SECOND GRADE CURRICULUM MAP

BLACKFORD COUNTY SCHOOLS

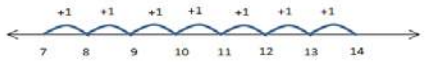
	Result Unknown	Change Unknown	Start Unknown
Add to	Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? 2 + 3 = ?	Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two? 2 + ? = 5	Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? ? + 3 = 5
Take from	Five apples were on the table. I ate two apples. How many apples are on the table now? 5 – 2 = ?	Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? 5 - ? = 3	Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? ? – 2 = 3
	Total Unknown	**Addend Unknown**	**Both addends Unknown**
Put Together/ Take Apart	Three red apples and two green apples are on the table. How many apples are on the table? 3 + 2 = ?	Five apples are on the table. Three are red and the rest are green. How many apples are green? 3 + ? = 5, 5 – 3 = ?	Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? 5 = 0 + 5, 5 = 5 + 0 5 = 1 + 4, 5 + 4 + 1 5 = 2 + 3, 5 = 3 + 2
	Difference Unknown	**Bigger Unknown**	**Smaller Unknown**
Compare	("How many more?" version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? ("How many fewer?" version): Lucy has two apples. Julie has five apples. How may fewer apples does Lucy have than Julie? 2 + ? = 5, 5 – 2 = ?	(Version with "more"): Julie has 3 more apples than Lucy. Lucy has two apples. How many apples does Julie have? (Version with "fewer"): Lucy has three fewer apples than Julie. Lucy has two apples. How many apples does Julie have? 2 + 3 = ?, 3 + 2 = ?	Julie has three more apples than Lucy. Julie has five apples. How many apples does Lucy have? (Version with "fewer"): Lucy has three fewer apples than Julie. Julie has five apples. How many apples does Lucy have? 5 – 3 = ?, ? + 3 = 5

Difference Unknown	Bigger Unknown	Smaller Unknown

Addition Strategies

Name	Clarification	Work Sample
Counting All	• Student counts every number • Students are not yet able to add on from either addend, they must mentally build every number	8 + 9 1,2,3,4,5,6,7,8,9,10,11,12,13
Counting On	• Transitional strategy • Student starts with 1 number and counts on from this point	8 + 9 8…9,10,11,12,13,14,15
Doubles/ Near Doubles	• Student recalls sums for many doubles	8 + 9 8 + (8 + 1) (8 + 8) + 1 16 + 1 = 17
Making Tens	• Student uses fluency with ten to add quickly	8 + 9 (7 + 1) + 9 7 + (1 + 9) 7 + 10 = 17
Making Friendly Numbers/ Landmark Numbers	• Friendly number are number that are easy to use in mental computation • Student adjusts one or all addends by adding or subtracting to make friendly numbers • Student then adjusts the answer to compensate	23 + 48 23 + (48 + 2) 23 + 50 = 73 73 -2 =71
Compensation	• Student manipulates the numbers to make them easier to add • Student removes a specific amount from one addend and gives that exact amount to the other addend	8 + 6 8 -1 =7 6 + 1 = 7 7 + 7 =14
Breaking Each Number into its Place Value	• Strategy used as soon as students understand place value • Student breaks each addend into its place value (expanded notations) and like place value amounts are combined • Student works left to right to maintain the magnitude of the numbers	24 + 38 (30 + 4) + (30 + 8) 20 + 30 = 50 4 + 8 = 12 50 + 12 = 62
Adding up in Chunks	• Follows place value strategy • Student keeps one addend whole and adds the second addend in easy to use chunks • More efficient than place value strategy because student is only breaking apart one addend	45 + 28 45 + (20 + 8) 45 + 20 = 65 65 + 8 = 73

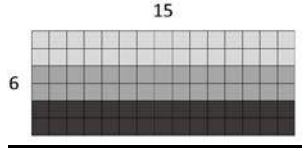
Subtraction Strategies

Name	Clarification	Sample
Adding up	• Student adds up from the number being subtracted to the whole • The larger the jumps, the more efficient the strategy • Student uses knowledge of basic facts, doubles, making ten, and counting on	14 – 7 7… 8,9,10,11,12,13,14 (+1 each jump)  7 + 3= 10 10 + 4= 14
Counting Back	• Strategy used by students who primarily view subtraction as taking away • Student starts with the whole and removes the subtracting in parts • Student needs the ability to decompose numbers in east to remove parts	65 – 32 65 – (10 + 10 + 10 + 2) 65, 55, 45, 35, 33 65 – (30 + 2) 65 – 30 = 35 35 – 2 = 33
Place Value	• Student breaks each number into its place value (expanded notation) • Student groups like place values and subtracts	999 – 345 (900 + 90 + 9) – (300 + 40 + 5) 900 – 300 = 600 90 – 40 = 50 9 – 5 = 4 600 + 50 + 4 = 654
Keeping a Constant Difference	• Student understands that adding or subtracting the same amount from both numbers maintains the distance between the numbers • Student manipulates the numbers to create friendlier numbers	123 – 59 123 + 1 = 124 59 + 1 = 60 124 – 60 = 64
Adjusting the Create and Easier Number	• Strategy requires students to adjust only one of the numbers in a subtraction problem • Student chooses a number to adjust, subtracts, then adjusts the final answer to compensate • Students must understand part/whole relationships to reason through this strategy	123 – 59 59 + 1 = 60 123 – 60 = 63 I added 1 to make an easier number. 63 + 1 = 64 I have to add 1 to my final answer because I took away 1 too many.

