

Grade 5 Mathematics – Unit 1: Whole Numbers

Phoenixville Area School District

Stage 1 Desired Results		
<p>PA Core Standards: <u>CC.2.1.5.B.1</u> - Apply place value to show an understanding of operations and rounding as they pertain to whole numbers and decimals.</p> <p><u>CC.2.1.5.B.2</u> - Extend an understanding of operations with whole numbers to perform operations including decimals.</p> <p>PSSA Assessment Anchors: <u>M05.A.T.1.1</u> - Demonstrate understanding of place-value of whole numbers and decimals and compare quantities or magnitudes of numbers.</p> <p><u>M05.A-T.2.1</u> - Use whole numbers and decimals to compute accurately (straight computation or word problems).</p>	Transfer	
	<p>TRANSFER GOALS <i>Students will be able to independently use their learning to...</i></p> <ul style="list-style-type: none"> • <i>Number Sense:</i> Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns. • <i>Fluency:</i> Demonstrate automatic recall of addition, subtraction, multiplication and division facts. • <i>Problem-Solving:</i> Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems. • <i>Mathematical Vocabulary:</i> Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale. 	
	Meaning	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Estimation helps determine the reasonableness of an answer. • Identifying relationships between numbers helps classify and compare them. • There are many ways to represent a number. • Mathematics is a language of carefully defined terms and symbols. </td> <td style="width: 50%; padding: 5px;"> <p>ESSENTIAL QUESTIONS <i>Students will keep considering...</i></p> <ul style="list-style-type: none"> • What are different ways to represent a number? • How do I demonstrate the relationship among numbers, quantities, and place value for whole numbers? • How can I use models, words, and expanded forms to order and compare numbers? • Have I sufficiently supported my answer and shown my work? </td> </tr> </table>	<p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • Estimation helps determine the reasonableness of an answer. • Identifying relationships between numbers helps classify and compare them. • There are many ways to represent a number. • Mathematics is a language of carefully defined terms and symbols.
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Knowledge and Skills Acquisition		
<p>KNOWLEDGE <i>Students will know...</i></p>	<p>SKILLS <i>Students will be skilled at...</i></p>	

	<ul style="list-style-type: none"> • Whole numbers can be represented in various forms (standard, word, expanded, place value) • Whole numbers can be compared according to their values, quantities, and magnitudes • Whole numbers can be added, subtracted, multiplied and divided • Real-world situations can involve whole numbers and problem-solving strategies help us make sense of those situations • Sums, differences, products, and quotients can be estimated <p>VOCABULARY</p> <ul style="list-style-type: none"> • Place Value • Estimate • Millions • Factor • Product • Quotient • Dividend • Divisor 	<ul style="list-style-type: none"> • Expressing whole numbers to the millions place in various forms and converting between forms in open-ended questions. • Comparing whole numbers by using their digits' values and visualizing a place value chart. • Explaining why one whole number has a greater/lesser value using precise place value vocabulary. • Calculating across operations using whole numbers in open-ended form and multiple-choice questions (i.e., multiplication with 3-digit factors and division with 2-digit divisors). • Applying a variety of strategies (UPSL – Understand, Plan, Solve, Look Back; modeling; organized step approach) to solve real-world problems involving whole numbers. • Rounding whole numbers to specific places, using the rule of rounding in open-ended format and multiple-choice questions. • Estimating answers by rounding prior to calculating in an open-ended format.
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Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
N/A	N/A	<p>PERFORMANCE TASK(S) <i>Students will demonstrate understanding (meaning-making and transfer) through complex performance by...</i></p> <p>Place Value Performance Task - Optional</p>	<p>Differentiation Considerations: N/A</p>

		<ul style="list-style-type: none"> Luxury Homes Performance Task <p>MIF Chapter 1 Performance Task – Optional</p> <ul style="list-style-type: none"> Student Edition workbook Pages 103-105 	
A/M	<p>All necessary work is shown with no missing information/skipped steps. All representations are clear and labeled accurately.</p>	<p>OTHER EVIDENCE</p> <p>2021-2022 Math in Focus Chapter 1 Test</p> <ul style="list-style-type: none"> M05.A.T.1.1 & M05.A-T.2.1 <p>2021-2022 Math in Focus Chapter 1 Test Cover Sheet</p> <p>*2021-2022 MIF Chapter 1 Test used for place value and operations standards, but moving forward, separate tests to assess standards individually</p> <p>Unit Test A: Whole Numbers (Place Value Concepts) *To be created</p> <ul style="list-style-type: none"> See <i>Math in Focus Chapter 1 Test 1A</i> M05.A.T.1.1 Multiple Choice Open Ended Response Constructed Response Prompts TBD <p>Unit Test B: Whole Numbers (Multiplication & Division) *To be created</p> <ul style="list-style-type: none"> See <i>Math in Focus Chapter 1 Test 1B</i> M05.A-T.2.1 Multiple Choice Open Ended Response Constructed Response Prompts TBD <p>Canvas Assessment used 2020-2021 school year – shared to Commons</p> <ul style="list-style-type: none"> Search “Math in Focus: 5th Grade Chapter 1 Test 2021-2022” 	<p>Differentiation Considerations:</p> <p>[Work on this section after completing Stages 1-2 of all units]</p>