

Math – Grade 4

District 2853

Month	Content	Performance Standards Addressed	Skills for Student Achievement	Assessment
September	Review Add/Sub regrouping (y/p)	<p>Mathematical Reasoning - Benchmarks #1, #2, #3, #5, #6</p> <p>Number Sense - Benchmark #4</p> <p>Computation and Operation - Benchmarks #1, #2, #3</p> <p>Algebra - Benchmarks #1, #2</p>	<ul style="list-style-type: none"> · Use the properties of arithmetic that involve ordering, grouping and the numbers 1 and 0, to do simple computations with whole numbers · Review the information regarding addition and subtraction operation · Estimating sum amount of $10 + 100$ 	<ul style="list-style-type: none"> · Assignment tests, 10-minute Math
	Number Sense (y/p)	<p>Mathematical Reasoning - Benchmarks #1, #6</p> <p>Number Sense - Benchmarks #1, #2, #4</p> <p>Computation and Operation - Benchmarks #4, #5</p> <p>Patterns and Functions - Benchmark #1</p>	<ul style="list-style-type: none"> · Using patterns of 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 25 to 100 · Associate skip counting with facts · Looking for patterns · Count back by 10's · Read and write whole numbers to 100,000 in numerals and words · Compare and order whole numbers 	<ul style="list-style-type: none"> · Timed tests, 10-minute math, teacher observation, oral reading of numbers, daily assignments
	Adding and Subtracting (y/p)	<p>Mathematical Reasoning - Benchmarks #1, #2, #3, #4, #5</p> <p>Computation and Operation - Benchmarks #1, #2</p> <p>Algebra - Benchmark #1</p> <p>Number Sense - Benchmark #4</p>	<ul style="list-style-type: none"> · Multiples of 10 	<ul style="list-style-type: none"> · Assessment Tests, daily assignments, teacher observation
	<ul style="list-style-type: none"> · Coins (y/p) · Telling time (y/p) 	<p>Measurement - Benchmark #3</p> <p>Mathematical Reasoning - Benchmarks #1, #2, #3, #4, #5, #6</p> <p>Number Sense - Benchmark #4</p> <p>Computation and Operation - Benchmarks #1,</p>	<ul style="list-style-type: none"> · Count money backwards to individual; make change to \$20 · Review telling time to minute 	<ul style="list-style-type: none"> · Count back to teacher · Oral assessment

October	<ul style="list-style-type: none"> Array Multiplication and Division 	<p style="text-align: center;">#2, #3</p> <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4 #5, #6 <p>Algebra</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #4, #5, #6 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 	<ul style="list-style-type: none"> Showing different ways to multiply/divide numbers Know division and multiplication facts Meaning of the word multiplication & division Prime numbers Non-prime/composite numbers Number of groups and/or how many in it (what are you looking for) Know what to do with leftover/remainder in division Looking at factors and multiples 	<ul style="list-style-type: none"> Choice time Assessment tests 6-10; 10-minute math, daily assessments, teacher observation, timed tests (facts), Student Sheet 8.15 (Just introduced and worked with – not tested at this time)
November and December	<ul style="list-style-type: none"> Geometry 	<p>Geometry</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Algebra</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Spatial Sense</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Measurement</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 	<ul style="list-style-type: none"> Understanding vocabulary with relationship to geometry Knowing terms of area, perimeter Learn what a silhouette is Writing instructions for building a code/building an item Share the building instructions & evaluate instruction effectiveness Develop visualization skills – top, side, bottom Introduce 3-D solid geometric slopes 	<ul style="list-style-type: none"> Assessment tests 12-15, 10-minute math, Quick Images, teacher observation, Student Sheets 11, 12 Instruction booklet for toy project
	<ul style="list-style-type: none"> Reviewing Money and Time 	<p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6 	<ul style="list-style-type: none"> Time problem solving 	<ul style="list-style-type: none"> Teacher made assignments, 10-minute math, ongoing oral and written work
November and December	<ul style="list-style-type: none"> Review all four math operations +, -, x, division 3-D drawings 	<p>Algebra</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5 	<ul style="list-style-type: none"> Continuous 	<ul style="list-style-type: none"> 10-minute math, daily assignments

