

## Chapter 1: Exponents

**Big Idea:** You can use exponential notation to represent repeated multiplication of the same factor.

Standard	Skill/Objective	Content Vocabulary
8.EE.1	Understand and use exponential notation.	base exponent exponential notation power prime factorization
8.EE.1	Use exponents to write the prime factorization of a number.	
8.EE.1	Understand the product of powers property.	
8.EE.1	Understand the quotient of powers property.	
8.EE.1	Multiply and divide expressions in exponential notation.	
8.EE.1	Understand raising a power to a power.	
8.EE.1	Use properties of exponents to simplify expressions.	
8.EE.1	Understand the power of a product property.	
8.EE.1	Understand the power of a quotient property.	
8.EE.1	Use properties of exponents to simplify expressions.	
8.EE.1	Understand zero and negative exponents.	
8.EE.1	Simplify expressions involving zero and negative exponents.	
8.EE.2	Evaluate square roots and cube roots of positive real numbers.	
8.EE.2	Solve real-world problems that use equations involving squares and cubes of unknowns.	

## Chapter 2: Scientific Notation

**Big Idea:** Scientific notation is a way of writing numbers that makes it easier to work with very big or very small numbers.

Standard	Skill/Objective	Content Vocabulary
8.EE.3	Understand the need for scientific notation.	coefficient

## Chapter 2: Scientific Notation

**Big Idea:** Scientific notation is a way of writing numbers that makes it easier to work with very big or very small numbers.

8.EE.3	Write numbers in scientific notation or in standard form.	scientific notation standard form
8.EE.3	Compare numbers in scientific notation.	
8.EE.4	Add and subtract numbers in scientific notation.	
8.EE.4	Introduce the prefix system.	
8.EE.4	Multiply and divide numbers in scientific notation.	
8.EE.4	Solve real-world problems involving the calculation of numbers in different forms.	
8.EE.4	Use calculators to operate in scientific notation.	