

HPISD Fifth Grade TAG Math

HPISD Fifth Grade TAG Math				
UNIT NAME	ESTIMATED DURATION	9 WEEKS		
UNIT 1: NUMBERS	10 DAYS	1	2	3
Unit Overview				
<p>The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value.</p> <p>The student applies mathematical process standards to represent and use rational numbers in a variety of forms.</p>				
Enduring Understandings				
The student will understand that:	<ul style="list-style-type: none"> • The distance from zero as the absolute value or magnitude of a rational number. • Rational numbers are a subset of the real number system. • Visual representations illustrate the relationship between sets of numbers. • Number lines are used to locate, compare, and order rational numbers arising from mathematical and real world context. • Fraction notation can be written as division. • Place value can be interpreted through number notations. 			
Concepts				
Rational Numbers	A number that can be written in the form of a/b , where a and b are integers and b does not equal zero.			
Number Line	A visual representation of the values of the rational numbers in order from least to greatest from left to right.			
Absolute Value	The distance of a number from zero on a number line.			
Integer	A member of the set of whole numbers and their opposites.			
Inequality	A mathematical sentence that shows the relationship between quantities that are not equal.			
Guiding/Essential Questions				
<ul style="list-style-type: none"> • How can you show interpretation of the value of each place-value position? • How do you identify an integer and its opposite? • How do you compare and order integers and rational numbers? • How do you find and use absolute value of integers and rational numbers? • How can you classify rational numbers? • How can you use a number line to represent and model a problem involving integers? 				
Learning Targets & Progressions				
<ul style="list-style-type: none"> • Students extend their understanding of our real number system to include integers using a number line and a Venn Diagram. <ul style="list-style-type: none"> • Absolute value is the distance from zero 				

<ul style="list-style-type: none"> • A number line is a visual representation of integers and rational numbers • Classify whole numbers, rational numbers, and integers • Identify a number and its opposite • Students will able to compare and order rational numbers and integers. <ul style="list-style-type: none"> • Write inequalities and make statements about the relationship between two numbers • Locate integers and rational numbers on a number line • Students extend their understanding of integers to represent mathematical and real-world problems. <ul style="list-style-type: none"> • Relate integers to the real-world 	
Formative Assessments	Summative Assessments
TEKS: Readiness Standards	TEKS: Supporting Standards
<p>6.2D order a set of rational numbers arising from mathematical and real-world contexts</p>	<p>5.2A represent the value of the digit in decimals through the thousandths using expanded notation and numerals</p> <p>6.2A classify whole numbers, integers, and rational numbers using a visual representation such as a Venn diagram to describe relationships between sets of numbers</p> <p>6.2B identify and number its opposite, and its absolute value</p> <p>6.2C locate, compare, and order integers and rational numbers using a number line</p> <p>6.2E extend representations for division to include fraction notation such as a/b represents the same number as $a \div b$ where $b \neq 0$.</p>
TEKS Process Standards	
<p>5.1A/6.1A apply mathematics to problems arising in everyday life, society, and the workplace</p> <p>5.1B/6.1B use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution</p> <p>5.1C/6.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems</p> <p>5.1D/6.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate</p> <p>5.1E/6.1E create and use representations to organize, record and communicate mathematical ideas</p> <p>5.1F/6.1F analyze mathematical relationships to connect and communicate mathematical ideas</p> <p>5.1G/6.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication</p>	
Processes and Skills:	Facts:
What students should be able to DO	What students should KNOW
<ul style="list-style-type: none"> • Represent place value using expanded notation and numbers • Classify whole numbers, rational numbers, and integers. • Relate integers to the real-world 	<ul style="list-style-type: none"> • Absolute value is the distance from zero • A number line is a visual representation of integers and rational numbers • Rational numbers include integers and whole numbers.

<ul style="list-style-type: none"> • Locate, compare and order integers and rational numbers • Identify a number, its opposite and its absolute value. 	<ul style="list-style-type: none"> • Write inequalities and make statements about the relationship between two numbers.
Topics	
Absolute Value Comparing and ordering integers and rational numbers Expanded Notation Inequalities	Integers and their opposites Number Lines Rational Numbers
Language of Instruction	
Rational number Absolute Value Inequalities Expanded Notation Integers Representations Order	Prime and Composite Positive Negative Classify Compare Opposite
State Assessment Connections	National Assessment Connections
Resources	
HMH, Texas Go Math! Unit 1 Page 1-56	