

First Nine Weeks

Grade: 1

Subject: Math

Year: 2016-2017

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
Ongoing	<p><u>Number and Number Sense</u></p> <ul style="list-style-type: none"> The student will count from 0 to 100 and write the corresponding numerals; (1.1a) 	<ul style="list-style-type: none"> Count by rote from 0 to 100, using the correct name for each numeral. Use the correct oral counting sequence to tell how many objects are in a set. Write numerals correctly. Write each numeral from 0 to 100. 	<p>Mathematics Their Way, Addison Wesley 1995 www.exchange.smarttech.com www.ixlmath.com</p>	<p>Dan Mulligan's Vocabulary – End of document Count Numeral Number Digit Between Number line</p>	<p>Count-L1 Write-L3 Using-L3 Tell-L2</p>
15 Ongoing for the rest of the year	<p><u>Computation and Estimation</u></p> <ul style="list-style-type: none"> The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts. (1.5) 	<ul style="list-style-type: none"> Identify + as a symbol for addition, – as a symbol for subtraction, and = as a symbol for equality. Recall and state orally the basic addition facts for sums with two addends to 18 or less and the corresponding subtraction facts. Recall and write the basic addition facts for sums to 18 or less and the corresponding subtraction facts, when addition or subtraction problems are presented in either horizontal or vertical written format. 	<p>Fast Math, SOL To Go, Mathematics Their Way, Addison Wesley 1995, Math Windows, Ten Frames, Counters, number lines, www.exchange.smarttech.com www.ixlmath.com SumDog</p>	<p>Addition Add Adding Sum Subtraction Subtract Subtracting Difference Minus</p>	<p>Recall-L1 Identify-L2 State-L1 Write-L3</p>
Ongoing	<p><u>Measurement</u></p> <ul style="list-style-type: none"> The student will use calendar language appropriately (e.g., names of the months, <i>today</i>, <i>yesterday</i>, <i>next week</i>, <i>last week</i>) (1.11) 	<ul style="list-style-type: none"> Read a calendar to locate a given day or date. Identify the months of the year. Identify the seven days in a week. 	<p>Calendar, smart board activities, www.starfall.com, Mathematics Their Way, Addison Wesley 1995 www.exchange.smarttech.com www.ixlmath.com</p>	<p>Months, year, date, days, today, yesterday, tomorrow, last week, next week, ordinals</p>	<p>Use-L3 Read-L1 Locate-L1 Identify-L2</p>

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
		<ul style="list-style-type: none"> • Determine the days/dates before and after a given day/date (e.g., yesterday, today, tomorrow). • Determine the date that is a specific number of days or weeks in the past or in the future from a given date, using a calendar. • Identify specific dates (e.g., the third Monday in a given month). 			Determine -L3 Using -L3 Identify -L2
15	<u>Patterns, Functions, and Algebra</u> <ul style="list-style-type: none"> • The student will demonstrate an understanding of equality through the use of the equal sign. (1.18) 	<ul style="list-style-type: none"> • Identify the equality (=) symbol. • Recognize that the equations $4 + 2 = 2 + 4$ and $6 + 1 = 4 + 3$ represent the relationship between two expressions of equal value. • Model an equation that represents the relationship of two expressions of equal value. • Identify equivalent values (e.g., $3 = 3$, $4 + 3 = 8 - 1$, $7 = 2 + 5$, etc.). 	Fast Math, SOL To Go, Mathematics Their Way, Addison Wesley 1995, Math Windows, Ten Frames, Counters, number lines, www.exchange.smarttech.com , www.ixlmath.com	Addition Add Adding Sum Subtraction Subtract Subtracting Difference Minus	Demonstrate -L3 Use -L3 Identify -L2 Recognize -L1 Represent -L2 Model -L3

