Motion review: choosing the right calculation

Teacher / technician

YEAR 10 / LESSON 15 / PHYSICS + SCIENCE (DOUBLE AWARD)

Staff preparation and answer guidance. Keep separate from student sheets. Record actual measurements separately from labelled practice examples.

Coverage and delivery

Shared Physics / Double Award: Review of 1.3–1.9. Graphs, speed and acceleration.

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
Booklet/graph paper/ruler	1 set per learner	30 sets
Earlier evidence packs with labelled spares	1 per pair	15 sets

Immediate safety

Desk-based review only. Do not repeat trolley runs or walk in corridors during this activity.

Preparation and delivery

Read alongside the student method

YEAR 10 / LESSON 15 / PHYSICS + SCIENCE (DOUBLE AWARD)

1. Bring earlier records and anonymised spares with their origin labelled. Provide 30 booklets/graph sheets and 15 evidence packs.

2. Keep answer guidance separate until an attempt has been made. Use the pupils' original uncertainty discussion instead of inventing ideal experimental results.

Close of lesson

• Return shared evidence packs and keep 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 15 / PHYSICS + SCIENCE (DOUBLE AWARD)

- 1.25 m s^{-1}.
- 1.5 m s^{-2}.
- 30 m.
- Stationary during that interval.
- Constant nonzero velocity.
- No; the method or calibration must address the bias.

References and provenance

Pearson Physics 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.