

Absorption: practice questions

5 questions · 14 marks · mark scheme at the back

For Cambridge IGCSE Biology 0610 (and 0970, which has the same content). **Supplement** is Extended content, only examined on Papers 2 and 4.

Name

Total / 14

1 In which region of the digestive system are nutrients absorbed? [1 mark]

- A. ☐ Oesophagus
- B. ☐ Small intestine
- C. ☐ Rectum
- D. ☐ Mouth

2 State where water is absorbed in the digestive system. [2 marks]

3 **Supplement** [3 marks]

Explain the significance of villi and microvilli in the small intestine.

4 **Supplement** [4 marks]

Describe the structure of a villus.

5

Supplement

[4 marks]

(a) State what is absorbed into the capillaries of a villus. [2] (b) Name the vessel in the centre of a villus that absorbs the products of fat digestion, and name these products. [2]

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Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1]

B B (small intestine)

2. [2]

- most in the small intestine (1)
- some in the colon / large intestine (1)

3. [3] **Supplement**

- increase the (internal) surface area (1)
- microvilli on the epithelial cells of each villus increase the area further (1)
- for absorption of (digested) nutrients (into the blood) (1)
- so absorption is faster / more is absorbed in a given time (1)
- Max 3

4. [4] **Supplement**

- finger-like projection (1)
- wall is one cell thick / thin epithelium (1)
- surface cells have microvilli (1)
- network of capillaries (1)
- lacteal in the centre (1)
- Max 4

5. [4] **Supplement**

- (a) glucose (1)
- amino acids (1) allow vitamins / mineral ions / water
- (b) lacteal (1)
- fatty acids and glycerol (1)