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
Ongoing	<p>Probability and Statistics</p> <ul style="list-style-type: none"> The student will investigate, identify, and describe various forms of data collection (e.g., recording daily temperature, lunch count, attendance, favorite ice cream), using tables, picture graphs, and object graphs (1.14) 	<ul style="list-style-type: none"> Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting. Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.) 	<p>Mathematics Their Way, Addison Wesley 1995, AIMS, smart board, www.brainpopjr.com, www.exchange.smarttech.com, www.ixlmath.com</p>	<p>data; count (counting); tally (tallying); statistics; picture graph; object graph; more; less; fewer; greater than; less than; equal to</p>	<p>Investigate-L4 Identify-L2 Describe-L2 Using-L3</p>
Ongoing	<p>Probability and Statistics</p> <ul style="list-style-type: none"> The student will interpret information displayed in a picture or object graph, using the vocabulary <i>more, less, fewer, greater than, less than, and equal to</i>. (1.15) 	<ul style="list-style-type: none"> Understand that picture graphs use pictures to represent and compare data while object graphs use concrete objects to represent and compare data. Understand that data can be analyzed and interpreted, using the terms <i>more, less, fewer, greater than, less than, and equal to</i>. Compare one category to another in a graph, indicating which has more or which has less, or which is equal to. Interpret information displayed in object graphs and picture graphs, using the words <i>more, less, fewer, greater than, less than, and equal to</i>. Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”). 	<p>Smart board activities, www.brainpopjr.com, www.exchange.smarttech.com, www.ixlmath.com</p>	<p>data; count (counting); tally (tallying); statistics; picture graph; object graph; more; less; fewer; greater than; less than; equal to</p>	<p>Interpret-L4 Using-L3 Understand-L2 Represent-L2 Compare-L4 Analyzed-L4 Indicating-L2 Find-L1</p>

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
5-8	<p><u>Patterns, Functions, and Algebra</u></p> <ul style="list-style-type: none"> The student will recognize, describe, extend, and create a wide variety of growing and repeating patterns. (1.17) 	<ul style="list-style-type: none"> Recognize the pattern in a given rhythmic, color, geometric figure, or numerical sequence. Describe the pattern in a given rhythmic, color, geometric figure, or numerical sequence in terms of the core (the part of the sequence that repeats). Extend a pattern, using manipulatives, geometric figures, numbers, or calculators. Transfer a pattern from one form to another. Create a repeating or growing pattern, using manipulatives, geometric figures, numbers, or calculators (e.g., the growing patterns 2, 3, 2, 4, 2, 5, 2, 6, 2, ...). 	<p>Smart board activities, www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com</p>	<p>Patterns, create, color, shape, number, repeat, growing, pattern unit sort, classify</p>	<p>Recognize-L1 Describe-L2 Extend-L2 Create-L6 Using-L3 Transfer-L3</p>

Second Nine Weeks

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
5 days Ongoing	<p><u>Computation and Estimation</u></p> <ul style="list-style-type: none"> The student will create and solve one-step story and picture problems using basic addition facts with sums to 18 or less and the corresponding subtraction facts. (1.6) 	<ul style="list-style-type: none"> Interpret and solve oral or written story and picture problems involving one-step solutions, using basic addition and subtraction facts (sums to 18 or less and the corresponding subtraction facts). Identify a correct number sentence to solve an oral or written story and picture problem, selecting from among basic addition and subtraction facts. 	Smart board activities, www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com www.edu4kids.com Mathematics Their Way	add; addition; adding; sum; subtraction; subtracting; minus, difference	Create -L6 Solve -L3 Using -L3
10 Days Ongoing	<p><u>Computation and Estimation</u></p> <ul style="list-style-type: none"> The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts. (1.5) 	<ul style="list-style-type: none"> Develop an understanding of the addition and subtraction relationship. Develop addition and subtraction strategies for fact recall. Develop fluency with basic number combinations for addition and subtraction. 	Smart board activities, www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com www.edu4kids.com Mathematics Their Way	add; addition; adding; sum; subtraction; subtracting; minus, difference	Recall -L1 Develop -L3
10-14	<p><u>Geometry</u></p> <ul style="list-style-type: none"> The student will identify and trace, describe, and sort plane geometric figures (triangle, square, rectangle, and circle) according to number of sides, vertices, and right angles. (1.12) 	<ul style="list-style-type: none"> Describe a circle. Trace triangles, squares, rectangles, and circles. Describe triangles, squares, and rectangles by the number of sides, vertices, and right angles. 	Smart board activities www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com www.edu4kids.com Mathematics Their Way	above; up; down; beside; next to; plane geometric figure; triangle; square; rectangle; circle; side; corner; square corner; polygon; quadrilateral	Identify -L2 Trace -L2 Describe -L2 Sort -L4

