

Plan and conduct reproducible investigations to answer questions and test...

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

Learning intention

- plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate...

Teach and model

- comparing the method with the hypothesis and examining the reasonableness of the method for testing that hypothesis
- discussing why it is important to identify variables and assumptions when planning an investigation
- examining the features of reproducible investigations, constructing methods and reviewing other students' methods

Check understanding

- Explain the main idea in plan and conduct reproducible investigations to answer questions and test... 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.