function
A	capillary	absorption of amino acids and glucose
B	capillary	absorption of fatty acids and glycerol
C	lacteal	absorption of amino acids and glucose
D	lacteal	absorption of fatty acids and glycerol

1 (a) Describe what is meant by the term physical digestion.

.....

.....

.....

.....

..... [2]

(b) Fig. 1.1 is a diagram of the human digestive system.

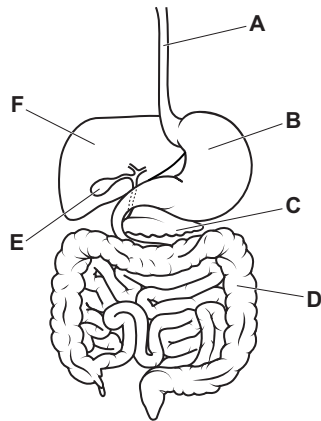


Fig. 1.1

State the letter from Fig. 1.1 that shows one part where:

physical digestion occurs

glucagon is produced

bile is produced.

[3]

(c) Explain the role of bile in physical digestion.

.....

.....

.....

.....

.....

.....

..... [3]

(d) Physical digestion also occurs in the mouth.

State the names **and** functions of **two** types of human teeth.

1

.....

2

..... [2]

(e) Fig. 1.2 is a photomicrograph of part of one villus in the small intestine.

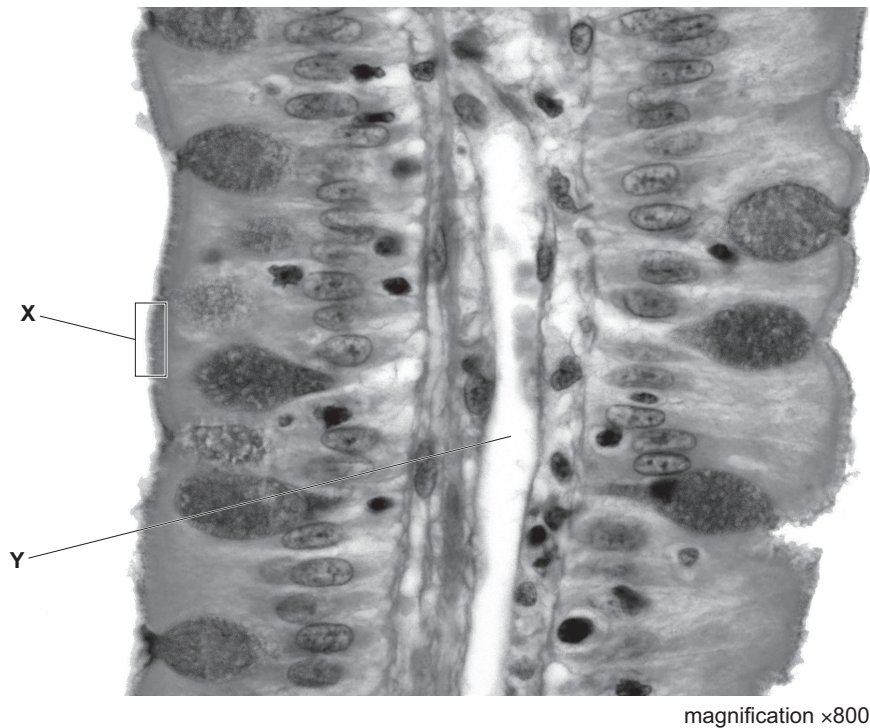


Fig. 1.2

Identify **and** explain the roles of the parts labelled **X** and **Y** in Fig. 1.2.

..... [4

[Total: 14]

9 The table shows the recommended daily allowance (RDA) of some nutrients for young children.

The table also shows the masses of these nutrients eaten by a child in one day.

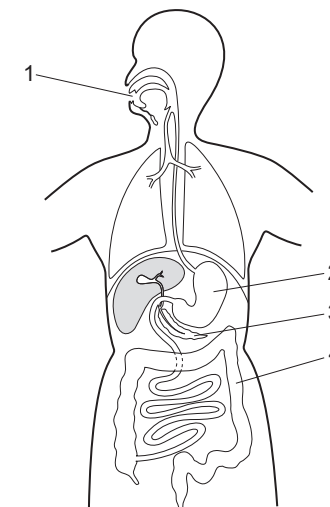
	mass of vitamin C /mg	mass of vitamin D /μg	mass of iron /mg	mass of calcium /mg
RDA	50	10	11	260
mass eaten in one day	54	5	11	150

Which conditions will the child be at risk of developing if they consume the same diet for a long period of time?

- 1 anaemia (**not** having enough red blood cells)
- 2 rickets
- 3 scurvy

A 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 2 only

11 In which parts of the digestive system does physical digestion occur?



A 1, 2 and 3 **B** 1 and 2 only **C** 2 and 3 only **D** 4 only

(b) (i) Describe the role of chemical digestion.

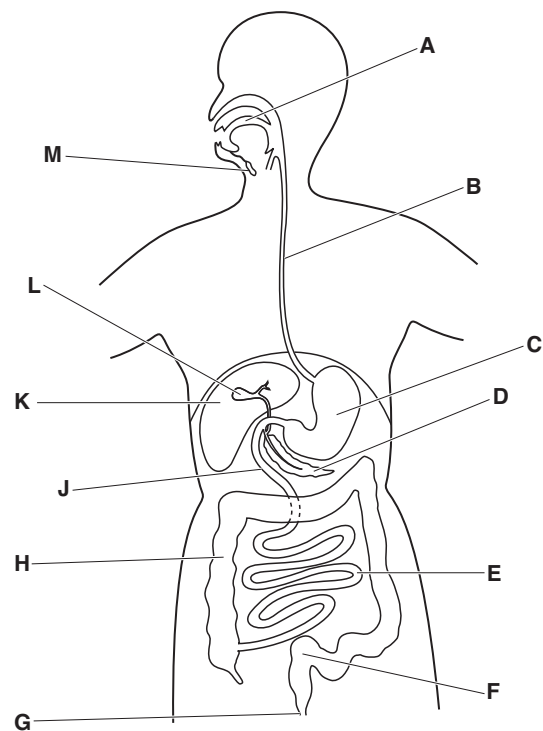


Fig. 1.1

Table 1.1 shows information about some of the structures shown in Fig. 1.1.

Complete Table 1.1, using Fig. 1.1.

Table 1.1

name of the structure	function	letter in Fig. 1.1
		G
	produces amylase	
gall bladder		
	transports food to the stomach	

(b) (i) Describe the role of chemical digestion.

..... [3]

(ii) Maltose is digested by maltase.

State the name of the product of this reaction.

..... [1]

(iii) Describe where maltose is digested in the small intestine.

..... [1]

[Total: 15]