Common Multiplication and Division Situations

	Unknown Product 3 X 6 = ?	Group Size Unknown (How many in each group)	Number of Groups Unknown (How many groups?)
Equal Groups	There are 3 bags with 6 plums in each bag. How many plums are there in all? ***Measurement example***: You need 3 lengths of string, each 6 inches long. How much string will you need altogether?	If 18 plums are shared equally into 3 bags, then how many plums will be in each bag? ***Measurement example***: You have 18 inches of string, which you will cut into 3 equal pieces. How long will each piece of string be?	If 18 plums are to be packed 6 to a bag, then how many bags are needed? ***Measurement example***: You have 18 inches of string, which you will cut into pieces that are 6 inches long. How many pieces of string will you have?
Arrays, Area	There are 3 rows of apples with 6 apples in each row. How many apples are there? ***Area example:*** What is the area of a 3 cm by 6cm rectangle?	If 18 apples are arranged into 3 equal rows, how may apples will be in each row? ***Area example***: A rectangle has area 18 square centimeters. If one side is 3 cm long, how long is a side next to it?	If 18 apples are arranged into equal rows of 6 apples, how many rows will there be? ***Area example:*** A rectangle has area 18 square centimeters. If one side is 6cm long, how long is a side next to it?
Compare	A blue hat costs $6. A red hat cost 3 times as much as the blue hat. How much does the red hat cost? ***Measurement example***: A rubber band is 6 cm long. How long will the rubber band be when it is stretched to be 3 times as long?	A red hat costs $18 and that is 3 times as much as a blue hat costs. How much does the blue bat cost? ***Measurement example:*** A rubber band is stretched to be 18 cm long and that is 3 times as long as it was at first. How long was the rubber band at first?	A red hat costs $18 and a blue hat costs $6. How many times as much does the red hat cost as the blue hat? ***Measurement example***: A rubber band was 6 cm long at first. Now it is stretched to be 18 cm long. How many times as long is the rubber band now as it was at first?
General	a x b = ?	a x ? = p and p ÷ a = ?	? x b = p and p ÷ b =?

Multiplication Strategies

Name	Clarification	Student Work Sample
Repeated Addition/Skip Counting	• Beginning strategy for students who are just learning multiplication • Connection to an array model provides an essential visual model	6 × 15 15+15+15+15+15+15 = 90 2 × 15 = 30 2 × 15 = 30 2 × 15 = 30 30 + 30 + 30 = 90 
Friendly Numbers/Landmark Numbers	• Students who are comfortable multiplying by multiples of 10	9 × 15 Add 1 group of 15 10 × 15 = 150 We must now take off 1 group of 15. 150 – 15 = 135
Partial Products	• strategy based on the distributive property and is the precursor for our standard U.S. algorithm • student must understand that the factors in a multiplication problem can be broken into addends • student can then u se friendlier numbers to solve more difficult problems	12 × 15 12 × (10 + 5) 12 × 10 = 120 12 × 5 = 60 120 + 60 =180
Breaking Factors into Smaller Factors	• Strategy relies on students' understand of breaking factors into smaller factors • Associate property	12 × 25 (3 × 4) × 25 3 × (4 × 25) (4 × 25) + (4 × 25) + (4 × 25) = 300
Doubling and Halving	• Used by students who have an understanding of the concept of arrays with different dimensions but the same area • Student can double and halve numbers with ease • Student doubles one factor and halves the other factor	8 × 25 8÷2 = 4 25 × 2 = 50 4 × 50 = 200

