NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.1.NS.1	Count, read, and write whole numbers up to 100.	• Numbers can be modeled with base ten blocks, pictures, number words, and numerals. • Base ten cubes represent 100. • There is a unique symbol that goes with each number. • There is a specific order to the set of whole numbers.	• whole numbers	Read "seventy-two" for the number 72. Read and solve problems with word forms of numbers
MA.1.NS.2	Count and group objects in ones and tens.	• Our number system uses the symbols 0-9 and place value to build all our numbers. • A set of ten objects can be grouped into one group of ten. • Objects not included in a group of ten are counted by ones. • Groups of ten can be counted by 10s.		Separate a group of 34 blocks into three groups of 10 blocks and 4 single blocks. Hands on: Base ten blocks
MA.1.NS.3	Identify the number of tens and ones less than 100.	• The decade numbers to 100 are built on groups of 10s. • Numbers greater than 10 can be represented as groups of tens and ones.		How many tens and how many ones are in 56? Explain your answer.

NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.1.NS.4	Name the number that is one more than or one less than any number up to 100.	• Place value can be used to compare and order numbers. • There is a specific order to the set of whole numbers.	• place value	Name the number one less than 78.
MA.1.NS.5	Compare whole numbers up to 10 and arrange them in numerical order.	• Symbols (<, >, =) and words are used to describe how one set of numbers is related to another set. • Numbers can be placed in order from greatest to least and least to greatest using place value.	• equal to • greater than • less than	Arrange the numbers 5, 2, and 9 in order from greatest to least and least to greatest.
MA.1.NS.6	Match the number names first, second, third, etc. with an ordered set of up to 10 items.	• There is a specific name for an ordered set of items.	• ordinal numbers	Point out the fifth child from the front of a line of children.
MA.1.NS.7	Recognize when a shape is divided into congruent (matching) parts.	• A region can be divided into equal-sized parts in different ways. These equal-sized parts have specific names depending on how many parts they were divided into.	• congruent • dividing	Given a rectangle with lines dividing it into parts, decide whether the parts are the same size.

NUMBER SENSE (NS)	Standard	Core Concepts	Key Terms	Examples
MA.1.NS.8	For a shape divided into 8 or fewer congruent (matching) parts, describe a shaded portion as "__out of __ parts" and write the fraction.	• Fractions can be written for shapes divided into equal pieces with a piece shaded in. • Fractions are written to describe how many parts out of a whole are shaded in. • The bottom number of a fraction is the total number of equal pieces. • The top number of a fraction is the number of pieces shaded in.	• equal parts • fraction	Given a circle divided into 4 equal parts with 3 of the parts shaded, describe the shaded portion as "3 out of 4 parts" and write the fraction for the shaded portion.
MA.1.NS.9	For a set of 8 or fewer objects, describe a subset as "__out of __ parts" and write the fraction.	• Fractions can be written to describe a subset of a set of objects. • The bottom number of a fraction is the total number of objects in the set. • The top number of a fraction is the number of objects in the subset.		Given 3 red pencils and 2 blue pencils, describe the subset of red pencils as "3 out of 5 parts" and write the fraction of the pencils that are red.
MA.1.NS.10	Represent, compare, and interpret data using pictures and a variety of graphs: pictographs, bar graphs, tables and charts.			

COMPUTATION (C)	Standard	Core Concepts	Key terms	Examples
MA.1.C.1	Show the meaning of addition (putting together, increasing) using objects.	• Adding to and putting together are two situations that involve addition. • Sums can be found using models (i.e. tens frames. base-ten blocks). • Situations in word problems can be represented in equations that include an equal sign and a symbol for an unknown. • Three numbers can be added in any order and the sum will be the same. • For a given set of numbers, there are relationships that are always true called properties. Properties are the rules that govern arithmetic. (i.e. numbers can be added in any order).	• addition • plus sign • equal sign • sum	Put together 3 pencils and 5 pencils. Tell how many pencils you have and explain what you are doing.

