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DISTRICT OF COLUMBIA LEARNING STANDARDS CORRELATED TO *MOVING WITH MATH® INTERMEDIATE/MIDDLE (IM) GRADE 6*

		IM1 <i>Number, Reasoning & Data</i> Student Book Skill Builders (SB)	IM2 <i>Fractions, Decimals & Percent</i> Student Book Skill Builders (SB)	IM3 <i>Geometry, Measurement, Graphing</i> Student Book Skill Builders (SB)
	NUMBER SENSE AND OPERATIONS			
	Number Sense			
6.NSO-N.1.	Explain the properties of and compute with rational numbers, expressed in a variety of forms.		2-34 SB: 11-1 to 11-6, 12-1 to 12-10, 13-1 to 13-5, 14-1, 14-2, 15-1 to 15-3, 16-1 to 16-4, 17-1 to 17-4, 18-1 to 18-4, 19-1 to 19-5, 20-1 to 20-5	
6.NSO-N.2.	Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.		5, 43 SB: 11-4, 21-1, 23-2	SB: 14-1, 21-1, 59-1
6.NSO-N.3.	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative or positive.	67 SB: 59-4		
6.NSO-N.4.	Represent rational numbers as repeating or terminating decimals when possible, and translate between these representations.		47, 48, 67-69	SB: 25-1 to 25-4, 30-1 to 30-5

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6.NSO-N.5.	Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.		6, 7, 42-44, 47, 68, 69 SB: 12-1, 12-3 to 12-7, 21-1 to 21-3, 25-1, 25-2, 25-4, 30-1 to 30-3, 30-5	SB: 14-1, 21-1, 24-1, 25-1
6.NSO-N.6.	Apply number theory concepts including prime and composite numbers; prime factorization; greatest common factor; least common multiple; and divisibility rules for 2, 3, 4, 5, 6, 9, and 10 - to the solution of problems.	13-15 SB: 4-1, 4-2	SB: 4-2, 4-3	SB: 4-1
6.NSO-N.7.	Round whole numbers and decimals to any given place.	52, 53 SB: 51-1 to 51-4	9-12 SB: 3-1 to 3-4	SB: 3-1, 51-1
	Computation and Operations			
6.NSO-C.8.	Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers and with positive fractions, mixed numbers, decimals, and percentages.		14-17, 19-23, 28-35, 54-63 SB: 6-1, 7-1, 8-1, 9-1, 10-1, 10-2, 15-1 to 15-3, 16-1 to 16-4, 17-1 to 17-3, 18-1, 18-2, 19-4, 20-1 to 20-5	SB: 26-1, 45-1, 45-3, 45-4
6.NSO-C.9.	Know integer subtraction is the inverse of integer addition; use the number line to model addition and subtraction of integers and add and subtract integers.	23-26 SB: 6-1 to 6-3, 7-1 to 7-4		SB: 59-2
6.NSO-C.10.	Accurately and efficiently add, subtract, multiply, and divide (with multi-digit divisors) whole numbers and positive decimals.	23-26, 35-37, 39-47 SB: 6-1 to 6-3, 7-1 to 7-4, 8-1 to 8-7, 9-1 to 9-5, 10-1, 10-3 to 10-7	54, 55, 57-63 SB: 26-2 to 26-4, 27-1 to 27-6, 28-1 to 28-5	SB: 6-1, 7-1, 8-1, 9-1, 10-1, 18-1, 19-1, 27-1, 28-1

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6.NSO-C.11.	Use prime factorization to add and subtract fractions with like and unlike denominators.		6-9 SB: 12-1 to 12-10	SB: 15-1, 16-1, 17-1, 18-1
6.NSO-C.12.	Accurately and efficiently add, subtract, multiply, and divide positive fractions (including mixed numbers) with like and unlike denominators. Simplify fractions.		6-9, 14-17, 19-23, 25-34 SB: 12-1 to 12-10, 15-1 to 15-3, 16-1 to 16-4, 17-1 to 17-4, 18-1 to 18-4, 19-1 to 19-5, 20-1 to 20-5	SB: 12-1, 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, 19-1, 20-1
6.NSO-C.13.	Calculate given percentages of quantities, and solve problems involving discounts at sales, interest earned, and tips.		70-72 SB: 53-1 to 53-4	SB: 45-1, 53-1
6.NSO-C.14.	Solve simple proportion problems using such methods as unit rate, scaling, finding equivalent fractions, and solving the proportion equation $a/b = c/d$.		6-9 SB: 12-1 to 12-9	57-61 SB: 5-2 to 52-5
6.NSO-C.15.	Apply laws of exponents to multiply whole number powers with like bases.		SB: 4-1	
6.NSO-C.16.	Understand multiplication of a negative number by a positive integer as repeated addition.			
6.NSO-C.17.	Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols.	22 SB: 5-4, 5-6, 5-8	SB: 5-1, 5-2	SB: 5-1
	Estimation			