Division Strategies

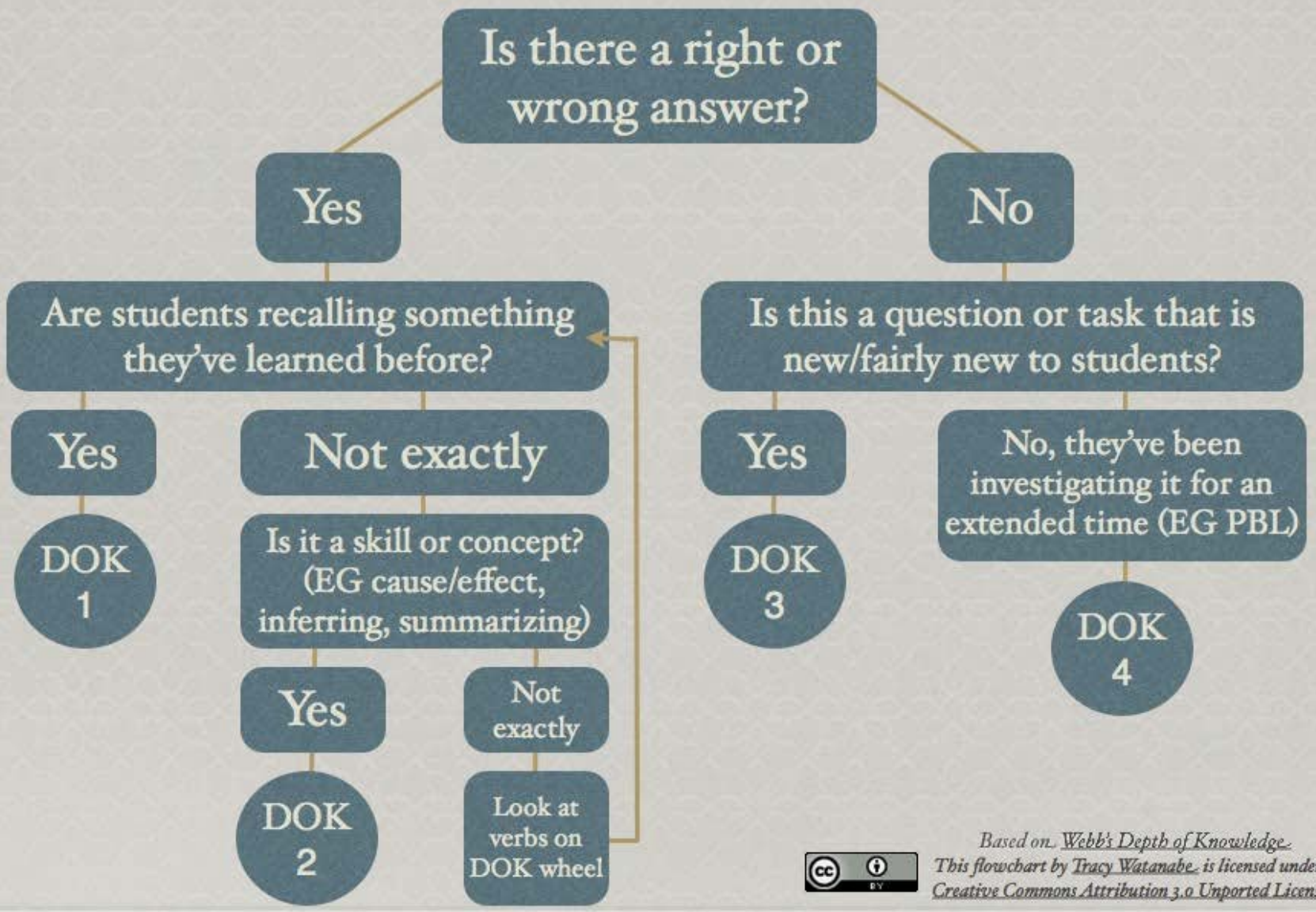
Name	Clarification	Student Work Sample
Repeated Subtraction/Sharing	• Early strategy students use when they are developing multiplicative reasoning • Repeated subtraction is one of the least efficient division strategies • Presents opportunities to make connections to multiplication	30 ÷ 5 30 – 5 = 25 25 – 5 = 20 20 = 5 = 15 15 – 5 = 10 10 – 5 = 5 5 – 5 = 0 I took out 6 groups of 5 30 ÷ 5 = 6
Multiplying Up	• Strategy is a natural progression from repeated subtraction • Student uses strength in multiplication to multiply up to reach the dividend • Students relying on smaller factors and multiples will benefit from discussions related to choosing more efficient factors	384 ÷ 16 10 × 16 = 160 384 – 160 = 224 10 × 16 = 160 224 – 160 = 64 2 × 16 = 32 64 – 32 = 32 2 × 16 = 32 32 – 32 = 0 10 + 10 + 2 + 2 = 24
Partial Quotients	• Maintains place value • Allows students to work their way toward the quotient by using friendly numbers such as ten, five, and two • As the student chooses larger numbers, the strategy becomes more efficient	384 ÷ 16 16) 384 -160 224 -160 64 -32 32 -32 0
Proportional Reasoning	• Students who have a strong understand of factors, multiples, and fractional reasoning • Students' experiences with doubling and halving to solve multiplication problems can launch an investigation leading to the idea that you can divide the dividend and the divisor by the same number to create a friendlier problem	384 ÷ 16 384 ÷ 16 ÷2 ÷2 192 ÷ 8 ÷2 ÷2 96 ÷ 4 ÷2 ÷2 48 ÷ 2 = 24 384 ÷ 16 = 24

