

Represent objects in 2 dimensions; discuss and reason about the...

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Learning intention

- represent objects in 2 dimensions; discuss and reason about the advantages and disadvantages of different representations

Teach and model

- deconstructing packaging to identify shapes and nets
- using different nets to construct prisms and determining which nets will make a cube, rectangular prism, triangular prism or pyramid
- using aerial views of buildings and other three-dimensional structures to visualise the footprint made by the building or structure, identifying prisms that could approximate...

Check understanding

- Explain the main idea in represent objects in 2 dimensions; discuss and reason about the... 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.