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6.NSO-E.18.	Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.	27, 28, 48, 51 SB: 49-1, 49-2, 50-1 to 50-3	24-27 SB: 18-3, 18-4, 45-3, 45-5, 45-6, 45-8 to 45-11	
	PATTERNS, RELATIONS, AND ALGEBRA			
6.PRA.1.	Use the properties of equality to solve problems using letter name variables (e.g., $1/4 + x = 7/12$).	71, 72 SB: 56-2 to 56-4		SB: 56-1, 56-2
6.PRA.2.	Write and solve one-step linear equations and check the answers.			SB: 56-2
6.PRA.3.	Identify and describe relationships between two variables with a constant rate of change (e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches). Contrast these with relationships where the rate of change is not constant.			13, 14, 31, 33-37, 40-51 SB: 35-1, 35-2, 36-4, 36-6, 38-1 to 38-13, 41-1, 41-2, 42-2
6.PRA.4.	Simplify expressions of the first degree by combining like terms, and evaluate using specific values.			
6.PRA.5.	Understand that adding or subtracting the same number to both sides of an equation creates a new equation that has the same truth values.	70, 71 SB: 56-1, 56-2, 56-5		SB: 56-2
6.PRA.6.	Understand that multiplying or dividing both sides of an equation by the same nonzero number creates a new equation that has the same truth values.	72 SB: 56-3, 56-5		SB: 12-1, 15-1, 17-1

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6.PRA.7.	Distinguish between an algebraic expression and an equation.	67-72 SB: 56-1 to 56-5, 59-4 to 59-7		58
6.PRA.8.	Recognize when information given in a table, graph, or formula suggests a proportional or linear relationship.			SB: 44-4
6.PRA.9.	Produce and interpret graphs that represent the relationship between two variables (x and y) in everyday situations.	62, 78 SB: 44-4		SB: 44-5
	GEOMETRY			
6.G.1.	Match three-dimensional objects and their two-dimensional representations (e.g., nets, projections, and perspective drawings).			12 SB: 34-7
6.G.2.	Identify angles as vertical, adjacent, complementary, or supplementary; provide descriptions of these terms; and use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle.			23-26 SB: 54-1, 55-1, 55-3
6.G.3.	Determine if two shapes are congruent by motions or series of motions (e.g., translations, rotations, and reflections); predict the results of transformations on unmarked planes and draw the transformed figure (e.g., predict how tessellations transform under translation, reflection, and rotation).			18-20 SB: 60-2 to 60-6

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6.G.4.	Graph points and identify coordinates of points on the Cartesian coordinate plane in all four quadrants.	77, 78 SB: 43-1, 44-4	SB: 43-1	16 SB: 43-1
6.G.5.	Find the distance between two points on horizontal or vertical number lines.			
	MEASUREMENT			
6.M.1.	Differentiate between and use appropriate units of measures for two- and three-dimensional objects (i.e., when finding perimeter, area, and volume).			42-49, 52-54 SB: 38-1 to 38-13, 39-1 to 39-6
6.M.2.	Find areas of triangles and parallelograms. Recognize that shapes with the same number of sides but different appearances can have the same area.			47, 48 SB: 38-7, 38-10
6.M.3.	Develop strategies to find the area and perimeter of complex shapes (e.g., subdividing them into basic shapes such as quadrilaterals, triangles, circles).			49 SB: 38-5
6.M.4.	Solve problems involving proportional relationships and units of measurement (e.g., same system unit conversions, scale models, maps, and speed).			59-61 SB: 52-3 to 52-5
6.M.5.	Understand the concept of volume; use the appropriate units in common measuring systems (e.g., cubic inch, cubic centimeter, cubic meter, cubic yard) to compute the volume of rectangular solids, including rectangular prisms.			52, 53 SB: 39-1 to 39-3

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6.M.6.	Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals; measure the interior angles of various polygons.			5-9 SB: 33-1, 34-1 to 34-5, 37-1, 37-2
6.M.7.	Understand the concept of the constant pi, know the formulas for the circumference and area of a circle. Use the concepts to solve problems.			14 SB: 35-2
6.M.8.	Know and use the formulas for the volumes and surface areas of cubes and rectangular prisms, given the lengths of their sides.			52-55 SB: 39-1 to 39-4
6.M.9.	Find the sum of the angles in simple polygons (up to eight sides) with and without measuring the angles.			SB: 55-2
	DATA ANALYSIS, STATISTICS, AND PROBABILITY			
6.DASP.1.	Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum, and range.	59-62 SB: 46-1 to 46-5		65-67 SB: 46-1
6.DASP.2.	Construct circle graphs using ratios, proportions, and percentages.		37, 38 SB: 48-1 to 48-3	76 SB: 48-1
6.DASP.3.	Construct, label, and interpret stem-and-leaf plots.			75
6.DASP.4.	Use tree diagrams and other models (e.g., lists and tables) to represent possible or actual outcomes of trials.		76-78 SB: 58-1, 58-2, 58-4	SB: 58-1

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6.DASP.5.	Represent two numerical variables on a scatter plot, and describe any apparent relationship that exists between the two variables (e.g., between time spent on homework and grades in class).			72, 73 SB: 44-5, 48-2, 48-3
6.DASP.6.	Compute probabilities of events from simple experiments with equally likely outcomes (e.g., tossing dice, flipping coins, spinning spinners) by listing all possibilities and finding the fraction that meets given conditions. Analyze the outcomes.		73-75, 78 SB: 57-1 to 57-4	SB: 57-1
6.DASP.7.	Use appropriate ratios between 0 and 1 to represent the probability of the outcome and associate the probability with the likelihood of the event; know that 0 probability means an event will not occur and that a probability of 1 means an event will occur.		73-76 SB: 57-1 to 57-4	SB: 57-1