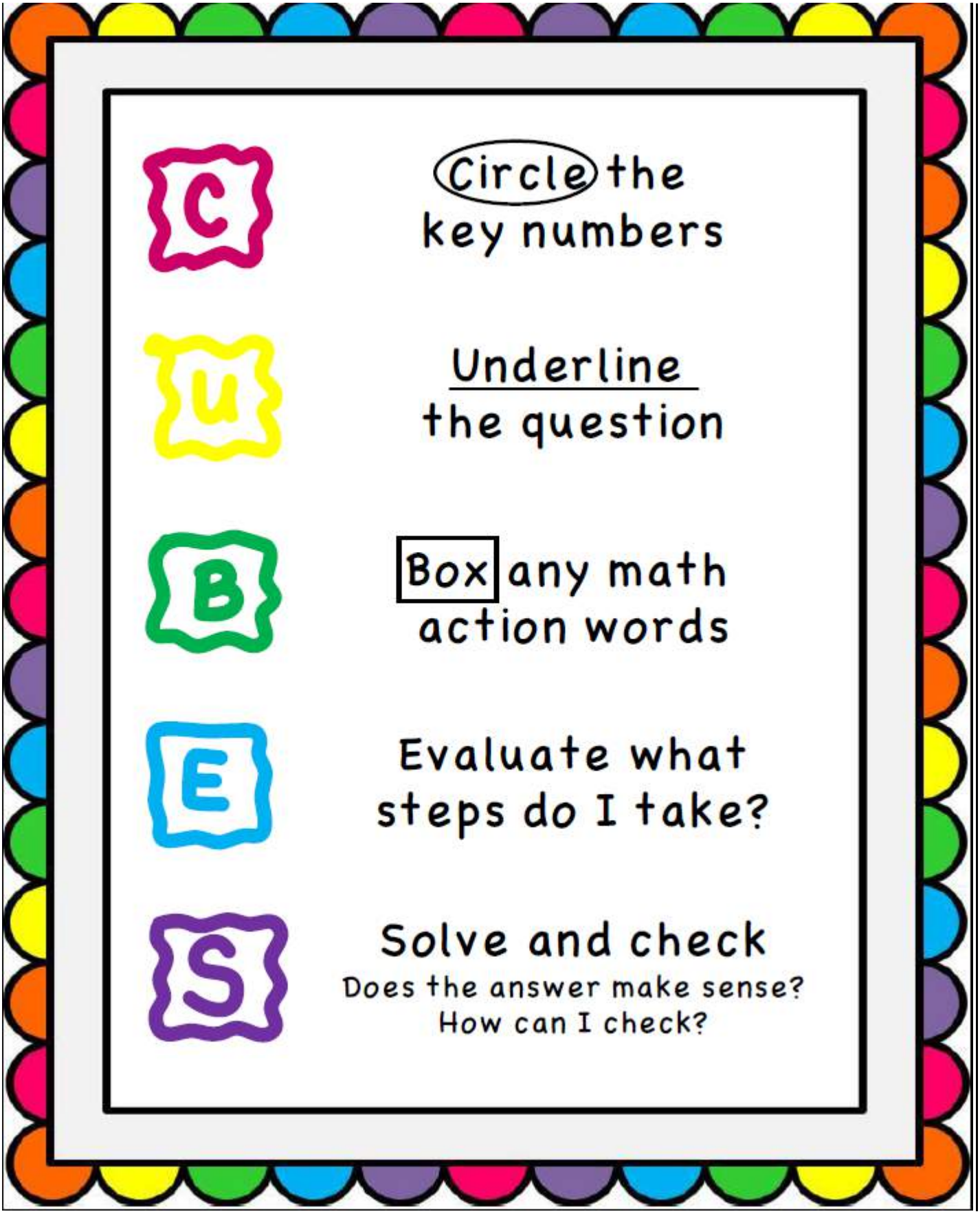
Problem Solving Strategy Focus

By Grade Level

Grade Level	Strategies
Kindergarten	Use Objects
First	Review Previous Grades Draw a Picture Use a Number Sentence
Second	Review Previous Grades Find a Pattern Make a Table
Third	Review Previous Grades Work Backwards Make It Simpler
Fourth	Review Previous Grades Make an Organized List Guess and Check
Fifth	Review Previous Grades Use Logical Reasoning
Sixth:	Students should know all strategies that will be used all year.