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
		<ul style="list-style-type: none"> Sort plane geometric figures into appropriate subsets (categories) based on characteristics (number of sides, vertices, angles, curved, etc.). Identify the name of the geometric figure when given information about the number of sides, vertices, and right angles. 	<i>The Shape of Things</i> by Dayle Ann Dodds		Sort-L4 Identify-L2
10-14	<p>Geometry</p> <ul style="list-style-type: none"> The student will construct, model, and describe objects in the environment as geometric shapes (triangle, rectangle, square, and circle) and explain the reasonableness of each choice. (1.13) 	<ul style="list-style-type: none"> Construct plane geometric figures. Identify models of representations of circles, squares, rectangles, and triangles in the environment at school and home and tell why they represent those figures. Describe representations of circles, squares, rectangles, and triangles in the environment and explain the reasonableness of the choice. 	Smart board activities, www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com www.edu4kids.com Mathematics Their Way I Spy Game	above; up; down; beside; next to; plane geometric figure; triangle; square; rectangle; circle; side; corner; square corner; polygon; quadrilateral	Construct-L6 Model-L3 Describe-L2 Explain-L2 Identify-L2 Tell-L2
5	<p>Patterns, Functions, and Algebra</p> <ul style="list-style-type: none"> The student will sort and classify concrete objects according to one or more attributes, including color, size, shape, and thickness. (1.16) 	<ul style="list-style-type: none"> Sort and classify objects into appropriate subsets (categories) based on one or two attributes, such as size, shape, color, or thickness. 	Smart board activities, www.ixlmath.com www.brainpopjr.com www.exchange.smarttech.com www.edu4kids.com Mathematics Their Way Attribute Blocks		Sort-L4 Classify-L4

Third Nine Weeks

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
Ongoing	<p><u>Number and Number Sense</u></p> <ul style="list-style-type: none"> Count from 0 to 100 (1.1a) Group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value. (1.1b) <p>Note: Do this section in conjunction with 1.4a and 1.4b – 10-15 days</p>	<ul style="list-style-type: none"> Count by rote from 0 to 100, using the correct name for each numeral. Use the correct oral counting sequence to tell how many objects are in a set. Write numerals correctly. Write each numeral from 0 to 100. Read two-digit numbers when shown a numeral, a Base-10 model of the number, or a pictorial representation of the number. Identify the place value (ones, tens) of each digit in a two-digit numeral (e.g., The place value of the 2 in the number 23 is tens. The value of the 2 in the number 23 is 20). Group a collection of objects into sets of tens and ones. Write the numeral that corresponds to the total number of objects in a given collection of objects that have been grouped into sets of tens and ones. 	Number Lines Hundreds Chart Calendar Smartboard Activities	Numeral Compare Identify Order tens one digits units	Count-L1 Group-L4 Write-L3 Develop-L3 Using-L3 Tell-L2 Read-L1 Identify-L2
Ongoing 10-15 days with 1.1a and 1.1b	<p><u>Computation and Estimation</u></p> <p>The student, given a familiar problem situation involving magnitude, will</p>	<ul style="list-style-type: none"> Select a reasonable order of magnitude for a given set from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, and 500 jelly beans in jars) in a familiar problem situation. 	Number Lines Hundreds Chart Calendar Smartboard Activities	magnitude	Select-L5