COMPUTATION (C)	Standard	Core Concepts	Key terms	Examples
MA.1.C.2	Show the meaning of subtraction (taking away, comparing, finding the difference) using objects.	• Taking from, taking apart and comparing are three situations that involve subtraction. • Differences can be found using models (i.e. tens frames. base-ten blocks). • Situations in word problems can be represented in equations that include an equal sign and a symbol for an unknown. • For a given set of numbers, there are relationships that are always true called properties. Properties are the rules that govern arithmetic. (i.e. numbers must be subtracted in a specific order).	• subtraction • minus sign • difference	Take away 6 blocks from a group of 10. Tell how many blocks are left and explain what you are doing.
MA.1.C.3	Show equivalent forms of the same number (up to 20) using objects, diagrams, and numbers.	• The number 10 can be broken down into parts of the whole in different ways. • Number relationships of 0-more or less than, 1-more or less than, and 2-more or less than are the basis for addition and subtraction facts with 0, 1, and 2. • The number 10 can be represented on a ten-frame using 5 and 10 as benchmark numbers.	• equal • equivalent	Write 15 as 8 + 7, 5 + 5 + 5, 10 + 5, 15 + 0, 17 – 2, etc.

COMPUTATION (C)	Standard	Core Concepts	Key terms	Examples
MA.1.C.4	Demonstrate mastery of the addition facts (for totals up to 20) and the corresponding subtraction facts.	• There are strategies for learning addition and subtraction facts within 20 that will help fluency. • Doubles can be associated with real-life situations (i.e. pairs of eyes, legs, hands). • Basic addition facts that are near doubles can be found using related doubles facts (i.e. doubles plus one, doubles minus one).		Add 11 + 8, subtract 16 – 9, add 4 + 7. Solve word problems involving addition and subtraction facts (for totals up to 20)
MA.1.C.5	Understand the meaning of the symbols +, -, and =.	• Mathematical symbols represent operations. • Sentences can be translated into expressions and equations using symbols.		Use symbols to write the number sentence "one added to three equals four."
MA.1.C.6	Understand the role of zero in addition and subtraction.	• Zero represents no tens or no ones. Zero is place holder		
MA.1.C.7	Understand and use the inverse relationship between addition and subtraction facts (such as 4 + 2 = 6, 6 – 2 = 4, etc.) to solve simple problems.			

ALGEBRA AND FUNCTIONS (AF)	Standard	Core Concepts	Key terms	Examples
MA.1.AF.1	Write and solve number sentences from problem situations involving addition and subtraction.	• Sentences can be translated into expressions and equations using symbols. • Understanding the properties of addition and subtraction can be useful in solving addition and subtraction problems. • Concrete models, such as base-ten blocks, and drawings can be useful in solving addition and subtraction word problems. • Situations in word problems can be represented in equations that include an equal sign and a symbol for an unknown.	• number sentence	You have 3 pencils and your friend has 2 pencils. You want to know how many pencils you have altogether. Write a number sentence for this problem and use it to find the total number of pencils.
MA.1.AF.2	Create word problems that match given number sentences involving addition and subtraction.	• Situation stories can be written to match number sentences. • Adding to and putting together are two situations that involve addition. • Taking from, taking apart, and comparing are three situations that involve subtraction.		Tell a story or draw a picture for a problem that can be solved using the number sentence 3 + 6 = 9.

ALGEBRA AND FUNCTIONS (AF)	Standard	Core Concepts	Key terms	Examples
MA.1.AF.3	Recognize the inverse relationship between addition and subtraction,	• Addition and subtraction have an inverse relationship and can be used to solve problems and check answers. • The inverse relationship between addition and subtraction means that every subtraction fact has a related addition fact.		Start with 8 blocks. Add 5 more blocks. How many do you have? Now take away 5 blocks. How many do you have now? Explain your answer.
MA.1.AF.4	Create and extend number patterns using addition.	• Patterns can be made using addition or subtraction rules. • Repeatedly adding or subtracting the same number forms a numerical pattern.	• number pattern	A number pattern begins with these numbers: 1, 3, 5. Tell what the next number will be and explain how you decided on that number.

GEOMETRY (G)	Standard	Core Concepts	Key terms	Examples
MA.1.G.1	Identify, describe, compare, sort, and draw triangles, rectangles, squares, and circles.	• Shapes can be defined by various attributes. • Shapes are named for the number of sides and other attributes.	• circle • square • rectangle • triangle	Draw a square and a circle and write their names next to them.
MA.1.G.2	Identify triangles, rectangles, squares, and circles as the faces of three-dimensional objects.	• Two-dimensional shapes are "flat" while three-dimensional shapes are "solid".	• two-dimensional shape • three-dimensional shape	Sort various objects (cube, square, triangle, prism, etc.) into the categories "two-dimensional" and "three-dimensional." Explain your choices.

