



	GRADE 2					
	Operations and Algebraic Thinking					
Represent and solve pre-	oblems involving addition and	subtraction	Major			
2.0A.A.1 Use addition and		Desired Student Performance				
subtraction within 100 to solve one-and two- step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the	 A student should know The answer to one problem or question is needed to find the answer to another problem or question. What the symbols mean; <, >, =, +, How to add and subtract. How to find "unknowns" with single-digit addition and subtraction. How to compare numbers. How to make numbers equal. Modeling equations with drawings. How to solve one-step word problems. Part and whole. 	 A student should understand Joining parts to make a whole is one interpretation of addition. Subtraction number sentences can be used to show separating parts from a whole or comparison subtraction situations. Addition and subtraction have an inverse relationship. How to model draw a situation. How to write and equation for a situation. 	 A student should be able to do Model addition of numbers within 100 with objects/pictures. Model subtraction of numbers within 100 with objects/pictures. Add two numbers within 100 using equations with/symbols or variable for the unknown. Subtract two numbers within 100 using equations with/symbols or variable for the unknown. Solve 1 and 2 step word problems and comparing numbers to find the unknown. 			
	problems.		numbers to find the			





	GRADE 2				
	Operations and	d Algebraic Thinking			
Represent and solve pr	oblems involving addition and	subtraction	Major		
2.0A.2 Fluently add and		Desired Student Performance			
subtract within 20 using mental strategies. By end of Grade 2 know from memory all sums of two one-digit numbers.	 A student should know Compensation Mental strategies for adding and subtracting. Part-whole relationships. 	 A student should understand How compensation works. Addition and subtraction using place-value. Ten 1's makes a bundle called a 10. 	 A student should be able to do Fluently add within 20 using mental strategies. Fluently subtract within 20 using mental strategies. Memorize the sums of one digit numbers. Find sums by making 10 when adding. 		





	GRADE 2						
	Operations and Algebraic Thinking						
Represent and solve pre-	oblems involving addition and	I subtraction		Supporting			
2.OA.3 Determine whether a		Desired Student Performance					
group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2's; write an equation to express and even numbers a sum of two equal addends.	 A student should know Skip counting by two's. That an equation is a number sentence. Adding numbers to 20. 	 A student should understand Some numbers can be divided into two equal parts (even numbers) and some cannot (odd numbers). 	 Te od Cc De ob Cr sh 	ent should be able to do ell if a number is even or id. punt by two's. etermine if a group of jects is even or odd. eate an equation that ows an even number as sum of doubles.			





	GRADE 2 Operations and Algebraic Thinking				
Represen	t and solve problems involving	addition and subtraction	Supporting		
2.OA.4 Use addition to find		Desired Student Performance			
the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	 A student should know One way to think about repeated addition is as an array. The number of addends in the repeated addition sentence corresponds to the number of rows. Using repeated addition to count groups; skip counting will be used to verify the value of the total group. Using a model can be used to represent addition of whole numbers. Skip counting. 	 A student should understand Repeated addition involves joining equal groups. An array involves joining equal groups and is one way to think about repeated addition. Information in a problem can often be shown using a diagram and used to solve the problem. 	 A student should be able to do Model addition to write number sentences. Build arrays to model repeated addition. Use addition to solve problems. 		





	GRADE 2 Numbers and Operation in Base Ten				
	Understand place va	-	Major		
2.NBT.1 Understand that the		Desired Student Performance			
three digits of a three- digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a "hundred." b. The numbers 100,200,300,400, 500,600,700,800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	 A student should know The place value of ones, tens, and hundreds. How to recognize the value of a digit. Two-digit numbers represent tens and ones. Ten is a bundle of ten ones. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens and 0 ones. 	 A student should understand 10 ones is equal to 1 ten. A bundle of 10 tens equals a hundred. Use place-value models to show number. Place value is foundational to all other mathematics. 	 A student should be able to do Read a three-digit number. Understand the values in each place of the three-digit number. Create a three-digit number using place value models. 		





