

Parent Guide to the

# Scientific Notation Operations

## Today's Standard

8.EE.A4 - Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology

# Real-World Applications for this Standard

Calculating distances in astronomy using light-years; Measuring microscopic organisms in biology; Expressing national debt in economics; Calculating the speed of tectonic plate movements; Converting units in physics experiments

## Today I Learned

Today we learned about scientific notation. It's a way to write very big or very small numbers using powers of ten.

## **Common Stumbling Blocks**

Some kids might think the exponent changes when multiplying or dividing in scientific notation. Others might not know when to use scientific notation or regular numbers.

#### Quiz Me

- What is scientific notation?
- When do we use scientific notation?
- What happens to the exponent when we multiply in scientific notation?
- Can you give an example of a big number in scientific notation?
- Why is scientific notation useful?

#### Help Me

Scientific notation helps us write very big or very small numbers easily. For example, scientists use it to measure things in space or tiny cells. It makes calculations simpler and helps us understand the size of things better.