

Solve problems involving the volume and capacity of right prisms...

solve problems involving the volume and capacity of right prisms using appropriate units

Learning intention

- solve problems involving the volume and capacity of right prisms using appropriate units

Teach and model

- using models to demonstrate the number of cubic centimetres in a cubic metre and relating this to capacities of millilitres and litres, recognising that one millilitre is...
- solving practical problems involving volume and capacity; for example, optimal packaging and production
- choosing which measurements are useful to consider when solving practical problems in context; for example, when purchasing a new washing machine, the dimensions are...

Check understanding

- Explain the main idea in solve problems involving the volume and capacity of right prisms... 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.