

Solve problems involving very small and very large measurements, time...

solve problems involving very small and very large measurements, time scales and intervals expressed in scientific notation

Learning intention

- solve problems involving very small and very large measurements, time scales and intervals expressed in scientific notation

Teach and model

- representing very large and small real numbers in scientific notation, converting real numbers expressed in scientific notation into decimal form; for example, the...
- using knowledge of place value and applying exponent laws to operate with numbers expressed in scientific notation in applied contexts; for example, performing...
- examining the degree of accuracy that different measurement instruments provide in a science laboratory, such as a measuring cylinder compared with a pipette, and...

Check understanding

- Explain the main idea in solve problems involving very small and very large measurements, time... 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.