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

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

Learning intention

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

Teach and model

- exploring how scientists are re-examining the relationships between organisms to refine the classification of species as they discover new information or interpret...
- researching developments in the understanding of astronomy, such as the predictions of eclipses and the calculation of the length of the solar year by Abu Abdallah...
- investigating how aeronautical engineers' understanding of the nature of the forces acting in flight have led to changes in the design of aircraft

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.