Camelot Learning
Computation
Correlation to the Hawaii Public Schools' Performance Standards

Lesson Numbers and Quest	Standard	Grade	Code	Benchmarks
Lessons 1, 2 How can you use your knowledge of the commutative property to recall basic addition facts?	**Standard 2**: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other	3	MA.3.2.4	• Use properties of addition of whole numbers (e.g., associative, commutative) to solve problems
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
	Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	2	MA.2.9.1	• Describe and create addition and subtraction number patterns (e.g., [20, 17, 14, …])
Lessons 3, 4 How can you use the strategy "Make a Ten" to add and subtract facts to 18?	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
		1	MA.1.3.2	• Use a variety of strategies to solve number problems involving addition and subtraction (e.g., comparing sets, counting on, counting backwards, doubles, doubles plus one)
	Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations	1	MA.1.10.1	• Use objects, pictures, words, and number sentences to represent and solve numerical problem situations involving addition and subtraction
Lessons 5 and 6 How can you use mental math strategies to find sums and differences without	**Standard 9:** Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	3	MA.3.9.3	• Identify and describe patterns in a hundreds chart

doing the written problems in your head?	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
		2	MA.2.3.2	• Use a variety of strategies to solve problems involving addition and subtraction of two-digit numbers
Lessons 7, 8 How can your knowledge of rounding and estimating help you solve multi-digit addition and subtraction problems?	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		3	MA.3.3.2	• Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers
		3	MA.3.3.3	• Estimate the results of whole-number computations
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
	Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems	2	MA.2.1.1	• Represent whole numbers up to 1000 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens and hundreds as units
Lessons 9, 10 How can you use mental math strategies to solve multi-digit whole number	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		3	MA.3.3.2	• Use a variety of strategies to solve problems

strategies in your head?				involving addition and subtraction of two- and three-digit numbers
		3	MA.3.3.3	• Estimate the results of whole-number computations
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
Lessons 11, 12 How does understanding place value help you when you are adding and subtracting numbers that have more than one digit?	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		3	MA.3.3.2	• Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers
		3	MA.3.3.3	• Estimate the results of whole-number computations
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
	Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems	2	MA.2.1.1	• Represent whole numbers up to 1000 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens and hundreds as units
Lessons 13, 14 How can you use your knowledge of place value to help you compare and order large numbers?	**Standard 1:** Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems	2	MA.2.1.1	• Represent whole numbers up to 1000 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens and hundreds as units
		2	MA.2.1.2	• Compare whole numbers up to 1000 using words (e.g., greater than, less than, equal to)
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use	2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty

	computational tools and strategies fluently and, when appropriate, use estimation			
Lessons 15, 16 How can you use your knowledge of place value and basic facts to solve multi-digit subtraction problems?	**Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		3	MA.3.3.2	• Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers
		3	MA.3.3.3	• Estimate the results of whole-number computations
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
	Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems	2	MA.2.1.1	• Represent whole numbers up to 1000 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens and hundreds as units
Lessons 17, 18 How can we use patterns as a problem-solving strategy to generate rules and make predictions?	**Standard 9:** Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	4	MA.4.9.2	• Represent the relationship between quantities in a variety of forms (e.g., manipulatives, tables, pictures, symbols)
		3	MA.3.9.1	• Create and describe growing numerical and spatial patterns and generalize a rule for the pattern
		3	MA.3.9.2	• Use patterns to solve problem situations involving related quantities in which one quantity changes as the other changes
		3	MA.3.9.3	• Identify and describe patterns in a hundreds chart
	Standard 10: Patterns, Functions, and Algebra: SYMBOLIC	5	MA.5.10.2	• Model problem situations with objects or manipulatives and use representations (e.g.

	REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations	4	MA.4.10.3	manipulatives and use representations (e.g., graphs, tables, equations) to draw conclusions • Describe the rate of change numerically and verbally based on data recorded in a table or graph
Lessons 19, 20 How can we solve addition and subtraction problems using data from bar graphs?	**Standard 11:** Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions	4	MA.4.11.2	• Label the parts of a graph (e.g., axes, scale, legend, title)
	Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis	3	MA.3.12.1	• Interpret data (e.g., tallies, chart, tables, bar graphs, line plots) and state what the representation shows about the set of data
	Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data	3	MA.3.13.1	• Answer questions based on data represented in graphs
	Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other	2	MA.2.2.1	• Recognize situations involving addition and subtraction and represent the situation with a number sentence
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	3	MA.3.3.2	• Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers
		2	MA.2.3.1	• Recall addition facts and their corresponding subtraction facts up to twenty
Lessons 21, 22	**Standard 2:** Numbers and Operations:	4	MA.4.2.2	• Use associative, commutative, and

