

First Grade Mathematics

Topics (Date)	Content and Skills	Vocabulary - to be taught in Chinese
Number sense (September)	<p>Numbers 0-10</p> <ul style="list-style-type: none"> • Identify the value of sets using words "more" and "less" • Identify numbers that are missing, what number comes before and after given numbers • Identify even and odd numbers • Count using whole numbers by 1's, 2's, 5's, and 10's <p>Ordinal Numbers</p> <ul style="list-style-type: none"> • Identify naming positions 1-10, first, second, third....to tenth • Identify positions from left and right. <p>Number Bonds</p> <ul style="list-style-type: none"> • Identify whole and parts in number bonds and pictorial representations • Demonstrate understanding of number bonds through the addition of parts to find the whole • Recognize the function and relationship of numbers in a number bond • Identify multiple number pairs that make the sums of 1 to 10 	Numbers 0-10 Ordinal Numbers 1st to 10th More Less Number Bond Whole Part Left Right
Number – Operations (October)	<p>Addition</p> <ul style="list-style-type: none"> • Demonstrate understanding of addition as “putting together” • Identify relationships in pictures in order to create addition number stories. • Use number bonds to solve addition problems (under 10). <p>Subtraction within 10</p> <ul style="list-style-type: none"> • Make subtraction stories from a picture • Make up subtraction stories from number sentences • Identify strategies for subtraction such as counting back and use of number line and apply it to solve problems. <p>Review</p> <ul style="list-style-type: none"> • Review of addition and subtraction concepts with numbers under 10. • Identify and apply different strategies to add and subtract small numbers 	Add Subtract Number story Number Sentence Addition Sentence Subtraction Sentence Plus Altogether Minus Subtract Take Away

	<ul style="list-style-type: none"> • Identify and memorize the ways to make 10. • Identify patterns when skip counting by 2's and be able to skip count from 2-20 and count back from 20-2 • Compute and solve vertical and horizontal single digit addition and subtraction problems with sums and differences within 10 • Describe inverse relationship between addition and subtraction. 	
Number – Base Ten & Operations (November)	<p>Numbers to 20</p> <ul style="list-style-type: none"> • Count, write, and identify numbers to 20 • Compare numbers using greater than, the greatest, smaller than, the smallest, and equal to • Use symbols of greater than, less than, and equal to compare and contrast numbers under 20 • Spell numbers from eleven to twenty • Group bundles of 10 and demonstrate understanding of place value concepts • Compute addition and subtraction sentences with sums up to 20 • Identify missing numbers within 20 in a given sequence, forward, backward, and in between • Complete addition and subtraction problems with sums within 20 	<p>Numbers 11-20 Greater Greatest Smaller Smallest</p> <p>Place Value Tens Ones Addition Sentence Subtraction Sentence</p>
Number – Base Ten & Operations (March)	<p>Numbers to 40</p> <ul style="list-style-type: none"> • Count, read, and write numbers to 40 • Identify and write out all numbers in words to 40 • Name and group tens and ones for numbers up to 40 • Compare numbers up to 40 using $>$, $<$, $=$ symbols for greater than, less than, equal to • Add single digits to double digit numbers within 40 with some regrouping • Subtract single digits from double digit numbers within 40 with some regrouping • Add 3 single digits together with sums under 40 	<p>Numbers 21-40 Tens Ones Greater Than $>$ Less Than $<$ Equal to $=$</p>
Number – Base Ten & Operations (May)	<p>Numbers to 100</p> <ul style="list-style-type: none"> • Count and order numbers from 1 to 100 • Identify number patterns in 100 chart • Identify place value concepts for numbers up to 100 • Add and subtract numbers up to 100 • Interpret and solve word problems involving addition and subtraction of numbers within 100 	<p>Numbers 31-100 in numbers and words Place Value Place Value Chart Ones Tens Hundreds</p>

Geometry (December)	<p>Shapes</p> <ul style="list-style-type: none"> • Identify and Name basic two and three dimensional shapes such as circles, squares, rectangles, triangles, cones, sphere, cubes, rectangular prisms and boxes • Identify two and three dimensional shapes in surroundings and environment • Group shapes into sets according to shared characteristics such as size, number of sides, corners, etc • Create and complete patterns using shapes • Identify corners and sides on a shape • Identify and draw lines of symmetry in geometric figures • Identify lines of symmetry in nature 	Shape Circle Triangle Rectangle Square Cube Rectangular Prism Pattern Side Corner Symmetry
Measurement (January-February)	<p>Length</p> <ul style="list-style-type: none"> • Identify and compare the length, width, and height of objects using terms, long, short, tall, -er, -est • Identify length and distance using various non-standard units of measurements • Apply knowledge of length to solve word problems • Identify inch and centimeter as units of measurement for determining length <p>Weight</p> <ul style="list-style-type: none"> • Compare the weight of objects using the terms “heavier than” “lighter than”, and “as heavy as” • Order objects based on weight • Read a balance scale • Use non-standard units of measurement to measure the weight of an object on the balance scale <p>Capacity</p> <ul style="list-style-type: none"> • Compare the capacity of various objects by identifying which can hold more and which can hold less • Identify equivalent capacities. • Measure the capacity of larger containers by utilizing the capacity of smaller containers. 	Length Long (er, est) Short (er, est) Tall (er, est) Unit Weight Measure Light (er, est) Heavy (er, est)
Data (February)	<p>Graphs</p> <ul style="list-style-type: none"> • Read, gather, and interpret information from pictographs and bar graphs 	Light(er) Heavy(ier)

	<ul style="list-style-type: none"> • Gather Data and Create graphs from data • Compare amounts within graphs through subtraction and addition • Use information from graphs to answer questions relating to the graph and draw conclusions based on the data 	<p>Less More</p>
<p>Time (April)</p>	<p>Time</p> <ul style="list-style-type: none"> • Sequence daily routines using the words "first", "second", "third", and "fourth", "fifth" • Order a short series of events in sequential order. • Tell time on an analog clock by the hour, half past the hour, and quarter • Identify and order the days of the week • Identify and order the months in a year. • Read and interpret the data provided on a calendar • Write the time from an analog clock in digital form. 	<p>Time & Date Ordinal Numbers 1st to 5th Day Night Morning Afternoon Evening Yesterday Today Tomorrow Week and Month Monday to Sunday Month January to December</p>
<p>Money (June)</p>	<p>Money</p> <ul style="list-style-type: none"> • Recognize and identify U.S. coins (penny, nickel, dime, quarter, half-dollar, dollar coin) and the value of each • Identify 1-,5-,10-, and 20-dollar bills. • Understand the correlation between a coin or bill and its value • Count and identify the amount of money in a set of coins • Count and identify the amount of money in a set of bills • Count and identify the value of a group of coins and bills • Compare the value of different amounts of money • Write the value of a given set of money • Add money by counting up starting with largest bills/coins first and moving to smallest bills/coins second • Subtract money and make change • Utilize skip-counting strategies to add and subtract money (counting by 1's, 5's, 10's) 	<p>Penny (1 cent) Nickel (5 cents) Dime (10 cents) Quarter (25 cents) Half dollar (50 cents) Dollar coin (100 cents) Coin Bill Dollar Cent 1-, 5-, 10-, 20-dollar bill Change Price, Spend/cost, Buy and Sell</p>