Operations	and Algebraic	Thinking
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Operations and Algebraic Thinking						
	Date:	Date:	Date:	Date:	Notes	
Represent and solve problems involving multiplication and division.						
Interpret products of while numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 x 7.						
2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <for a<br="" describe="" example,="">context in which a number of shares or a number of groups can be expressed as 56 ÷; 8.</for>						
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.						
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 $\times$ ? = 48, 5 = _÷, 6 $\times$ 6 =?						
Undertand properties of multiplication and the relationship between multip	lication and	division.				
Apply properties of operations as strategies to multiply and divide. Examples: If 6 x 6 = 24 is known, then 4 x 6=24 is also known. (Commutative property of multiplication.) $3x5x2$ can be found by $3x5=15$ , then $115x2=30$ , or by $5x2=10$ , then $3x10=30$ . (Associative Property of Multiplication.) Knowing that $8x5=40$ and $8x2=16$ , one can find $8x7$ as $8x(5+2)=(8x5) + (8x2)=40+16=56$ (Distributative property.)						
Understand division as an unknown -factor problem. For example, find 32÷8 by finding the number that makes 32 when multiplied by 8.						

Multiple and divide within 100.				
Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8x5=40, one know 40÷5=8) or properties of operations. By the end of Grade 3, know from membore all the products of two one-digit number.				
Solve problems involving the four operations, and identify and explain patter	rns in arthem	atic.		
Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.				
Identify arithmetic patters (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.				
NUMBERS AND OPERATION	IS IN B	ASE TE	IN	
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Understand place value. Understand that the 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. 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 hundred (and 0		ASE TE		

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Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >,=, and < symbols to record the results of comparisons.					
Use place value understanding and properties of operations to add and subtract.					
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.					
Add up to four two-digit numbers using strategies based on place value and properties of operations.					
Add and subtract within 1000, using concreate 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 subracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.					
Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number.					
Explain why addition and subtraction strategies work, using place value and the properties of operations.					
MEASUREMENT AND DATA					
Measure and estimate lengths in standards units.					

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.			
Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chose.			
Estimate lengths using units of inches, feet, centimeters, and meters.			
Measure to determine how much longer one objects is than another, expressing the length difference in terms of a standard length unit.			
Relate addition and subtraction to length.			
Use addition and subtraction within 100 to solve word problems involving lengths that are given the same units, e.g., by using drawings (such as drawings of rulers) and equations with a sumbol for the unknown number to represent the problem.			
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole-number sums and differences within 100 on a number line diagram.			
Work with time and money.			
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.			

Second Grade			
Solve word problems 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?			
Represent and interpret data.			
Generate 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			
Draw a picture graph 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.			
GEOMET	RY	1	
Reason with shapes and their attributes.			
Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.			
Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.			
Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.			

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# Common Core Tracking Chart

Second Grade: Math

WRITING					
	Date:	Date:	Date:	Date:	Notes:
Text Types and Purposes					
Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is).					
Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.					
Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.					
Production and Distribution of Writing					
With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.					
With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.					
Research to Build and Present Knowledge					
Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).					
With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.					

## Common Core Tracking Chart

Second Grade: Math

SPEAKING AND LISTENING					
	Date:	Date:	Date:	Date:	Notes:
Comprehensive and Collaboration					
Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.					
Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).					
Continue a conversation through multiple exchanges.					
Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.					
Ask and answer questions in order to seek help, get information, or clarify something that is not understood.					
Presentation and Knowledge of Ideas					
Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.					
Add drawings or other visual displays to descriptions as desired to provide additional detail.					
Speak audibly and express thoughts, feelings, and ideas clearly.					

### Common Core Tracking Chart

Second Grade: Math

LANGUAGE STANDARDS						
	Date:	Date:	Date:	Date:	Notes:	
Conventions of Standards English						
Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.						
Print many upper- and lowercase letters.						
Use frequently occurring nouns and verbs.						
Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).	,					
Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).						
Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).						
Produce and expand complete sentences in shared language activities.						
Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.						
Capitalize the first word in a sentence and the pronoun I.						
Recognize and name end punctuation.						
Write a letter or letters for most consonant and short-vowel sounds (phonemes).						

Spell simple words phonetically, drawing on knowledge of sound-letter relationships.			
Vocabulary Acquisition and Use			
Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.			
Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).			
Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.			
With guidance and support from adults, explore word relationships and nuances in word meanings.			
Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.			
Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).			
Identify real-life connections between words and their use (e.g., note places at school that are colorful).			
Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.			
Use words and phrases acquired through conversations, reading and being read to, and responding to texts.			