How can you use your knowledge of doubling a number to help you master multiplication facts?	OPERATION SENSE: Understand the meaning of operations and how they relate to each other **Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	2 3	MA.2.2.2 MA.3.3.1	distributive properties as they apply to operations involving whole numbers • Demonstrate multiplication as repeated addition of equal groups • Recall multiplication facts from 0 x 0 to 10 x 10
Lessons 23, 24 How can you use skip counting by multiples to find patterns on the hundreds chart and identify relationships among the patterns?	**Standard 1:** Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems **Standard 2:** Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other **Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation **Standard 9:** Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	4 2 3 3	MA.4.1.2 MA.2.2.2 MA.3.3.1 MA.3.9.3	• Identify and list factors, multiples, prime numbers, and composite numbers • Demonstrate multiplication as repeated addition of equal groups • Recall multiplication facts from 0 x 0 to 10 x 10 • Identify and describe patterns in a hundreds chart .
Lessons 25, 26 How can you use mental math strategies to multiply by	**Standard 1:** Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number	4	MA.4.1.2	• Identify and list factors, multiples, prime numbers, and composite numbers

multiples of 10 and 100?	systems **Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
		3	MA.3.3.1	• Recall multiplication facts from 0 x 0 to 10 x 10
	Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	4	MA.4.9.1	• Extend, create, and generalize growing and shrinking numeric and geometric patterns (including multiplication patterns)
Lessons 27, 28 How can we use our knowledge of addition and division to find the mean distance a marble travels at a given height?	**Standard 12:** Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis	5	MA.5.12.1	• Determine the range, median, mode, and mean for a data set
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	3	MA.3.3.1	• Recall multiplication facts from 0 x 0 to 10 x 10
	Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring	2	MA.2.4.1	• Measure length using inches, feet, and centimeters
Lessons 29, 30 How can you use estimation to help you solve multiplication and division problems?	**Standard 2:** Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other	3	MA.3.2.1	• Recognize situations involving multiplication and division of whole numbers and represent the situation with a number sentence

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	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	3 4 4	MA.3.3.3 MA.4.3.1 MA.4.3.2	• Estimate the results of whole-number computations • Recall all multiplication facts and the corresponding division facts up to 12 x 12 • Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
Lessons 31, 32 How can you use your knowledge of place value to compare numbers and put them in correct order?	**Standard 1:** Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems **Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4 2 4	MA.4.1.1 MA.2.1.2 MA.4.3.1	• Identify place value from ten-thousandths to millions • Compare whole numbers up to 1000 using words (e.g., greater than, less than, equal to) • Recall all multiplication facts and the corresponding division facts up to 12 x 12
Lessons 33, 34 How can you use computational skills of multiplying a 3-digit number by a 2-digit number to solve problems?	**Standard 2:** Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other **Standard 3:** Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	3 3 4 4	MA.3.2.1 MA.3.3.3 MA.4.3.1 MA.4.3.2	• Recognize situations involving multiplication and division of whole numbers and represent the situation with a number sentence • Estimate the results of whole-number computations • Recall all multiplication facts and the corresponding division facts up to 12 x 12 • Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
Lessons 35, 36	**Standard 2:** Numbers and Operations:	3	MA.3.2.1	• Recognize situations involving

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How can you use computational skills of dividing a 3-digit number by a 2-digit number to solve problems?	OPERATION SENSE: Understand the meaning of operations and how they relate to each other	3	MA.3.2.3	multiplication and division of whole numbers and represent the situation with a number sentence • Demonstrate that multiplication and division of whole numbers can undo each other
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	3	MA.3.3.3	• Estimate the results of whole-number computations
		4	MA.4.3.1	• Recall all multiplication facts and the corresponding division facts up to 12 x 12
		4	MA.4.3.2	• Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
Lessons 37, 38 How can you use ordered pairs to identify locations on the grid?	**Standard 8:** Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry	4	MA.4.8.1	• Use ordered pairs to plot points on a coordinate grid
		3	MA.3.8.1	• Use coordinates to locate objects/locations on a grid
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	4	MA.4.3.1	• Recall all multiplication facts and the corresponding division facts up to 12 x 12
Lessons 39, 40 Which strategy can you use to solve multiplication and division problems?	**Standard 2:** Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other	3	MA.3.2.1	• Recognize situations involving multiplication and division of whole numbers and represent the situation with a number sentence
		3	MA.3.2.3	• Demonstrate that multiplication and division of whole numbers can undo each other
	Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently	3	MA.3.3.3	• Estimate the results of whole-number computations
		4	MA.4.3.1	• Recall all multiplication facts and the

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	and, when appropriate, use estimation	4	MA.4.3.2	corresponding division facts up to 12 x 12 • Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers
	Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations	3	MA.3.10.1	• Model situations that involve multiplication and division of whole numbers using objects/pictures and number sentences
		2	MA.2.10.1	• Create a word/story problem for a given number sentence