The alimentary canal and peristalsis

Teacher / technician

YEAR 10 / LESSON 52 / BIOLOGY + SCIENCE (DOUBLE AWARD)

Staff preparation and answer guidance. Keep separate from student sheets. Original learning tasks; no supplied numerical example represents class measurements.

Coverage and delivery

Shared Biology / Double Award: 2.27–2.28. Gut structure and movement.

Allow about 60 minutes. Follow the student sequence and use the answers to check reasoning.

Requisition • class of 30, working in 15 pairs

Item	Per pair / setup	Class total
Student booklets	1 per learner	30
Clean sleeves / soft balls / rulers	1 of each per pair	15 sets

Immediate safety

Use clean modelling materials only. Keep balls and sleeves away from mouths; do not throw balls or wrap sleeves around anyone. No biological samples are handled.

Preparation and delivery

Read alongside the student method

YEAR 10 / LESSON 52 / BIOLOGY + SCIENCE (DOUBLE AWARD)

1. Provide 30 booklets and 15 rulers, clean fabric sleeves and suitably sized soft balls. Check that a coordinated squeeze can move the ball without excessive force.

2. Use a labelled alimentary-canal reference diagram to check pupils' routes. Keep the model away from mouths and keep answers separate until pupils attempt the questions.

Close of lesson

• Return models and keep the corrected work.

Check before teaching

Check the cards, reference data and quantities against this requisition. Keep the staff answer guide separate until the checking stage. Supplied numerical practice datasets are labelled examples; they are not class measurements.

Answers and teaching notes

Expected explanations • do not give as experimental observations

YEAR 10 / LESSON 52 / BIOLOGY + SCIENCE (DOUBLE AWARD)

- No; pancreatic secretions enter the small intestine.
- Coordinated waves of muscular contraction moving gut contents.
- The small intestine; this course focuses on the ileum’s absorptive adaptations.
- Absorbing water and ions.
- Egestion removes undigested gut material; excretion removes metabolic waste.
- It lacks living muscles, enzymes, absorption and biological control.

References and provenance

Pearson Biology specification

Prepared 22 November 2026. Original wording, tables and questions. Sources inform the concepts and technique; the lesson scope and classroom quantities are explicitly described here. No laboratory trial or final school risk approval is claimed.