



ADW GRADE Kindergarten MATH STANDARDS & INSTRUCTION GUIDE

2017

NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.K.NS.1	Match sets of objects one-to-one.	<ul style="list-style-type: none">• There is a specific order to the set of whole numbers.• Items or actions can counted as a one to one match with each number in the sequence.	Whole number	Take crayons from the box and give one to each student in the group. Explain what you are doing.
MA.K.NS.2	Compare sets of up to ten objects and identify whether one set is equal to, more than, or less than another.	<ul style="list-style-type: none">• A set of objects is equal to, more, or less than another set up to 10.• If you compare two groups of objects and the number of objects match, then the objects have the same number/are equal.• If you compare two groups of objects and one group has items that are left over, that group has more. The other group has less.	Equal More than Less than	Compare the blocks in two boxes. Tell which box contains more blocks and explain the way in which you decided on your answer.



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MA.K.NS.3	Know that larger numbers describe sets with more objects in them than sets described by smaller numbers.	<ul style="list-style-type: none">In a pair of numbers, the number that shows more is “more” or “greater” and the number that shows fewer is less.“1 more than”, “1 less than”, “2 more than”, “2 less than”, etc., expresses a relationship between two numbers.		Using two sets of apples, show that a set of 7 apples contains more apples than a set of 3 apples
MA.K.NS.4	Divide sets of ten or fewer objects into equal groups.	<ul style="list-style-type: none">Two groups of objects with the same amount are equal.	<ul style="list-style-type: none">DivideEqual groups	Take 6 blocks and give the same number to each of 3 children.
MA.K.NS.5	Divide shapes into equal parts.	<ul style="list-style-type: none">When parts of a shape are equal they create a whole shape.	<ul style="list-style-type: none">Equal parts	Divide a piece of paper into 4 equal pieces



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MA.K.NS.6	Count, recognize, represent, name, and order a number of objects (up to 31).	<ul style="list-style-type: none">• There is a specific order to the set of whole numbers.• The Base Ten numeration system uses the symbols 0-9 and place value to build all our numbers.• Counting tells how many are in a set, regardless of their arrangement or the order in which they appear.• The last number said when counting a set is the total.• There is a unique symbol that goes with each number.• The total of a number of objects can be represented by writing the numeral		Count a group of seven pennies. Recognize that 7 is the number for this set.



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MA.K.NS.7	Find the number that is one more than or one less than any whole number up to 10.	<ul style="list-style-type: none">• Zero is a number that tells how many objects when there are none.• Each successive number name refers to a quantity that is one more.• Each preceding number name refers to a quantity that is one less		You have a bag of 7 apples. How many apples are in a box that holds one less than the bag of apples?



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NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.K.NS.8	Use correctly the words one/many, none/some/all, more/less, and most/least.	<ul style="list-style-type: none">• "One" expresses the amount one.• "Many" expresses more than three.• "None" expresses the amount of zero.• "Some" expresses at least a small amount of something.• "All" expresses the whole quantity of something.• "More" expresses a greater or additional amount.• "Less" expresses a smaller amount of something.• "Most" expresses the greatest in amount. "Least" expresses the smallest in amount.	More Least	Take some of the blocks out of this box, but not all of them.



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NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.K.NS.9	Record and organize information using objects and pictures.			
MA.K.NS.10	Count backwards from 10.	<ul style="list-style-type: none">• Each preceding number name refers to a quantity that is one less.		
MA.K.NS.11	Use ordinal words to identify position, such as <i>first</i> , <i>next</i> , <i>last</i> .	<ul style="list-style-type: none">• Numbers can be used to tell an order. Positions in a row can be found by counting.	<ul style="list-style-type: none">• Ordinal words	Line students up and have them identify students in different positions, ex: who is the first person in line? Who is next? Who is last?