Depth of Knowledge (DOK) Flowchart for Questions




C
Circle the key numbers
U
Underline the question
B
Box any math action words
E
Evaluate what steps do I take?
S
Solve and check
Does the answer make sense?
How can I check?

Weeks 1-9 Pacing Guide

Week 1	**2.NS.1:** Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.
Week 2	**2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.CA.5:** Use addition to find 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 groups.
Week 3	**2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.
Week 4	**2.NS.3:** Plot and compare whole numbers up to 1,000 on a number line. **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.NS.5:** Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).
Week 5	**2.NS.2:** Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000. **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a “hundred." Understand that 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).
Week 6	**2.NS.2:** Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000. **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a “hundred." Understand that 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).
Week 7	**2.NS.3:** Plot and compare whole numbers up to 1,000 on a number line.
Week 8	**2.NS.7:** Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
Week 9	**2.NS.7:** Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. **2.CA.1:** Add and subtract fluently within 100.

Weeks 10-18 Pacing Guide

Week 10	**2.CA.1:** Add and subtract fluently within 100. **2.CA.6:** Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.
Week 11	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 12	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 13	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 14	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 15	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 16	**2.CA.1:** Add and subtract fluently within 100 **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
Week 17	**2.CA.1:** Add and subtract fluently within 100 **2.DA.1:** Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.
Week 18	**2.CA.1:** Add and subtract fluently within 100

	******** needs something

Weeks 19-27 Pacing Guide

Week 19	**2.CA.1:** Add and subtract fluently within 100. **2.CA.4:** Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.
Week 20	**2.CA.1:** Add and subtract fluently within 100. **2.G.1:** Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.
Week 21	**2.CA.1:** Add and subtract fluently within 100. **2.G.2:** Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials. **2.G.3:** Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.
Week 22	**2.CA.1:** Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.
Week 23	**2.CA.1:** Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.
Week 24	**2.CA.1:** Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.
Week 25	**2.CA.1:** Add and subtract fluently within 100. **2.M.5:** Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.
Week 26	**2.CA.1:** Add and subtract fluently within 100. **2.M.6:** Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.

Week 27	**2.CA.1:** Add and subtract fluently within 100. **********

Weeks 28-36 Pacing Guide

Week 28	**2.CA.1:** Add and subtract fluently within 100. **2.M.2:** Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.
Week 29	**2.CA.1:** Add and subtract fluently within 100. **2.M.3:** Understand that the length of an object does not change regardless of the units used. 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 chosen.
Week 30	**2.CA.1:** Add and subtract fluently within 100. **2.M.4:** Estimate and measure volume (capacity) using cups and pints.
Week 31	**2.CA.1:** Add and subtract fluently within 100. 3.NS.1: Read and write whole numbers up to 10,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 10,000.
Week 32	**2.CA.1:** Add and subtract fluently within 100. 3.NS.2: Compare two whole numbers up to 10,000 using >, =, and < symbols.
Week 33	**2.CA.1:** Add and subtract fluently within 100. 3.NS.9: Use place value understanding to round 2- and 3-digit whole numbers to the nearest 10 or 100.
Week 34	**2.CA.1:** Add and subtract fluently within 100. 3.C.1: Add and subtract whole numbers fluently within 1000.
Week 35	**2.CA.1:** Add and subtract fluently within 100. 3.AT.1: Solve real-world problems involving addition and subtraction of whole numbers within 1000 (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).
Week 36	**2.CA.1:** Add and subtract fluently within 100. 3.AT.4: Interpret a multiplication equation as equal groups (e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each). Represent verbal statements of equal groups as multiplication equations.

Weeks 1-3:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them.	**Reason abstractly and quantitatively**	**Construct viable arguments and critique the reasoning of others**	**Model with Mathematics**	**Use appropriate tools strategically**	**Attend to precision**	**Look for and make sure of structure**	**Look for and express regularity in repeated reasoning.**
PS.1	**PS.2**	**PS.3**	**PS.4**	**PS.5**	**PS.6**	**PS. 7**	**PS.8**

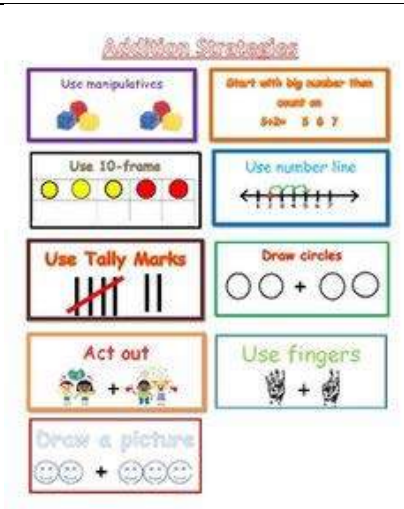
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation

2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000. **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.CA.5:** Use addition to find 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 groups.	**1.NS.1:** Count to at least 120 by ones, fives, and tens from any given number. In this range, read and write numerals and represent a number of objects with a written numeral. **1.NS.3:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items. **1.CA.6:** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2).

