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Arizona Mathematics Standards Correlated to Moving with Math Extensions Grade 3

		Student Book	Skill Builders
	STRAND 1: NUMBER AND OPERATIONS		
	Concept 1: Number Sense		
PO.1	Express whole numbers through six digits using and connecting multiple representations.	1, 2, 8	1-1
PO.2	Compare and order whole numbers through six digits by applying the concept of place value.	3, 4	2-1, 2-2
PO.3	Count and represent money using coins and bills to \$100.00.	63	
PO.4	Sort whole numbers into sets and justify the sort.	5 (T.G.)	
PO.5	Express benchmark fractions as fair sharing, parts of a whole, or parts of a set.	47, 48	30-1, 31-1
PO.6	Compare and order benchmark fractions.	49	32-1
	Concept 2: Numerical Operations		
PO.1	Add and subtract whole numbers to four digits.	15, 16, 18, 21-23	10-1, 10-2, 12-1, 15 1, 15-2, 17-1
PO.2	Create and solve word problems based on addition, subtraction, multiplication, and division.	24-26, 31, 42, 43	10-5
PO.3	Demonstrate the concept of multiplication and division using multiple models.	27-31, 39-41	20-1, 25-1
PO.4	Demonstrate fluency of multiplication and division facts through 10.	33	20-2
PO.5	Apply and interpret the concept of multiplication and division as inverse operations to solve problems.	40	25-2
PO.6	Describe the effect of operations (multiplication and division) on the size of whole numbers	27, 31, 39	
PO.7	Apply commutative, identity, and zero properties to multiplication and apply the identity property to division.	32	
	Concept 3: Estimation		
PO.1	make estimates appropriate to a given situation or computation with whole numbers.	20	
	STRAND 2: DATA ANALYSIS, PROBABILITY, AND DISCRETE MATHEMATICS		

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	Concept 1: Data Analysis (Statistics)		
PO.1	Collect, record, organize, and display data using frequency tables, single bar graphs, or single line graphs.	64	50-1
PO.2	Formulate and answer questions by interpreting and analyzing displays of data, including frequency tables, single bar graphs, or single line graphs.	64	50-1
	Concept 2: Probability		
	No performance objectives at this grade level.		
	Concept 3: Systematic Listing and Counting		
PO.1	Represent all possibilities for a variety of counting problems using arrays, charts, and systematic lists; draw conclusions from these representations.		
PO.2	Solve a variety of problems based on the multiplication principle of counting.		
	Concept 4: Vertex-Edge Graphs		
PO.1	Color complex maps using the least number of colors and justify the coloring.		
PO.2	Investigate properties of vertex-edge graphs		
•	circuits in a graph,		
•	weights on edges, and		
•	shortest path between two vertices.		
PO.3	Solve problems using vertex-edge graphs.		
	STRAND 3: PATTERNS, ALGEBRA, AND FUNCTIONS		
	Concept 1: Patterns		
PO.1	Recognize, describe, extend, create, and find missing terms in a numerical sequence.	5	3-1
PO.2	Explain the rule for a given numerical sequence and verify that the rule works.		
	Concept 2: Functions and Relationships		
PO.1	Recognize and describe a relationship between two quantities, given by a chart, table or graph, in which the quantities change proportionally, using words, pictures, or expressions.		
PO.2	Translate between the different representations of whole number relationships, including symbolic, numerical, verbal or pictorial.		
	Concept 3: Algebraic Representations		
PO.1	Record equivalent forms of whole numbers to six digits by constructing models and using numbers.	1, 2, 8	

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PO.2	Use a symbol to represent an unknown quantity in a given context.	13, 14, 32	9-1, 9-2
PO.3	Create and solve simple one-step equations that can be solved using addition and multiplication facts.	31	
	Concept 4: Analysis of Change		
	No performance objectives at this grade level.		
	STRAND 4: GEOMETRY AND MEASUREMENT		
	Concept 1: Geometric Properties		
PO.1	Describe sequences of 2-dimensional figures created by increasing the number of sides, changing size, or changing orientation.		
PO.2	Recognize similar figures.		
PO.3	Identify and describe 3-dimensional figures including their relationship to real world objects: sphere, cube, cone, cylinder, pyramids, and rectangular prisms.	57	40-1
PO.4	Describe and compare attributes of two- and three-dimensional figures.		
	Concept 2: Transformation of Shapes		
PO.1	Identify a translation, reflection, or rotation and model its effect on a 2-dimensional figure.		
PO.2	Identify, with justification, all lines of symmetry in a 2-dimensional figure.	55	
	Concept 3: Coordinate Geometry		
	No performance objectives at this grade level.		
	Concept 4: Measurement		
PO.1	Determine elapsed time		
•	across months using a calendar		
•	by hours and half hours using a clock.		
PO.2	Apply measurement skills to measure length, weight, and capacity using US Customary units.	59	42-2, 43-1
PO.3	Convert units of length, weight, and capacity	60	44-1, 44-2, 45-1
•	inches or feet to yards,	60	44-1
•	ounces to pounds, and		44-2
•	cups to pints, pints to quarts, quarts to gallons.		44-2
PO.4	Determine the area of a rectangular figure using an array model.	62	
PO.5	Measure and calculate perimeter of 2-dimensional figures.	61	46-1
	STRAND 5: STRUCTURE AND LOGIC		
	Concept 1: Algorithms and Algorithmic Thinking		

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	No performance objectives at this grade level.		
	Concept 2: Logic, Reasoning, Problem Solving, and Proof		
PO.1	Analyze a problem situation to determine the question(s) to be answered.	24, 25, 42, 43	10-5
PO.2	Identify relevant information related to the solution to a problem.	25, 43	
PO.3	Select and use one or more strategies to efficiently solve the problem and justify the selection.	42	
PO.4	Determine whether a problem to be solved is similar to previously solved problems, and identify possible strategies for solving the problem.	13, 14	
PO.5	Represent a problem situation using any combination of words, numbers, pictures, physical objects, or symbols.	31, 42, 43	
PO.6	Summarize mathematical information, explain reasoning, and draw conclusions.	journal prompts throughout	
PO.7	Analyze and evaluate whether a solution is reasonable, is mathematically correct, and answers the question.	24	
PO.8	Make and test conjectures based on data (or information) collected from explorations and experiments.	27, 30	50-3, 50-4