	GRADE 2 Numbers and Operation in Base Ten					
Understand place value Major 2.NBT.2 Desired Student Performance Count within 1000; A student should know skip-count by 5's. A student should know						
skip-count by 5's, 10's, and 100's.	 Finding numbers that are a given number more than or less than a number help to understand the size and order of numbers. Number lines can help with skip counting. When counting by a number you don't say the numbers in between. Counting and place-value patterns can be seen on a hundreds charts. 	 Position words such as, "before" and "after" can be used to explain number relationships. Skip counting is a predictable pattern of counting. Skip counting is a repeated pattern. How to use or create a number line or chart to model skip counting. 	 Use hel of a and Ide pat Ide cor pat Sol 	e a hundreds chart to p describe the position a number in relation to other number. ntify and apply number terns. ntify the number that nes next in a given tern. ve problems by finding nber patterns.		





	GRADE 2 Numbers and Operation in Base Ten				
	Understand place v	alue	Major		
2.NBT.3 Read and write		Desired Student Performance			
numbers to 1000 using base-ten numerals, number names, and expanded form.	 A student should know Numbers greater than 20 uses a hyphen when written out in word form (e.g. twenty-one). The place-value system. The differences between a standard form, expanded form, and a number written in words. 	 A student should understand Numbers can be used to tell how many. Some numbers can be written by joining number words. The relationship between base-ten and place-value. Expanded form is based on breaking the number down by place-value. 	 A student should be able to do Read and write number words for numbers 0- 1000. Identify and record three- digit numbers in expanded form, standard form, and number word form. Model three-digit numbers using base-ten. 		





GRADE 2			
	Numbers and C	Operation in Base Ten	
	Understand place	value	Major
2.NBT.4 Compare two three-		Desired Student Performance	
digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, < symbols to record the results of comparisons.	 A student should know The symbols <, >, and = are used to compare two numbers. The value of each digit. Comparing two-digit numbers. 	 A student should understand Place value can be used to compare and order numbers. Comparing numbers is similar to ordering numbers. 	 A student should be able to do Compare numbers with the symbols <, >, or =. Order numbers from least to greatest and greatest to least. Use place value to compare numbers.





	GRADE 2						
	Numbers and Operation in Base Ten						
Use place value u	understanding and properties o	f operations to add and subtrac	t	Major			
2.NBT.5 Fluently add and		Desired Student Performance					
subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	 A student should know Addition is combining. Subtraction is taking-away. Use compensation to subtract when helpful. Using a hundreds chart when you add a ten you move down a column, and when they add ones they move across the row. Adding multiples of tens sets the foundation for computation. How to choose the method in which you will solve a problem. Traditional algorithm. Vertical/place value addition. 	 A student should understand The place value number system. Adding tens is similar to adding ones. Two-digit numbers can be broken apart using tens and ones and added in different ways. Patterns on a hundreds chart. Subtracting groups of tens is similar to subtracting numbers less than 10. 10 ones can be regrouped for 1 ten. 1 ten can be regrouped for 10 ones. Sums and differences can be found using models, math mental or paper and pencil. 	 Ide that that Me nu Me nu Us for Us two dig Fir nu "co pa Re wh 	ent should be able to do entify and write numbers at are 10 more and 10 less an given numbers. entally add a one-digit mber to a two-digit mber. se models and algorithms addition and subtraction. se mental math to add a o-digit number to a two- git number. nd the missing part of mbers within 100 by punting on" from the given rt. egroup 1 ten as 10 ones nen subtracting. egroup 10 ones as a ten.			





	GRADE 2 Numbers and Operation in Base Ten						
Use place value unders	tanding and properties of oper	ations to add and subtract	Major				
<u>2.NBT.6</u> Add up to four two-							
digit numbers using strategies based on place value and properties of operations.	 A student should know Basic addition facts. Knowledge of place-value concepts. Use the commutative (order) and associative (grouped) properties. Modeling addition. Regrouping. 	 A student should understand Three and four two-digit numbers can be grouped and added in any order. Addition means combining numbers. The value of digits changes depending on what place they are in. 	 A student should be able to do Add 2 four-digit numbers Add 3 four-digit numbers. Add 4 four-digit numbers. 				





