

NAME _____

DATE _____

Module 11 Simplifying Algebraic Expressions
with Polynomials
Lesson 2 Using Scientific Notation



**guided
notes**

Lesson Objectives

- Convert numbers between scientific notation and standard form.
- Multiply and divide numbers written in scientific notation.

Scientific notation is used for keeping track of place value in

_____ or _____ numbers.

A number is in scientific notation if it is written in the form $a \times 10^n$

$a < 10$ and n is an integer.

In scientific notation, small numbers are written with _____,

and larger numbers are written with _____.

- 1 The number of meters in one micron is 1×10^{-6} . Write this number in standard form. _____
- 2 There are 110,000 hairs on an average human head. Write this number in scientific notation. _____
- 3 Each side of a square microchip is 9×10^{-3} m long. Find the area of the microchip. _____
- 4 The mass of Earth is 6×10^{27} g. The mass of the planet Pluto is 1.3×10^{25} g. How many times greater is Earth's mass than Pluto's mass?



