

Supporting **STAAR** Readiness in **Grade 4**

ACTIVITY	TOPICS	PAGE
<u>Don't be Punny!</u>	Comparing Fractions Comparing Decimals	8
<u>Cold, Hard Decimal Cash!</u>	Drawing Strip Diagrams or Pictures Writing Equations Solving Problems Using Money Math	13
<u>The Amazing Decimal Number Line Race!</u>	Decimals on the Number Line Time Distance	19
<u>Mr. Peacock's Fireworks Warehouse</u>	Representing & Decomposing Fractions Comparing Fractions Adding Fractions	23
<u>Input-Output & Number Sequences</u>	Patterns in a Table Number Sequences	25
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Standard		Page
(4.2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships as related to place value. The student is expected to:		
4.2B	represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.	8
4.2G	relate decimals to fractions that name tenths and hundredths.	8
(4.3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:		
4.3D	compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$.	8 , 23
4.3E	represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations.	23 , 56
(4.4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:		
4.4A	add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.	13 , 19 , 49
4.4H	solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.	35 , 61 , 68
(4.5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:		
4.5A	represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.	13 , 35 , 49 , 56
4.5B	represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.	25
4.5D	solve problems related to perimeter and area of rectangles where dimensions are whole numbers.	40
(4.6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:		
4.6D	classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.	43
(4.7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:		
4.7C	determine the approximate measures of angles in degrees to the nearest whole number using a protractor.	43
(4.8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:		
4.8C	solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.	13 , 19 , 40
(4.9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:		
4.9A	represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions.	49

		Standard	Page
SUPPORTING STANDARDS	(4.2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships as related to place value. The student is expected to:		
	4.2A	interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left.	13 , 19
	4.2C	compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, or $=$.	8
	4.2D	round whole numbers to a given place value through the hundred thousands place.	8
	4.2E	represent decimals, including tenths and hundredths, using concrete and visual models and money.	13
	4.2F	compare and order decimals using concrete and visual models to the hundredths.	19
	4.2H	determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line.	19
	(4.3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. The student is expected to:		
	4.3A	represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$.	8
	4.3B	decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations.	23
	4.3C	determine if two given fractions are equivalent using a variety of methods.	8 , 23
	4.3G	represent fractions and decimals to the tenths or hundredths as distances from zero on a number line.	19
	(4.4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. The student is expected to:		
	4.4B	determine products of a number and 10 or 100 using properties of operations and place value understandings.	19 , 25 , 49
	4.4C	represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15;	40 , 56 , 68
	4.4D	use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.	35 , 61 , 68
4.4E	represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations.	61 , 68	
4.4F	use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor.	35 , 56 , 61 , 68	

		Standard	Page
SUPPORTING STANDARDS	(4.6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:		
	4.6A	identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.	43
	4.6B	identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure.	43
	4.6C	apply knowledge of right angles to identify acute, right, and obtuse triangles.	43
	(4.7) Geometry and measurement. The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. The student is expected to:		
	4.7D	draw an angle with a given measure.	43
	(4.8) Geometry and measurement. The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. The student is expected to:		
	4.8A	identify relative sizes of measurement units within the customary and metric systems.	19
	4.8B	convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table.	19
	(4.9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:		
	4.9B	solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot.	49
	(4.10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:		
	4.10A	distinguish between fixed and variable expenses.	13
4.10B	calculate profit in a given situation.	13	