	GRADE 2			
	Numbers and O	peration in Base Ten		
Use place value u	nderstanding and properties o	ff operations to add and subtrac	ct Major	
2.NBT.7 Add and subtract within		Desired Student Performance		
1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	 A student should know That each digit has a value. Use basic facts and place value to identify patterns in sums. For example; 5 + 3 and 50 + 30 to find 500 + 300. The connection between addition and subtraction to help master subtraction facts and develop mental math strategies. Place value addition and subtraction. How to use concrete models. How to model draw. 	 A student should understand There are a variety of ways to add and subtract. There is more than one way to do a calculation. The properties of operations. Adding and subtracting are opposites. The process of composing and decomposing numbers. 	 A student should be able to do Use a strategy to add three digit numbers; model, algorithm, or mentally. Find the missing part of a given quantity and one of its parts by "counting on" or "counting back." Write and solve an equation that is modeled. Model an equation that is written. Subtract three-digit numbers by using an algorithm. 	





	GRADE 2 Numbers and Operation in Base Ten				
Understand place val		es of operations to add and sub		Major	
2.NBT.8 Mentally add 10 or 100		Desired Student Performance			
to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	 A student should know Basic facts and place-value concepts are used to find the sums and differences for groups of tens and hundreds mentally. Adding or subtracting ten from a number, the ones digit stays the same. Adding or subtracting 100 to a number, the tens and ones stay the same. How to mentally add and subtract single digit numbers. 	 A student should understand Adding or subtracting hundreds or tens is similar to adding or subtracting single- digit numbers. When the place-value is 0, the number being added to or subtracted from may stay the same. 	 Add 100 num Add to a 	nt should be able to do d and subtract 10 and to and from two-digit nbers using mental math. I and subtract 10 or 100 nd from a three-digit nbers using mental math.	





	GRADE 2					
	Numbers and Operation in Base Ten					
Use place value u	understanding and properties o	of operations to add and subtrac	t	Major		
2.NBT.9 Explain why addition		Desired Student Performance				
and subtraction strategies work, using place value and the properties of operations.	 A student should know The base- ten system using 10 ones to regroup for a ten, ten tens to regroup for a hundred. The use of the place-value to show regrouping actually involves an exchange of objects. 	 A student should understand The properties for operations. The place-value system. Addition and subtraction are opposites. Composing and decomposing numbers. 	 Us sul an co nu reç Us sul an co nu reç Us sul an co nu reç 	ent should be able to do se models to add and btract using place-value d explain the process of mposing and decomposing mbers with and without grouping. se pictures to add and btract using place-value d explain the process of mposing and decomposing mbers with and without grouping. se algorithms to add and btract using place-value d explain the process of mposing and decomposing mbers with and without grouping.		





	GRADE 2 MEASUREMENT AND DATA				
	Measure and estimate I	lengths in standard units		Major	
<u>2.MD.1</u> Measure the length of		Desired Student Performance			
an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	 A student should know Identify an attribute, such as length or weight, of the object being measured. Choose an appropriate unit for measurement. Counting the number of units contained in the object to be measured. Line up the item to be measured. Line up the item to be measured with a ruler on the zero. Reading a ruler is similar to a number line. Measuring in whole number lengths. 	 A student should understand The length of objects is measurable. A standard unit such as an inch or centimeter is always the same length. Measurement gives us the length of an object. The length spans from one end of an object to the other. Measurement is the iteration of a unit. 	 Metodo Metodo Chatologica Metodo Metodo Metodo Metodo 	ent should be able to do easure different lengths. easure using different ols. oose the appropriate of for measurement. easure items in inches centimeters. easure accurately and asonable quickly.	





	GRADE 2 MEASUREMENT AND DATA Measure and estimate lengths in standard units Major					
Меа						
afferent lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	 A student should know Length is how long an object is. You can use different units to measure objects. Items can be measured using different units. The longer an object is, the greater the number of units there will be. The smaller the unit is the greater number of units there will be. How to discuss differences in length and units. 	 Desired Student Performance A student should understand Measurement is a process of comparing a unit to the object being measured. The length of any object can be used as a measurement unit for length. Objects can be measured using more than one unit. 	 M D ai m D di ol 	nt should be able to do leasure the same bject with different nits. iscuss the similarities nd differences in the leasurements. iscuss how the ifferent lengths of bjects compare to the ifferent units of leasure.		