GEOMETRY (G)	Standard	Core Concepts	Key terms	Examples
MA.1.G.3	Classify and sort familiar plane and solid objects by position, shape, size, roundness, and other attributes. Explain the rule you used.	• Shapes can be combined to make shapes. • Flat sides of a three-dimensional shapes are called faces. • Faces are made up of two-dimensional shapes.	• faces	Look at a collection of solid objects and find triangles and squares on their sides.
MA.1.G.4	Identify objects as two- or three-dimensional.	• "Defining" attributes can include the concepts of open or closed, and number of sides and corners. "Non-defining" attributes can include such attributes as color, orientation and size.		Group a collection of objects by something they have in common. Explain your grouping.

GEOMETRY (G)	Standard	Core Concepts	Key terms	Examples
MA.1.G.5	Give and follow directions for finding a place or object.	• Position words can be used can be used to describe where a place or an object is.	• left • right	Show someone how to get to the school library by making a map or diagram. Given a simple map, describe the position of various places. Move from one place to another.
MA.1.G.6	Arrange and describe objects in space by position and direction: near, far, under, over, up, down, behind, in front of, next to, to the left or right of.	• Objects can be sorted in groups based on positioning. • Position and direction words can be used to describe where an object is in relation to another object.		Name objects that are near your desk and objects that are in front of it. Explain why there may be some objects in both groups

GEOMETRY (G)	Standard	Core Concepts	Key terms	Examples
MA.1.G.7	Identify geometric shapes and structures in the environment and specify their location.	• Objects in the real world are made up of geometric (two-dimensional and three-dimensional) shapes. • Shapes can be combined to make new shapes.	• geometric shapes	Find as many rectangles as you can in your classroom. Record the rectangles that you found by making drawings or using a camera.

MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.1.M.1	Measure the length of objects by repeating a non-standard unit or a standard unit.	• Some attributes are measureable and can be quantified using unit amounts. • The length of an object is measureable. • Measurement is the process of comparing a unit to the object being measured.		Measure the length of your desk in pencil-lengths.
MA.1.M.2	Use different units to measure the length of the same object and predict whether the measure will be greater or smaller when a different unit is used.	• The length of any object can be used as a measurement unit of length (i.e. paperclip). • Measuring units that are longer (marker) will need less than measuring units that are smaller (paperclip).		If you measure your desk with a shorter pencil, will the number of pencil-lengths be more or less? Measure the desk to find out your answer.

MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.1.M.3	Recognize the need for a fixed unit of length.	• The length of any object can be used as a measurement unit of length (i.e. paperclip), but a standardized unit such as an inch or centimeter is always the same length.		Give students different lengths of string and have them measure the width of a doorway. Talk about why their answers are different and the kinds of problems this can cause.
MA.1.M.4	Measure and estimate the length of an object to the nearest inch and centimeter.	• Measurement is the process of comparing a unit to the object being measured. • The length of an object is measurable.	• centimeter • foot • inch • length • ruler	Have some students measure the width of the doorway in inches and some measure it in centimeters. Discuss why these are better ways of measuring than using the pieces of string.

MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.1.M.5	Compare and order objects according to area, capacity, weight, and temperature, using direct comparison or a non-standard unit.	• Objects can be compared and ordered by length. • Some attributes of objects are measureable and can be quantified using unit amounts.	• area • capacity • temperature • weight	Use a scale or balance to see how many crayons weigh the same as a shoe.
MA.1.M.6	Tell time to the nearest half-hour and relate time events (before/after, shorter/longer).	• Time can be recorded on analog and digital clocks. • On an analog clock, the hour hand tells the hour, and the minute hand tells the number of minutes after the hour. • Time to the hour can be shown on an analog clock or a digital clock and can be read as "_ o'clock" and can be written in two ways: _ o'clock or _:00. • Time can be given to the half hour (30 minutes after the hour) and can be read in two ways: "_ thirty" or "half-past _" and can be written as _:30. • Time can be related to events.	• analog clock • digital clock • half-hour	Is recess before or after lunch? Using an analog clock, tell and write time to the hour and the half-hour. Show an analog clock and have students correctly identify the time as 3:30

MEASUREMENT (M)	Standard	Core Concepts	Key terms	Examples
MA.1.M.7	Identify and give the values of collections of pennies, nickels, dimes and quarters up to $1.00.	• Specific coins have a unique value. The size of a coin does not indicate its value. • One penny is worth one cent. One nickel is equal to 5 pennies. One dime is equal to 10 pennies. One quarter is equal to 25 pennies. • Money amounts can usually be counted in different ways. • The ¢ symbol is used to designate coin values. • Money amounts can be used in solutions to problems.	• penny • nickel • dime • quarter • cent	How many pennies have the same value as two nickels? What is the total value of one penny, one nickel, one dime and one quarter?