

The parallel cross-sections of objects and recognise their relationships to...

compare the parallel cross-sections of objects and recognise their relationships to right prisms

Learning intention

- compare the parallel cross-sections of objects and recognise their relationships to right prisms

Teach and model

- using objects made of foam or polystyrene, slice along different cross-sections, and record the different shapes of faces that result; comparing cross-sections of different...
- using different pieces of fruit, slicing across different cross-sections, drawing the cross-section; reporting back to the class the results of the investigation
- observing and drawing the shapes resulting from different ways of slicing through familiar objects; for example, slicing carrots at different angles or cutting through...

Check understanding

- Explain the main idea in the parallel cross-sections of objects and recognise their relationships to... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.