

Kindergarten Mathematics

Topics (Date)	Content and Skills	Vocabulary - to be taught in Chinese
Number sense (September)	Match and Sort <ul style="list-style-type: none"> • Distinguish relationships between objects and match objects with similar relationships • Analyze characteristics within a group of objects and match objects together that share similar characteristics • Explain differences between sets of objects 	Same Different
Number – Counting (October)	Numbers to 5 <ul style="list-style-type: none"> • Count, write, and identify numbers through 5 • Count and correspond objects to their numerical value up to 5 Numbers to 10 <ul style="list-style-type: none"> • Count, write, and identify numbers to 10 using whole numbers • Represent equivalent forms of the same number through use of concrete objects, drawings, word names, symbols • Count, order, and group concrete objects with quantities up to 10 • Use whole numbers to represent quantities (1-10) 	Number words 0-10 Match Find
Number – Counting (May)	Numbers to 100 <ul style="list-style-type: none"> • Read, count, and write numbers up to 100 • Identify the missing number in a given sequence of numbers within 100 • Count by 2's, 5's and 10's from 0-100 	
Number – Order (November)	Number Order <ul style="list-style-type: none"> • Count using whole numbers (0-10) • Identify the correct sequence of numbers from 0-10 and 10-0 • Identify numbers that are missing from a given sequence, both forwards and backwards 	Count Count up Count down
Number – Operations (January- February)	Compare Sets <ul style="list-style-type: none"> • Identify and describe sets of numbers and objects using the terms such as 'equal to' or are the 'same', 'more than' 'greater than', 'less than' or 'fewer than' Comparing Numbers <ul style="list-style-type: none"> • Recognize groups that are more, less or the same 	Greater (than) Fewer (than) Equal to Same

	<ul style="list-style-type: none"> • Compare the value of two sets of numbers within 10 • Compare numbers using more than, less/fewer than, or the same as • Find “how many more, or less/fewer, than” through matching objects to find remainder (or one-to-one correspondence) 	<ul style="list-style-type: none"> - How many fewer? - How many more?
Number – Number bonds (March)	<p>Number Bonds</p> <ul style="list-style-type: none"> • Identify whole and parts in number bonds and pictorial representations • Put pictures into number stories and number bonds • Demonstrate understanding of number bonds through the addition of parts to find the whole 	Number Bond Whole Part
Number – Operations (March)	<p>Addition</p> <ul style="list-style-type: none"> • Apply the meaning of addition as “putting together” to solve simple problems • Use pictures to tell addition number stories • Apply the strategy of 'counting up' to find the sum. • Solve addition problems with sums up to 10 with and without the use of manipulative and pictorial cues <p>Subtraction</p> <ul style="list-style-type: none"> • Identify that subtracting means taking away • Use pictures to tell subtraction number stories • Complete subtraction problems by crossing out objects in pictures to represent taking away. <p>Solve simple subtraction problems within 10 with and without the use of manipulative and pictorial cues</p>	Add/Plus (+) Subtract/Minus (-) Equal (=) Altogether Count up/on
Number – Base Ten (February)	<p>Numbers to 20</p> <ul style="list-style-type: none"> • Count, read, and write numbers up to 20 • Demonstrate understanding of the difference between a group of tens and individual ones • Apply concepts of place value for tens and ones for numbers up to 20 • Apply making 10 strategy for large groups of numbers before adding • Complete addition problems within 20 with picture cues • Match groups of objects and numbers, to the words for numbers under 20 	More than Less than Fewer than Altogether Making ten Number words 11-20

Number – Base Ten (April)	Numbers to 30 <ul style="list-style-type: none"> • Read, write, and count numbers up to 30 • Identify the order of numbers up to 30 and back from 30 • Count numbers to 30 by grouping into 10's and adding the ones • Write numbers using the place value chart. 	Number words 21-30 Tens Ones Group
Geometry (November)	Shapes <ul style="list-style-type: none"> • Name and label common two dimensional geometric shapes (circle, square, rectangle, triangle) • Draw and Replicate common two dimensional geometric shapes • Identify objects in the environment and describe geometric figures in real life • Identify the differences and make connections between 2-D and 3-D shapes • Construct 3-D shapes with paper folding (cube, cone) • Identify 3D shapes in real life 	Circle, Square, Rectangle, Triangle, Line, Corners, Shape Sphere, Cone, Cube, Rectangular, Prism, Solid Red, Orange, Yellow, Green, Blue, Purple, Black, White, Brown, Pink, Gray
Patterns (December)	Patterns with Shapes <ul style="list-style-type: none"> • Identify the pattern in a given set of sequences • Complete and Extend a pattern sequence • Draw and Create a pattern using shapes • Make a pattern using pre-cut shapes • Identify patterns in real life 	Pattern
Measurement (December)	Length and Size <ul style="list-style-type: none"> • Guess and measure the length, height, width of various objects using nonstandard units of measurements • Measure distance and length using non-standard units of measurement such as hand span, foot length, and paces • Make comparisons between the sizes of objects and be able to identify which is longer, shorter, bigger and smaller • Apply concepts of length and size to put objects into size order (big to small, small to big) 	Length Long(er) Short(er) Wide(er) Tall(er) Measure Big(ger) Small(er)
(January)	Weight <ul style="list-style-type: none"> • Identify, name, and compare objects that are lighter or heavier • Compare the weights of objects relative to each other using the terms “heavier than” and “lighter than” 	Light(er) Heavy(ier) Less More

	<ul style="list-style-type: none"> • Read a balancing scale to determine the weight of objects according to non-standard units of measurement <p>Capacity</p> <ul style="list-style-type: none"> • Identify objects that have capacity and objects that do not. • 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. 	
<p>Time (May)</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. • Identify, read, and write ordinal numbers up to 5 • Identify activities done during the day and activities done at night. • Identify the purpose of a clock and fill in the numbers on the face of a clock. • Identify the long and short hand on a clock as the hour and minute hands • Tell time on an analog clock by the hour • 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 	<p>Time & Date Ordinal Numbers 1st to 5th Day Night Morning Afternoon Evening Yesterday Today Tomorrow Week Monday to Sunday Month January to December Calendar</p>
<p>Money (June)</p>	<p>Money</p> <ul style="list-style-type: none"> • Identify the use and purpose of money. • Identify coins by name and image (penny, nickel, dime, quarter) • Demonstrate understanding of the correlation between a coin and its value • Count groups of coins to find their total value • Match the price tag of an item to the correct number of coins needed to pay for it. • Identify the correct amount of money needed to pay for an item from a large group of coins. 	<p>Coin Dollar Cent Penny (1 cent) Nickel (5 cents) Dime (10 cents) Quarter (25 cents) Price, Spend/Cost, Pay</p>