Unit 2 Operations with Numbers

Content Area: **Special Education**
Course(s):
Time Period: **September**
Length: **6 weeks**
Status: **Published**

Enduring Understandings

Properties of operations can be used to simplify and write equivalent expressions.

Scientific notation is “shorthand” for very small and very large numbers and why that is advantageous.

Every number has one unique prime factorization.

Essential Questions

What applications offer contextual examples of adding two integers with different signs?

How can I determine the prime factorization of a number?

How do number properties assist in computation?

Content

Vocabulary

Prime number

Composite number

Prime Factorization

Factor tree

Monomial

Common factor

Greatest Common Factor

Relatively Prime

Skills

Write the prime factorization of numbers.

Write numbers using exponents.

Find the GCF of two or more whole numbers.

Find the least common multiple of two numbers.

Perform operations with positive and negative integers.

Perform operations with fractions.

Follow the order of operations to simplify numerical expressions.

Explore powers of 10.

Perform operations using scientific notation.

Resources

Standards

CCSS: Mathematics

CCSS: Grade 6

The Number System

6. NS.B. Compute fluently with multi-digit numbers and find common factors and multiples.

6. NS.B.4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

Show details

CCSS: Grade 7

The Number System

7.NS.A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

7.NS.A.1c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.

7.NS.A.1d. Apply properties of operations as strategies to add and subtract rational numbers.

7.NS.A.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.

7.NS.A.2c. Apply properties of operations as strategies to multiply and divide rational numbers.

MA.6.NS	The Number System
MA.6.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
MA.6.NS.B	Compute fluently with multi-digit numbers and find common factors and multiples.