	GRADE 2 MEASUREMENT AND DATA				
	Measure and estimate I	engths in standard units		Major	
2.MD.3 Estimate lengths		Desired Student Performance			
using units of inches, feet, centimeters, and meters.	 A student should know How to measure in whole numbers. How to compare the lengths of two objects. If the measurement is not exact you use the word "about." The approximate size of inches, feet, centimeters, and meters. 	 A student should understand "Estimate" is the word used that means "about" or "an educated guess." When you don't have a tool to measure exact length you can estimate. You can use objects similar to units of measurement to make estimates (e.g. thumb). A process of estimation and why it is useful. 	 Es ler ind ce Es sir me Me too 	ent should be able to do atimate and measure ngths using units of ches or feet, ntimeters, and meters. atimate using objects nilar to units for easurement. easure using appropriate ols after they estimate d compare.	





	GRADE 2 MEASUREMENT AND DATA				
Ν	leasure and estimate lengths i	in standard units		Major	
<u>2.MD.4</u> Measure to determine		Desired Student Performance			
how much longer one object is than another, expressing the length difference in terms of a standard length unit.	 A student should know How to subtract. Label measurements. Subtract to find the difference of the lengths. How to "count up" to find the difference of lengths. How to compare lengths indirectly using a third object. 	 A student should understand The length of two objects can be compared. The length of two objects can be measured visually. When measuring two objects, measure both objects in the same unit to determine difference in length unit. 	 Definition Definition Definition Mediate Iteriate 	ent should be able to do etermine which length is optermine which length is orter. easure to compare ogth and express the ogth difference in a andard length unit.	





	GRADE 2 MEASUREMENT AND DATA				
	Related addition and	d subtraction to length	Major		
2.MD.5 Use addition and		Desired Student Performance			
subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	 A student should know Use regrouping. Add and subtract one and two digit numbers. Compare numbers based on the number of tens and ones. How to use number lines for addition and subtraction. Key words in word problems that let students know to add or subtract. 	 A student should understand Measurements in the same unit can be added or subtracted in the same way as adding and subtracting whole numbers. The unit needs to be written with the sum or difference. Adding is similar to continuing iteration. When you have a missing number in an equation you can use a symbol. 	 A student should be able to do Use addition and subtraction to solve measurement word problems. Use drawings to model word problems. Use symbols for "unknowns" when writing equations for word problems. 		





	GRADE 2 MEASUREMENT AND DATA				
	Relate addition and	subtraction to length	Major		
2.MD.6 Desired Student Performance Represent whole					
numbers as lengths from 0 on a number line diagram with equally space points corresponding to the numbers 0, 1, 2, and represent whole – numbers sums and differences within 100 on a number line diagram.	 A student should know How to model addition on a number line. How to model subtraction on a number line. 	 A student should understand Sums can be represented as lengths on a number line. Differences can be represented as lengths on a number line. Number lines can be models or diagrams of addition and subtraction. 	 A student should be able to do Use a number line to model one and two-digit addition. Use a number line to model one and two-digit subtraction. 		





	GRADE 2 MEASUREMENT AND DATA					
		me and money		Supporting		
2.MD.C.7 Tell and write time		Desired Student Performance				
from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	 A student should know Counting by 5's. How to "count-on" from a given number. How to "count-on" from a given number by 5's. The short hand represents the hour on an analog clock. The long hand represents the minute on an analog clock. On a digital clock, number to the left of the colon is the hour; to the right of the colon is the minute. a.m. is before noon. p.m. is after noon. 	 A student should understand Time can be given to the nearest five minutes. Time can be expressed before or after the hour. Numerals on an analog clock face are in increments of five minutes. Nickels are also counted in five cent increments. 	 Tell digit Rea term past an h Writ near 	and write time from a al and/or analog clock. d and express time in as of "quarter" and "half " an hour and before four. e the time to the rest five minutes and a.m. or p.m.		





	GRADE 2				
MEASUREMENT AND DATA Work with time and money Supporting					
2.MD.8 Solve word problems		Desired Student Performance			
involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	 A student should know Adding 2-digit numbers is the same as adding cents except for cent symbol or the decimal and dollar sign. Subtracting 2-digit numbers is the same as subtracting cents except for adding either the cent symbol or dollar sign and decimal point. Knowledge of coins: dollar coin, half-dollar, quarter, dime, nickel, or penny. 	 A student should understand Each coin has a unique value. The size of the coin does not indicate its value. Money amounts can be counted in different ways. The same amount of money can be represented using different combinations of coins and bills. The relationship between place value and money. 	 Ide bil Ac the Ac co Sc 	dent should be able to do entify the value of dollar ls and coins. Id coins and bills to find e total value. Id different values of ins together. Nove word problems ing money.	