Week 1:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.NS.1:** Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000. (***subtraction will be week 16*)		
Students will: • **Count** forward and backward by ones from any given number up to 999 • **Identify** missing numbers in a sequence on a number line, hundred chart, tape measure, etc. • **Count** forward and backward by fives, tens, and hundreds from any give number up to 999.	***AIMS:*** ***Internet Resources:*** https://www.brainpop.com/games/battleshipnumberline/	Addends Addition Count Count backward Count forward Count on/count back **Extend** Fives Hundred chart Hundreds **Number line** Ones Patterns Plus

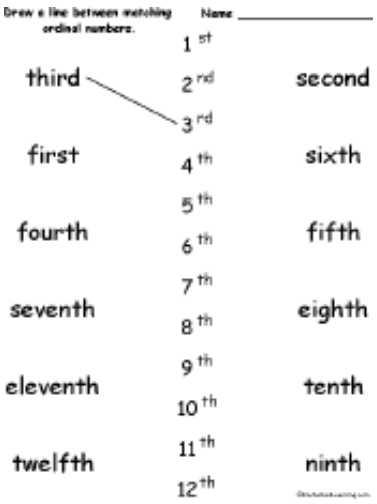
 Strategy: Use Patterns	http://mathsnacks.com/pearl_diver_game_en.html http://www.topmarks.co.uk/Flash.aspx?f=NumberLinev5 http://www.sheppardsoftware.com/mathgames/placevalue/BPOrder1000.htm https://campus.mangahigh.com/en-us/px/850/0/0	**Rule** Subtraction **Sum** Tens Thousand Twos

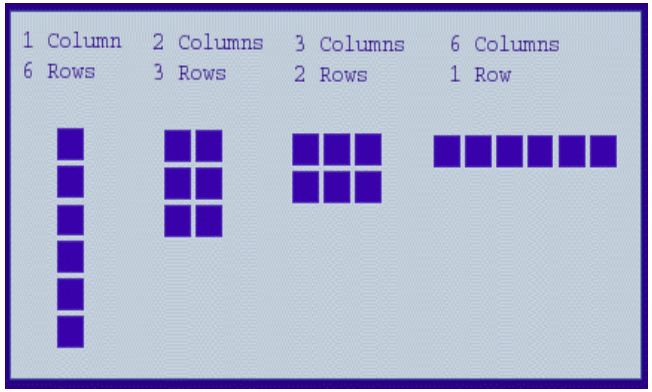
Week 2:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.CA.5:** Use addition to find 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 groups.		

Students will:

- **Match** ordinal numbers
- **Use** addition to find total of object
- **Understand** rectangular arrays
- **Understand** difference of rows and columns
- **Write** an equation
- **Express** total sum as equal groups





Strategy: Use objects

AIMS:

- *Accounting for Butterflies*
- *Treasure Trove*

Internet Resources:

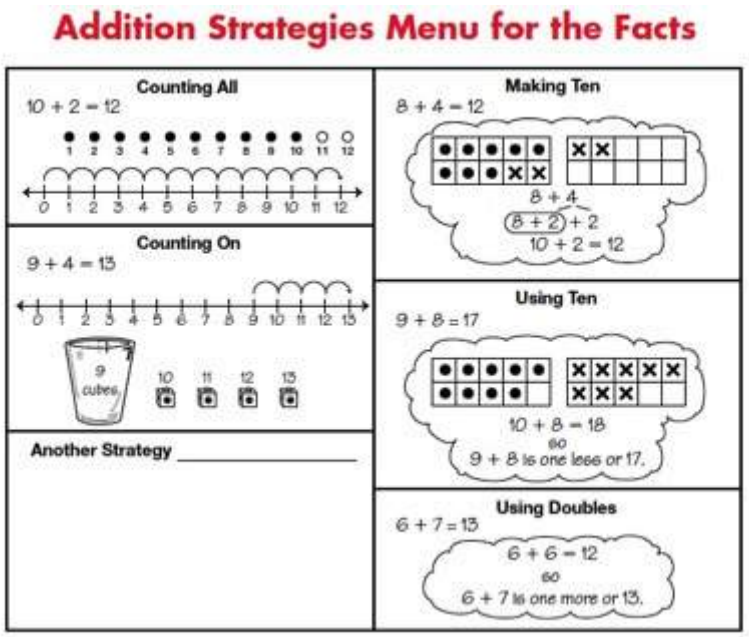
http://www.multiplication.com/games/addition-games

http://mrnussbaum.com/grade_2_standardsarrays/

Addition
Array
Column
Equal
Equation
Express
Groups
Match
Order
Ordered set
Ordinal numbers
Plus
Rectangle
Row
Sum

Week 3:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.		

