Grade 5 Mathematics – Unit 4: Decimals

Phoenixville Area School District

Stage 1 Desired Results

PA Core Standards:	*Transfer*
CC.2.1.5.B.1 - Apply place-value concepts to show an understanding of operations and rounding as they pertain to whole numbers and decimals. CC.2.1.5.B.2 - Extend an understanding of operations with whole numbers to perform operations including decimals.	TRANSFER GOALS *Students will be able to independently use their learning to…* • *Number Sense*: Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns. • *Fluency*: Demonstrate automatic recall of addition, subtraction, multiplication and division facts. • *Problem-Solving*: Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems. • *Mathematical Vocabulary*: 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	
PSSA Assessment Anchors: M05.A-T.1.1 - Demonstrate understanding of place-value of whole numbers and decimals and compare quantities or magnitudes of numbers. M05.A-T.2.1 - Use whole numbers and decimals to compute accurately (straight computation or word problems).	UNDERSTANDINGS *Students will understand that…* • 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.	ESSENTIAL QUESTIONS *Students will keep considering...* • 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?

	Knowledge and Skills Acquisition	
	KNOWLEDGE *Students will know…* • Decimals represent parts of a whole and can be expressed with digits to the right of the decimal point – an extension of the place value chart for whole numbers • Decimals have value in increments of tenths, hundredths, and thousandths • Decimals can be expressed in various forms (standard, word, expanded, place value) • Decimals can be compared using their digits' values • Decimals can be added, subtracted, multiplied, and divided • Real-world situations can involve decimals and problem-solving strategies help us make sense of those situations • Decimal numbers can be rounded to the "nearest" place value • Decimal sums, differences, products, and quotients can be estimated VOCABULARY • Thousandth • Equivalent • Estimate • Dividend • Divisor	SKILLS *Students will be skilled at…* • Identifying the value of digits in decimal numbers by visualizing/drawing a place value chart. • Expressing decimal values in terms of decimal places using proper mathematical vocabulary orally and in written form. • Converting decimal amounts between different forms in oral, multiple-choice, and written/open-ended formats. • Comparing decimals based on value of places, utilizing comparative strategies such as number line, stacking, etc., in open-ended format. • Performing operations with decimal numbers (i.e., multiplication involving factors to the hundredths and division including whole number divisors only). • Rounding decimals to decimal/whole number places using rounding strategies. • Estimating answers by rounding prior to calculating can be demonstrated in multiple-choice and open-ended formats.

Stage 2 – Evidence			
Code A/M/T	**Evaluative Criteria**	**Assessment Evidence**	
N/A	N/A	PERFORMANCE TASK(S) *Students will demonstrate understanding (meaning-making and transfer) through complex performance by...* **School Supplies Performance Task (Adding and Multiplying Decimals)** Students will add and multiply decimal amounts to find the best prices on school supplies. • *Goal:* Your task is to figure out which school supply store is cheaper for purchasing various school supplies. • *Role/Audience:* You are a 5th grade teacher shopping for your students. • *Situation/Product:* You will use addition and multiplication of decimals to determine total costs of supplies. • *Success Criteria:* Your work, solutions and explanations are accurate and clearly represent the steps you took to answer each question. **Math in Focus: Chapter 4 Performance Task** <u>CC.2.1.5.B.1</u> • MIF Student Edition Pages 325-329 • All problems appropriate for assessment **Math in Focus: Chapter 5 Performance Task** <u>CC.2.1.5.B.2</u> • MIF Student Edition Pages 449-452 • All problems appropriate for assessment	Differentiation Considerations: N/A
A/M	Uses mathematics vocabulary and notation concisely and correctly. All necessary work is shown with no missing information/skipped steps.	**Unit Test A: Decimals** <u>CC.2.1.5.B.1</u> • *See Math in Focus Chapter 4 Test* • Multiple Choice • Open-Ended Response • Constructed Response Prompts (TBD)	Differentiation Considerations: [Work on this section after completing Stages 1-2 of all units]

		Canvas Math in Focus Chapter 4 Test – Shared in Commons • Search "Math in Focus: 5th grade Chapter 4 Test 2020-2021" **Unit Test B: Multiplying and Dividing Decimals** CC.2.1.5.B.2 • *See Math in Focus Chapter 5 Test* • Multiple Choice • Open-Ended Response • Constructed Response Prompts (TBD) **Canvas Math in Focus Chapter 5 Test** – Shared in Commons • Search "Math in Focus: 5th grade Chapter 5 Test 2020-2021"	