

Unit Plan by Prioritized Standards

Content Area	MATH
Grade/Course	6th
Unit of Study	Numbers and their opposites (Rational numbers)
Duration of Unit	24 days - 6 weeks

Insert priority standards below (include code). **CIRCLE or Highlight** the **SKILLS** that students need to be able to do and **UNDERLINE** the **CONCEPTS** that students need to know. **(address “supporting” standards in daily lesson plans)**

MGSE6.NS.5 **Understand** that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

MGSE6.NS.6 **Understand** a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.

MGSE6.NS.6b Understand signs of number in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.

MGSE6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

Skills (what must be able to do)	Concepts (what students need to know)	DOK Level / Bloom's
Understand that positive and negative numbers are used together to describe quantities having opposite directions/values	Extend on previous understanding about a number line that extends to include negative numbers	$\frac{2}{3}$
Understand a rational number as a point on the number line (vertical or horizontal)	Rational numbers represent position on a horizontal or vertical number line; including the coordinate plane as ordered pairs	$\frac{2}{3}$
<p>Skills to Maintain:</p> <ul style="list-style-type: none"> • Changing between fractions and decimals • Finding area of squares, rectangles, and triangles, and finding the perimeter of squares and rectangles. 		

<p>Step 5: Determine BIG Ideas (enduring understandings students will remember long after the unit of study)</p>	<p>Step 6: Write Essential Questions (these guide instruction and assessment for all tasks. The big ideas are answers to the essential questions)</p>
<ul style="list-style-type: none"> • Negative numbers are used to represent quantities that are less than zero such as temperatures, elevation, scores in games or sports, and loss of income in business. • Absolute value is useful in ordering and graphing positive and negative numbers. • Positive and negative numbers are often used to solve problems in everyday life. • Rational numbers are points on a number line. • Numbers in ordered pairs indicate locations in quadrants of the coordinate plane. 	<ul style="list-style-type: none"> • When are negative numbers used and why are they important? • Why is it useful for me to know the absolute value of a number? • How do I use positive and negative numbers in everyday life? • Where do I place positive and negative rational numbers on the number line? • How can I use number lines to find the distances between points?
<p>Essential Unit Vocabulary</p>	
<ul style="list-style-type: none"> • Absolute Value • Distance • Integers • Rational numbers: Positive/Negative numbers • Opposite of numbers • “Sign” of a number 	
<p>Next step, create assessments and engaging learning experiences</p>	