Math Teachers Press, Inc.

Arizona Mathematics Standards Correlated to
Moving with Math Extensions Grade 5

		Student Book	Skill Builders
	STRAND 1: NUMBER AND OPERATION		
	Concept 1: Number Sense		
PO.1	Determine equivalence by converting between benchmark fractions, decimals, and percents.	45	25-1
PO.2	Differentiate between prime and composite numbers; differentiate between factors and multiples for whole numbers.	7, 36	4-1
PO.3	Locate integers on a number line.		
PO.4	Compare and order positive fractions, decimals, and percents.	32, 44	13-1, 24-1
PO.5	Use ratios and unit rates to model, describe and extend problems in context.	48	
PO.6	Express or interpret positive and negative numbers in context.		
	Concept 2: Numerical Operations		
PO.1	Add and subtract decimals through thousandths and fractions expressing solutions in simplest form.	33-35, 37, 38, 46, 47	15-1, 15-2, 15-3, 16-1, 17-1, 17-3, 26-1
PO.2	Multiply multi-digit whole numbers.	15-17	8-3
PO.3	Divide multi-digit whole numbers by whole number divisors with and without remainders.	19, 20, 24, 25	10-1, 10-2
PO.4	Apply the associative, commutative, and distributive properties to solve numerical problems.	8	5-1, 5-2
PO.5	simplify numerical expressions (including fractions and decimals) using the order of operations with or without grouping symbols.		
	Concept 3: Estimation		
PO.1	Make estimates appropriate to a given situation or computation with whole numbers, fractions, and decimals.	11, 12, 18	49-1, 49-2, 50-1
	STRAND 2: DATA ANALYSIS, PROBABILITY, AND DISCRETE MATHEMATICS		
	Concept 1: Data Analysis (Statistics)		
PO.1	Collect, record, organize, and display data using multi-bar graphs or double line graphs.		

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PO.2	Formulate and answer questions by interpreting and analyzing displays of data, including multi-bar graphs or double line graphs.	63	48-1
PO.3	Use mean, median, mode, and range to analyze and describe the distribution of a given data set.	21, 22	46-1, 46-2
	Concept 2: Probability		
PO.1	Describe the theoretical probability of events and represent the probability as a fraction, decimal, or percent.		47-2
PO.2	Explore probability when performing experiments by		
•	predicting the outcome,		47-2
•	recording the data,		47-2
•	comparing outcomes of the experiment to predictions, and		47-2
•	comparing the results of multiple repetitions of the experiment.		47-2
	Concept 3: Systematic Listing and Counting		
PO.1	Analyze relationships among representations and make connections to the multiplication principal of counting.		
PO.2	Solve a variety of counting problems and explain the multiplication principle of counting.		
	Concept 4: Vertex-Edge Graphs		
PO.1	Investigate properties of vertex-edge graphs		
•	Euler paths		
•	Euler circuits, and		
•	degree of vertex		
PO.2	Solve problems related to Euler paths and circuits.		
	STRAND 3: PATTERNS, ALGEBRA, AND FUNCTIONS		
	Concept 1: Patterns		
PO.1	Recognize, describe, create, and analyze a numerical sequence involving fractions and decimals using addition and subtraction.		
	Concept 2: Functions and Relationships		
	No performance objectives at this grade level.		
	Concept 3: Algebraic Representation		
PO.1	Create and solve two-step equations that can be solved using inverse operations with whole numbers.		
	Concept 4: Analysis of Change		
PO.1	Describe patterns of change including constant rate and increasing or decreasing rate.		

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	STRAND 4: GEOMETRY AND MEASUREMENT				
	Concept 1: Geometric Properties				
PO.1	Draw and label 2-dimensional figures given specific attributes including angle measure and side length.		52		
PO.2	Solve problems by understanding and applying the property that the sum of the interior angles of a triangle is 180°.				
PO.3	Classify quadrilaterals by their properties.				
PO.4	Compare attributes of 2-dimensional figures with 3-dimensional figures by drawing and constructing nets and models.		59 (T.G.)		39-1
	Concept 2: Transformation of Shapes				
	No performance objectives at this grade level.				
	Concept 3: Coordinate Geometry				
	No performance objectives at this grade level.				
	Concept 4: Measurement				
PO.1	Solve problems using elapsed time.		60		40-1
PO.2	State an appropriate measure and degree of accuracy in a given context.				
PO.3	Measure angles between 0 and 360 degrees.				37-1
PO.4	Solve problems involving the area of 2-dimensional figures by using the properties of parallelograms and triangles.				
PO.5	Solve problems involving area and perimeter of regular and irregular polygons using reallotment of square units.		57, 58		38-1, 38-2
	STRAND 5: STRUCTURE AND LOGIC				
	Concept 1: Algorithms and Algorithmic Thinking				
PO.1	Analyze common algorithms for adding and subtracting fractions and decimals using the associative, commutative, and distributive properties.				
PO.2	Develop an algorithm or formula to calculate areas and perimeters of simple polygons.				
	Concept 2: Logic, Reasoning, Problem Solving and Proof				
PO.1	Analyze a problem situation to determine the question(s) to be answered.		13		45-1, 45-3
PO.2	Identify relevant, missing, and extraneous information related to the solution to a problem.		13		45-1, 45-3
PO.3	Select and use one or more strategies to efficiently solve the problem and justify the selection.		26		45-1
PO.4	Determine whether a problem to be solved is similar to previously solved problems, and identify possible strategies for solving the problem.		17		

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PO.5	Represent a problem situation using any combination of words, numbers, pictures, physical objects, or symbols.	14		
PO.6	Summarize mathematical information, explain reasoning, and draw conclusions.	journal prompts throughout		
PO.7	Analyze and evaluate whether a solution is reasonable, is mathematical correct, and answers the question.	13, 26		45-1
PO.8	Make and test conjectures based on data or information collected from explorations and experiments.			47-2
PO.9	Identify simple valid arguments using *if…then* statements based on graphic organizers.			
PO.10	Construct *if…then* statements to generalize rules for computation, geometric properties and algebraic functions.	16		