

Construct and use appropriate representations, including tables, graphs and visual...

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Learning intention

- construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe...

Teach and model

- exploring how different representations can be used to show different aspects of relationships, processes and trends
- representing circuits using virtual simulations or circuit diagrams and indicating the direction of electricity flow
- using line graphs to show changes in growth over time under different physical conditions

Check understanding

- Explain the main idea in construct and use appropriate representations, including tables, graphs and visual... 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.