

Develop investigable questions, reasoned predictions and hypotheses to test relationships...

develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models

Learning intention

- develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models

Teach and model

- discussing how a tested hypothesis may lead to further predictions and testing to determine if the prediction is supported
- developing hypotheses about the role of human activity in changes to climate and investigating these using secondary data
- observing a change in the frequency of extreme weather events and hypothesising causes from scientific models, such as: 'If the El Niño weather pattern occurs more...

Check understanding

- Explain the main idea in develop investigable questions, reasoned predictions and hypotheses to test relationships... 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.