

Analyse methods, conclusions and claims for assumptions, possible sources of...

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Learning intention

- analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

Teach and model

- identifying assumptions then examining if extra variable controls are required and how these might affect the data and conclusion
- identifying sources of error in methods such as inconsistent variable control and inaccuracies in procedures or measurements, and explaining how the...
- comparing results with other groups or secondary sources to examine consistency and describing where there may be conflicting results or conclusions

Check understanding

- Explain the main idea in analyse methods, conclusions and claims for assumptions, possible sources of... 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.