

Examine how people use data to develop scientific explanations

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Learning intention

- examine how people use data to develop scientific explanations

Teach and model

- examining age-appropriate scientific journal articles, identifying common text features and exploring why the scientific community might have conventions for sharing...
- viewing or listening to documentaries or news reports that feature researchers and identifying how they talk about their area of research, particularly references to...
- investigating how ecologists use food chain data to develop explanations for population decline of native species such as the Richmond birdwing butterfly, and to develop...

Check understanding

- Explain the main idea in examine how people use data to develop scientific explanations 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.