	Calculator	<p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #1, #5, #6 <p>Algebra</p> <ul style="list-style-type: none"> - Benchmark #1 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #5, #6 	<ul style="list-style-type: none"> Using calculator Understand decimal points on calculator Knowing when to use the calculator and not to use one 	
January	Factors & Multiples	<p>Patterns and Functions</p> <ul style="list-style-type: none"> - Benchmark #1 <p>Algebra</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6, #7 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6 	<ul style="list-style-type: none"> Understanding the meaning of landmarks Understanding how addition & subtraction relate Understand different ways to count to 100's, 1000's Arranging factors of 10's and 100's Review counting by 50's & 100's 	<ul style="list-style-type: none"> Timed tests (facts), teacher observation, daily assignments, Student Sheet 10, 11, 20 Choice time, boxes for 200, related problem sets, skip counting
Jan. & Feb.	Patterns & Factors	<p>Number Sense</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmark # 1 	<ul style="list-style-type: none"> Using patterns and factors to count to 100,000 Reading numbers to 100,000 Sequencing numbers to 100,000 	<ul style="list-style-type: none"> Close to 1000 (game), observation
	Problem Solving	<p>Patterns and Functions</p> <ul style="list-style-type: none"> - Benchmark #1 <p>Computation and Operation</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6 <p>Algebra</p> <ul style="list-style-type: none"> - Benchmarks #1, #2 <p>Number Sense</p> <ul style="list-style-type: none"> - Benchmark #4 <p>Mathematical Reasoning</p> <ul style="list-style-type: none"> - Benchmarks #1, #2, #3, #4, #5, #6 	<ul style="list-style-type: none"> Solve problem using factors up to 300 Communicate strategies through speaking and writing (year long process) 	<ul style="list-style-type: none"> Daily assignments, Choice Time
	Estimating	<p>Algebra</p> <ul style="list-style-type: none"> - Benchmark #1 <p>Patterns and Functions</p>	<ul style="list-style-type: none"> Estimating problem answers to 100 & 100,000 	<ul style="list-style-type: none"> 10-minute math, daily assignments

		<ul style="list-style-type: none"> - Benchmark #1 Computation and Operation - Benchmark #1, #2, #3, #4, #5, #6, #7 Number Sense - Benchmark #4 Mathematical Reasoning - Benchmarks #1, #2, #4, #5, #6 		
Late February	Adding/Subtracting Counting	<ul style="list-style-type: none"> Algebra - Benchmarks #1, #2 Computation and Operation - Benchmarks #1, #2, #3 Number Sense - Benchmark #4 Mathematical Reasoning - Benchmarks #1, #2, #3, #4, #5, #6 	<ul style="list-style-type: none"> Add and subtract multiples of 100 from 100,000 Using a calculator Introduced writing, reading and sequence numbers of 100,000 	Assessment tests 17-21, 10-minute math, teacher observation
March	Fractions	<ul style="list-style-type: none"> Patterns and Functions - Benchmark #1 Number Sense - Benchmarks #3, #4 Mathematical Reasoning - Benchmarks #1, #2, #3, #4, #5, #6 	<ul style="list-style-type: none"> Understanding and recognizing parts of a whole, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{12}$ Parts of a whole must be same size, but not always looking the same $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{12}$ Ordering fractions Comparing fractions Different size wholes will have fraction number with different size Understanding equivalent fractions Introduce landmarks with use of fractions Introduce fractions $<$, $&$, $>$, $/$ symbols Using combination of fractions to make a whole number Demonstrate/comm the relationship Use fractions and decimals to solve problems representing parts of a whole, parts of a set and division of whole numbers by whole numbers in real-world and mathematical problems 	10-Minute math, teacher observation, Use of Manipulative, SS #10 Proving Thirds/Sixths, SS #5 Comparing Fractions, daily assignments, Assessment tests 23-26

Late April to May	Data	Computation and Operation - Benchmarks #1, #2, #3, #5, #6, #7 Data and Statistics - Benchmarks #1, #2 Patterns and Functions - Benchmark #1 Algebra - Benchmark #1 Number Sense - Benchmark #4 Mathematical Reasoning - Benchmarks #1, #2, #3, #4, #5, #6	Define the way data is collected Recording/reporting data Describing (writing and speaking) what data is Vocabulary related to data e.g. range, clusters or clumps, mean, mode, median, outliers, etc. Comparing data student collected to what is typical Comparing collected data with different factors e.g. 1 st grade height vs. 4 th grade height	10-minute math, teacher observation, daily assignments, cavity data, group presentations, SS #6-11
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TECHNOLOGY USED:

® Online drill and practice
 Geometry
 ® Math workshop program

® Calculators
 ® Videos

® Coordinate