	GRADE 2 MEASUREMENT AND DATA					
	Represent and interpret data Supporting					
2.MD.9 Generate		Desired Student Performance				
measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	 A student should know A table is one way to organize data. A line plot is another way to organize data. How to organize data. 	 A student should understand A line plot can be used as a visual representation of the relative lengths of objects. The objects that are the longest are farthest right on the line plot. The objects that are the shortest in length are the least value on the line plot. 	• Ho • Ma	dent should be able to do ow to measure. ake a line plot. ow to graph on a line ot.		





	GRADE 2			
	MEASUREN	IENT AND DATA		
	Represent and interpre	et data		Supporting
<u>2.MD.10</u> Draw a picture graph		Desired Student Performance		
and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	 A student should know Making graphs provides an opportunity to count, compare, add, subtract, sequence, and classify data. A symbol represents the data. Graphs can represent numerical data. 	 A student should understand Data can be organized in different ways. The type of data can determine the best graph to be used to represent it. Picture graphs and bar graphs make it easy to compare data. 	 Re a t gra Dr 	dent should be able to do epresent a set of data in ally chart and in a bar aph. aw and use pictographs solve problems.





	GRADE 2					
	Geometry					
	Reason with shapes and the	eir attributes		Additional		
2.G.A.1 Recognize and draw		Desired Student Performance		<u>.</u>		
shapes having specified attributes, such as a given number of angles or given number of equal faces. ⁵ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. ⁵ Sizes are compared directly or visually, not compared by measuring.	 A student should know The names and faces of objects (e.g. rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles). The names of three-dimensional shapes (e.g. cubes, right rectangular prisms, circular cones, circular cylinders). Polygons can be combined to make new shapes. Polygon shapes can be decomposed into other shapes. Build and draw shapes. 	 A student should understand The difference between a two-dimensional and three-dimensional shape. Polygons are flat 2- dimensional shapes. A shape can be identified by the number of its sides, vertices, or angles. Three-dimensional or solid figures have length, width, and height. 	 Residual Res	ent should be able to do ecognize and draw apes based on specific ributes. ecognize and draw bes based on specific ributes. escribe the attributes of cube. escribe the attributes of polygon/2-dimensional/ ane shape. entify the number of des, angles, or vertices.		





GRADE 2 Geometry							
	Additional						
2.G.A.2 Partition a rectangle	Desired Student Performance						
into rows and columns of same-size squares and count to find the total number of them.	 A student should know Rectangles can be partitioned into equal squares. Rows run east and west; columns run up and down. Partitioning shapes and describing as halves, fourths, and quarters. 	 A student should understand When you add rows and columns you get a sum. You can divide rectangles up into smaller equal shares. You can partition in more parts than halves, fourths, and quarters. Decomposing in to equal shares. The connection between geometry and measurement is finding the area of a rectangle. 	• Div squ	ent should be able to do ride a rectangle into equal uares and count the total mber of squares.			





GRADE 2 Geometry								
	Additional							
2.G.A.3 Partition circles and	Desired Student Performance							
rectangles into two, three, or four equal shares, describe the shares using the words, <i>halves, thirds, half of, a</i> <i>third of, etc.,</i> and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	 The concept of equal parts. The meaning of halves, thirds, half of, a third of, fourths, etc. Decomposing in to equal shares makes smaller shares. Model drawings to make fractions that represent them. 	 A student should understand The equal-sized parts have the same area but do not necessarily have the same shape. Name equal parts of a whole using terminology mentioned in the standard (e.g. halves, thirds, half of, a third of, etc.). 	 [t t i i<	ent should be able to do Describe and describe he words: halves, thirds, half of, a third of, fourths, etc. dentify "equal shares." Divide circles and rectangles into two, three, or four equal shares. Demonstrate that equal shares of identical wholes do not need to have the same shape. Partition shapes in equal shares that do and do not have the same shape.				