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
	<ul style="list-style-type: none"> select a reasonable order of magnitude from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral (e.g., 5, 50, 500);(1.4a) explain the reasonableness of the choice. (1.4b) 	<ul style="list-style-type: none"> Given a familiar problem situation involving magnitude, explain why a particular estimate was chosen as the most reasonable from three given quantities: a one-digit numeral, a two-digit numeral, and a three-digit numeral. 			Select-L5 Explain-L2
Ongoing	<u>Number and Number Sense</u> <ul style="list-style-type: none"> Count forward by ones, twos, fives and tens to 100 and backwards by ones from 30. (1.2) 	<ul style="list-style-type: none"> Describe patterns in counting by ones (both forward and backward) and skip counting and use those patterns to predict the next number in the counting sequence Count by ones, twos, fives, and tens to 100, using concrete objects, such as counters, connecting cubes, pennies, nickels, and dimes. Demonstrate a one-to-one correspondence when counting by ones with concrete objects or representations. Skip count orally by twos, fives and tens to 100 starting at various multiples of 2, 5, or 10. Count backward by ones from 30. 	Number lines Brain Pop, Jr. Hundreds Chart Calendar www.hbschool.com/menus/math2004/math2004_gr1.html exchange.smarttech.com	Skip-count Forwards Backwards Two Five Ten Before After Next Between Even Odd	Count-L1 Describe-L2 Predict-L6 Using-L3 Demonstrate-L3 Skip count-L1

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
10	<p><u>Number and Number Sense</u></p> <ul style="list-style-type: none"> The student will identify the parts of a set and/or region that represent fractions for halves, thirds, and fourths and write the fractions.(1.3) 	<ul style="list-style-type: none"> Represent a whole to show it having two equal parts and identify one-half ($\frac{1}{2}$), and two halves ($\frac{2}{2}$). Represent a whole to show it having three equal parts and identify one-third ($\frac{1}{3}$), two-thirds ($\frac{2}{3}$) and three-thirds ($\frac{3}{3}$). Represent a whole to show it having four equal parts and identify one-fourth ($\frac{1}{4}$), two-fourths ($\frac{2}{4}$), three-fourths ($\frac{3}{4}$) and four-fourths ($\frac{4}{4}$). Identify and model halves, thirds, and fourths of a whole, using the set model (e.g., connecting cubes and counters), and region/area models (e.g., pie pieces, pattern blocks, geoboards, paper folding, and drawings). Name and write fractions represented by drawings or concrete materials for halves, thirds, and fourths. Represent a given fraction using concrete materials, pictures, and symbols for halves, thirds, and fourths. For example, write the symbol for one-fourth, and represent it with concrete materials and pictures. 	<p>manipulatives including pizza fractions, candy bar fractions, and pie fractions. smart board fraction activities Brain Pop Jr. exchange.smarttech.com</p>	<p>Fraction Whole Part One- half One-fourth One-third Equal parts</p>	<p>Identify-L2 Write-L3 Represent-L2 Model-L3 Using-L3 Name-L1</p>

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
10-15	<p>Measurement</p> <ul style="list-style-type: none"> Tell time to the half hour, using analog and digital clocks. (1.8) 	<ul style="list-style-type: none"> Understand the concepts of a.m., p.m., minutes, and hours. Understand that there are sixty minutes in an hour. Tell time shown on an analog clock to the half-hour. Tell time shown on a digital clock to the half-hour. Match a written time to the time shown on a digital and analog clock to the half-hour. 	<p>Teacher and student Judy clocks Clock stamps Flashcards Time Bingo Brain Pop, Jr. Smartboard exchange activities Porta Portal www.beatthechock.com www.stoptheclock.com</p>	<p>Clock Analog Digital Minute hand Hour hand Half hour Hour O'clock Minute</p>	<p>Tell time-L3 Using-L3 Understand-L2 Match-L1</p>