Students will: • **Match** ordinal numbers • **Order** items up to 30 • **Create** number patterns for addition • **Extend** number patterns for addition • **Express** number pattern for addition (subtraction will be week 19)  Strategy: Patterns	***AIMS:*** ***Internet Resources:*** http://www.sheppardsoftware.com/mathgames/earlymath/fruit_shoot_NumberLine.htm	Addition Order **Ordinal number** Pattern Plus Rule **Sum**

Weeks 4-6:

Problem Solving: Should be embedded within daily instruction:

Make sense of problems and persevere in solving them. PS.1	Reason abstractly and quantitatively PS.2	Construct viable arguments and critique the reasoning of others PS.3	Model with Mathematics PS.4	Use appropriate tools strategically PS.5	Attend to precision PS.6	Look for and make sure of structure PS. 7	Look for and express regularity in repeated reasoning. PS.8

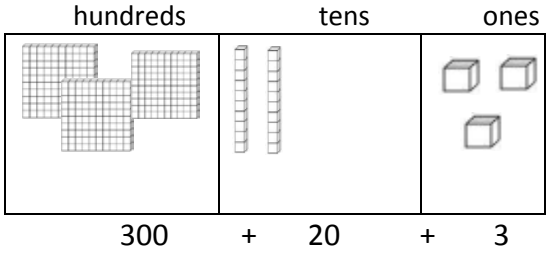
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.NS.3: Plot and compare whole numbers up to 1,000 on a number line. **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.NS.5:** Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s). **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a “hundred." Understand that 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).	**1.NS.4:** Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. **1.NS.3:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items. **1.NS.2:** Understand that 10 can be thought of as a group of ten ones — called a “ten." Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. Understand that 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).

Week 4:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.NS.3:** Plot and compare whole numbers up to 1,000 on a number line. **2.NS.4:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items. **2.NS.5:** Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).		
Students will: • **Plot** whole numbers on a number line up to 1,000 • **Compare** whole numbers on a number line up to 1,000 • **Match** ordinal numbers up to 30 items • **Show** how to pair objects to demonstrate odd or even • **Explain** how to pair objects to demonstrate odd or even • **Show** how an even number can be separated into two equal groups • **Explain** how to separate objects into two equal groups • **Explain** how an odd number cannot be separated into two equal groups   Strategy: Use Objects	***AIMS:*** • *Odds & Ends* ***Internet Resources:*** **http://resources.hwb.wales.gov.uk/VTC/explore_num_seq/eng/Introduction/default.htm** http://www.sheppardsoftware.com/mathgames/earlymath/Fruit_shoot_odd_even.htm http://www.sheppardsoftware.com/mathgames/monkeydrive/numbers/MDOddEven.htm	Compare **Even** Left over **Number line** **Odd** Order **Ordered set** **Ordinal number** Pairing **Plot**

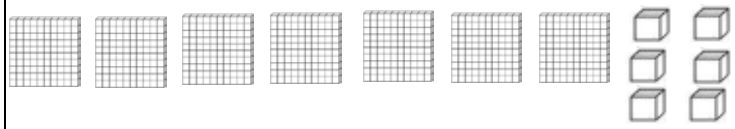
Week 5: Begin Addition Timed tests

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.NS.2:** Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000. **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a "hundred." Understand that 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).		
Students will: • **Read** numbers using base-ten numerals (standard form) and number names (word form) through 999 • **Write** numbers using base-ten numerals (standard form) and number names (word form) through 999 • **Model** a number up to 999 in expanded form using appropriate tolls (place value blocks, other concrete materials, or pictorial representations). • **Write** a number up to 999 in expanded form.  	***AIMS:*** • *Base-ic Buildings* • *Base Place: The Pluses* • *Base Place: The Minuses* ***Internet Resources:*** http://www.abcya.com/base_ten_fun.htm http://www.abcya.com/base_ten_bingo.htm http://www.hoodamath.com/mobile/games/basetenblocks.html http://www.sheppardsoftware.com/mathgames/placevalue/FS_place_value.htm	**Digit** Equals **Expanded form** Group Hundred **Models** Ones **Place value** Read **Standard form** Tens **Whole number** Write

Strategy: Use a picture Use objects		

Week 6:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.NS.2:** Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000. **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a “hundred." Understand that 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).		

