

Solutions

Each answer shows the steps, then the **result**.

2.1

- **mouth** → **oesophagus** → **stomach** → **small intestine** → **large intestine** → **anus**

2.2

- egestion is **undigested food leaving the body as faeces**

3.1 C

- the **pancreas** adds juice; food does **not** pass through it
- A, B and D are parts of the canal

3.2

(a)

- taking food in is **ingestion**

(b)

- **egestion** removes undigested food that was never absorbed
- **excretion** removes waste products of metabolism made inside cells

3.3

(a)

- **ingestion**: taking food in through the mouth
- **digestion**: large insoluble molecules → small soluble ones
- **absorption**: small molecules pass through the gut wall into the blood
- **assimilation**: absorbed molecules used by cells
- **egestion**: undigested food leaves through the anus

(b)

- chemical digestion: mainly the **small intestine**
- absorption of digested food: **small intestine** (villi)
- absorption of water: **large intestine**

(c)

- liver makes **bile**, released into the small intestine
- pancreas makes **pancreatic juice** with enzymes, into the small intestine

(d)

- circular and longitudinal muscles **contract and relax** in turn
- a wave of contraction **pushes food forward**