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COMPUTATION (C)	Standard	Core Concepts	Key Terms	Examples
MA.K.C.1	Model addition by joining sets of objects (for any two sets with fewer than 10 objects when joined).	<ul style="list-style-type: none">Increasing a given amount by another amount is an interpretation of addition.	<ul style="list-style-type: none">Addition	Put together 3 pencils and 2 pencils. Count the total number of pencils.
MA.K.C.2	Model subtraction by removing objects from sets (for numbers less than 10).	<ul style="list-style-type: none">Taking parts of a group away is one interpretation of subtraction.	<ul style="list-style-type: none">Subtraction	From a pile of 9 crayons, take away 6 crayons. Count the number of crayons left in the pile



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COMPUTATION (C)	Standard	Core Concepts	Key Terms	Examples
MA.K.C.3	Describe addition and subtraction situations (for numbers less than 10).	<ul style="list-style-type: none">• There is more than one way to show a number.• Joining parts to make a whole is one interpretation of addition.• Increasing a given amount by another amount is another interpretation of addition.• Joining groups can be shown in an addition expression that use the plus (+) sign (i.e. $4 + 1$).• Addition sentences can be used to show parts of a whole (i.e. $4 + 1 = 5$).• Taking parts of a group away is one interpretation of subtraction.• Comparing two quantities to find how much or less one quantity is than another is one interpretation of subtraction.• Separating, taking away, and comparisons can be shown in a subtraction expression that uses the minus (-) sign (i.e. $5 - 1$)• Subtraction number sentences using (-) and (=) can be used to show subtraction (i.e. $5 - 1 = 4$).		In the last example, explain what operation you were using when you took away crayons from the pile.



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ALGEBRA AND FUNCTIONS (AF)	Standard	Core Concepts	Examples	Key terms
MA.K.AF.1	Identify, sort, and classify objects by size, number, and other attributes. Identify objects that do not belong to a particular group.	<ul style="list-style-type: none">• Objects have identifiable attributes that can be used to compare objects.• Attributes such as size, number, color, or shape can be used to classify and sort objects into different categories.• Attributes such as size, number, color or shape can be used to sort the same set of objects on different ways.• A set of objects can be sorted to according to a combination of attributes.• These same attributes can be used to find objects not belonging to a particular group.	<ul style="list-style-type: none">• Sort	Find the squares in a collection of shapes. Sort these squares into large ones and small ones and explain how you decided which squares went in each pile.
MA.K.AF.2	Identify, copy, and make simple patterns with numbers and shapes.	<ul style="list-style-type: none">• Patterns are all around us.• Patterns can be made with colors, rhythms, shapes, numbers, and letters that repeat.	<ul style="list-style-type: none">• Patterns	Make a pattern of squares and circles with one square, one circle, one square, one circle, etc.



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GEOMETRY (G)	Standard	Core Concepts	Key terms	Examples
MA.K.G.1	Identify and describe common geometric objects: circle, triangle, square, rectangle, and cube.	<ul style="list-style-type: none">• Geometric figures have specific names.	<ul style="list-style-type: none">• Circle• Square• Rectangle• Cube• Triangle	Look for cubes and circles at home and at school.
MA.K.G.2	Compare and sort common objects by position, shape, size, roundness, and number of corners.	<ul style="list-style-type: none">• Geometric figures have specific names.• Two dimensional shapes can be similar to and different from other two dimensional shapes. Characteristics of objects can be individual or shared.	<ul style="list-style-type: none">• Vertex	Compare the numbers of vertices of triangles, squares, and rectangles.
MA.K.G.3	Identify and use the terms: inside, outside, between, above, and below.	<ul style="list-style-type: none">• Objects can be described based on location in reference to another object.		Tell when a block is inside or outside a box.



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MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.K.M.1	Make direct comparisons of the length, capacity, weight, and temperature of objects and recognize which object is shorter, longer, taller, lighter, heavier, warmer, cooler or holds more.	<ul style="list-style-type: none">• Objects can be compared based on a variety of factors.	<ul style="list-style-type: none">• Length• Capacity• Weight• Temperature	Hold two books side by side to see which is shorter. Hold one in each hand to see which is heavier.



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MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.K.M.2	Understand concepts of time: morning, afternoon, evening, today, yesterday, tomorrow, week, month, and year. Understand that clocks and calendars are tools that measure time.	<ul style="list-style-type: none">• Time is ongoing.• The morning comes first in the day when the sun comes up... The afternoon is after the morning in the middle of the day. The evening is when the sun starts to set. Today is the current time. Yesterday is the past time. Tomorrow is in the future time.• A week is 7 days. There are 12 months in a year. Each month has a name and a month is longer than a week. A year is 12 months and longer than a month.• People track time using tools. Calendars tell the month, day, and year, Clocks tell the time of each day using numerals.	<ul style="list-style-type: none">• Calendar• Analog Clock• Digital Clock	Use a calendar to find the number of days in the month of your birthday.