

Close and Check



Focus Question

How can negative powers of 10 make small numbers easier to write and compare?



Do you know **HOW**?

1. The diameter of an average snowflake is about 10 micrometers. That is approximately 0.0003937 in. Express the diameter of a snowflake in scientific notation.

2. The diameters of atoms can vary. One particular atom has a diameter of 5.0×10^{-8} cm. Express the diameter of the atom in standard form.

3. The measurement 8.16 micrometers equals 8.16×10^{-6} meter. The measurement 2.04 centimeters equals 2.04×10^{-2} meter. How many times greater is the centimeter measurement than the micrometer measurement?



Do you **UNDERSTAND**?

4. **Writing** Do you agree or disagree with the statement below? Explain.

Scientific notation is a method used to rewrite very large or very small numbers as a number n greater than 0 times an integer power of 10.

5. **Error Analysis** An earthworm travels 0.0000425 miles per second. A friend writes the rate as 4.25×10^5 mps. Explain her error. Write the correct rate in scientific notation.