Fourth Nine Weeks

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
5-7	<p>Measurement</p> <ul style="list-style-type: none"> Use nonstandard units to measure length and weight/mass and volume. (1.9) 	<ul style="list-style-type: none"> Students will use connecting cubes, paper clips, erasers to measure length. Students will measure the weight/mass of objects using a balance scale with various nonstandard units such as paper clips, bean bags, cubes. Students will measure the volume of objects using various nonstandard units such as cubes, blocks, rice and water. 	<p>Mathematics Their Way, Addison Wesley, 1995 Portaportal.com BrainPop Jr.</p>	<p>Measure Weight Mass Volume Balance scale Length</p>	<p>Use-L3 Measure-L5</p>
5-7	<p>Measurement</p> <p>The student will compare, using the concepts of more, less, and equivalent,</p> <ul style="list-style-type: none"> the volumes of two given containers (1.10a) 	<ul style="list-style-type: none"> Compare the volumes of two containers to determine if the volume of one is more, less, or equivalent to the other, using nonstandard units of measure (e.g., a spoonful or scoopful). Compare the volumes of two containers to determine if the volume of one is more, less, or equivalent to the other by pouring the contents of one container into the other. 	<p>Mathematics Their Way, Addison Wesley, 1995 Portaportal.com BrainPop Jr.</p>	<p>More Less Equivalent Compare Volume</p>	<p>Compare-L4 Using-L3 Determine-L3</p>
5-7	<p>Measurement</p> <p>The student will compare, using the concepts of more, less, and equivalent,</p> <ul style="list-style-type: none"> the weight/mass of two objects, using a balance scale.. (1.10b) 	<ul style="list-style-type: none"> Compare the weight/mass of two objects, using the terms <i>lighter</i>, <i>heavier</i>, or <i>the same</i>, using a balance scale. The pan containing less weight/mass will rise and the pan containing more weight/mass will fall. If the objects are of equivalent weight/mass, the two pans will balance. 	<p>Mathematics Their Way, Addison Wesley, 1995 Portaportal.com BrainPop Jr.</p>	<p>Weight Mass More Less Equivalent</p>	<p>Compare-L4 Using-L3</p>

# Days	SOL	Student Essential Knowledge and Skills	Resources	Vocabulary	Bloom's
5-7	<p>Measurement</p> <ul style="list-style-type: none"> identify the number of pennies equivalent to a nickel, a dime, and a quarter (1.7a) 	<ul style="list-style-type: none"> Identify the value of a nickel, a dime, and a quarter in terms of pennies. Recognize the characteristics of pennies, nickels, and dimes (e.g., color, size). 	<p>Mathematics Their Way, Addison Wesley, 1995 Portaportal.com BrainPop Jr. manipulatives exchange.smarttech.com</p>	<p>Penny Nickel Dime Quarter Cent Equals Value</p>	<p>Identify-L2 Recognize-L1</p>
10-15	<p>Measurement</p> <ul style="list-style-type: none"> determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less. (1.7b) 	<ul style="list-style-type: none"> Count by ones to determine the value of a collection of pennies whose total value is 100 cents or less. Count by fives to determine the value of a collection of nickels whose total value is 100 cents or less. Count by tens to determine the value of a collection of dimes whose total value is 100 cents or less. Count by ones, fives, and tens to determine the value of a collection of pennies and nickels, pennies and dimes, and nickels and dimes whose total value is 100 cents or less. Count by ones, fives, and tens to determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less. 	<p>Mathematics Their Way, Addison Wesley, 1995 Portaportal.com BrainPop Jr. manipulatives exchange.smarttech.com</p>	<p>Penny Nickel Dime Quarter Cent Equals Value</p>	<p>Determine-L3 Count-L1</p>

Dan Mulligan Vocabulary

GRADE 1

Number and Number Sense: ten (tens); five (fives); two (twos); ordered position; ordinal position; ordinality; ordered number: first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth; fraction; part of a whole; one-half; one-fourth

Computation and Estimation: magnitude; add; addition; adding; sum; subtraction; subtracting; minus, difference

Measurement and Geometry: cent (cents); nickel; dime; quarter; penny (pennies); analog clock; digital clock; half hour; length; weight; estimation; volumes; greater than; less than; the same; light (lighter); heavy (heavier); translations (slide, flip, turn); near; far; close by; below; above; up; down; beside; next to; plane geometric figure; triangle; square; rectangle; circle; side; corner; square corner; polygon; quadrilateral

Probability and Statistics: data; count (counting); tally (tallying); statistics; picture graph; object graph; more; less; fewer; greater than; less than; equal to

Patterns, Functions, and Algebra: sort; classify; patterns; growing patterns

Bloom's Taxonomy Key

1. Level 1 (L1) – Remembering – Pink
2. Level 2 (L2) – Understanding – Blue
3. Level 3 (L3) – Applying – Green
4. Level 4 (L4) – Analyzing – Yellow
5. Level 5 (L5) – Evaluating – Gray
6. Level 6 (L6) – Creating – Red