



Scientific notation

GRADE 8 MATH

Name _____

Date _____

Leave every answer in proper scientific notation. Show your working.

WORKED EXAMPLE

One non-zero digit before the point. Multiplying adds the powers; adding does not move them. How many times as much → divide.

1. Write 4 200 and 0.00056 in scientific notation.

FLUENCY

Show your thinking

Answer

2. Write 3×10^6 as an ordinary number.

FLUENCY

Show your thinking

Answer

3. Write 7×10^{-2} as an ordinary number.

FLUENCY

Show your thinking

Answer

4. Is 34×10^4 in scientific notation? If not, rewrite it.

REASONING

Show your thinking

Answer

5. Work out $(3 \times 10^4) \times (5 \times 10^3)$.

APPLICATION

Show your thinking

Answer

6. Work out $(6 \times 10^8) \div (2 \times 10^3)$.

APPLICATION

Show your thinking

Answer

7. Work out $5 \times 10^6 + 2 \times 10^6$, and explain why the power stays the same.

REASONING

Show your thinking

Answer

8. A cell is 2×10^{-5} m wide and an atom 1×10^{-10} m. How many times wider is the cell?

APPLICATION

Show your thinking

Answer

9. Which is bigger, 4×10^{-3} or 9×10^{-4} ? Explain.

REASONING

Show your thinking

Answer

10. Work out $8 \times 10^5 + 3 \times 10^4$. (Careful — the powers differ.)

APPLICATION

Show your thinking

Answer