

Explain how new evidence or different perspectives can lead to...

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Learning intention

- explain how new evidence or different perspectives can lead to changes in scientific knowledge

Teach and model

- identifying how technological developments, such as those related to microscopes and medical imaging, have led to improved understanding of cells and organs
- considering how advances in technologies have enabled the repair and replacement of organs using synthetic materials
- analysing how sustainability priorities such as efficiency and limiting environmental impact have led to innovative practices in mining and mine site regeneration

Check understanding

- Explain the main idea in explain how new evidence or different perspectives can lead to... 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.