Students will: • **Identify** the digit of a number to 999 that corresponds with a given place value with concrete materials and pictorial representations • **Represent** the amount of a digit in a multi-digit numeral by its position within the number of models, words, and numerals. Example: What is the amount of the underlined digit in 654? Answer: 600 or 6 hundreds What is the amount of the underlined digit in 301? Answer: 0 or 0 tens • **Represent** a hundred as ten groups of ten • **Create** bundles of 100s with or without leftovers using base ten blocks, towers, or ten frames • **Express** a number up to 999 using place value in multiple ways → 245 can be expressed in the following ways: 1) 2 hundreds, 4 tens, 5 ones 2) 2 hundreds, 43 ones 3) 24 tens, 3 ones 4) 243 ones → 706 can be modeled with base ten blocks in the following ways:  7 hundreds and 6 ones Strategy: Use objects	***AIMS:*** • *Base-ic Buildings* • *Base Place: The Pluses* • *Base Place: The Minuses* ***Internet Resources:*** http://www.internet4classrooms.com/skill_builders/place_value_math_third_3rd_grade.htm	**Digit** **Equivalent** Equivalent form **Expanded form** Group Hundred **Models** Ones **Place value** Read **Represent** **Standard form** Tens **Word form** Write

Weeks 7-9:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.NS.3: Plot and compare whole numbers up to 1,000 on a number line. **2.NS.7:** Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. **2.CA.1:** Add and subtract fluently within 100.	**1.NS.4:** Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. **1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction.

Week 7:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.NS.3:** Plot and compare whole numbers up to 1,000 on a number line.		

Students will: • **Use** a number line • **Plot** whole numbers up to 1,000 using a number line • **Compare** whole numbers using a number line Strategy: draw a picture use objects	***AIMS:*** ***Internet Resources:*** http://www.multiplication.com/games/addition-games http://www.multiplication.com/games/subtraction-games http://www.abcya.com/comparing_number_values.htm (whole numbers, medium) https://www.sheppardsoftware.com/mathgames/menus/comparingnumbers.htm	Compare Equals to Greater than Less than **Number line** **Plot** **Symbol**

Week 8:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100.		

2.NS.7: Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.		
Students will: (focus on the top 4 bullets) • **Construct** and communicate a comparison of two numbers up to 999 using place value blocks. • **Explain** a process for determining whether a three-digit number is greater than, less than, or equal to another three-digit number • **Compare** two digits up to 999 using <, >, = • **Understand** the value of the hundreds, tens, and ones place • Communication/explanation to the problem below: 452 ____ 455 452 has 4 hundreds 5 tens and 2 ones. 455 has 4 hundreds 5 tens and 5 ones. They have the same number of hundreds and the same number of tens, but 455 has 5 ones and 452 only has 2 ones. 452 is less than 455 Strategy: Make a table	***AIMS:*** • *Dealing with Digits* ***Internet Resources:*** https://www.sheppardsoftware.com/mathgames/menus/comparingnumbers.htm	Compare Comparison Equal to Greater than Hundreds Less than Ones **Place value** Record Results **Symbol** Tens Three-digit Two-digit

Week 9:

Benchmarks to be taught:	Activities	Vocabulary

Standards:
2.CA.1: Add and subtract fluently within 100.
2.NS.7: Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
2.CA.1: Add and subtract fluently within 100.

Students will: (Focus on the explanation/communication portion)

- **Construct** and communicate a comparison of two numbers up to 999 using place value blocks.
- **Explain** a process for determining whether a three-digit number is greater than, less than, or equal to another three-digit number
- **Compare** two digits up to 999 using <, >, =
- **Understand** the value of the hundreds, tens, and ones place
- **Communication**/explanation to the problem below:

452 ____ 455

452 has 4 hundreds 5 tens and 2 ones.
455 has 4 hundreds 5 tens and 5 ones.
They have the same number of hundreds and the same number of tens, but 455 has 5 ones and 452 only has 2 ones.
452 is less than 455

Strategy: Make a table

AIMS:

- *Dealing with Digits*
- *Base Place: The Pluses*
- *Base Place: The Minuses*
- *Composing with Codes*

Internet Resources:
https://www.sheppardsoftware.com/mathgames/menus/comparingnumbers.htm

Compare
Equals to
Fluently
Greater than
Greatest
Hundreds
Least
Less than
Numbers
Ones
Place value
Record
Results
Symbol
Tens
Three-digit
Two-digit

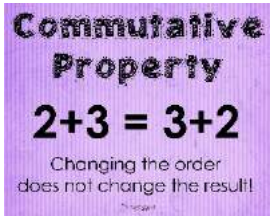
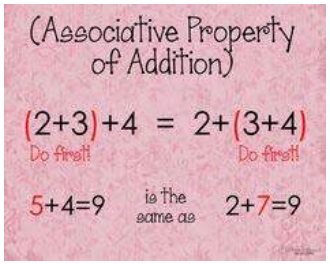
Weeks 10-12:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level correlation
2.CA.1: Add and subtract fluently within 100. **2.CA.6:** Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.CA.6:** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2). **1.CA.2:** Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). **Spiral**: **2.NS.6:** 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). Understand that 100 can be thought of as a group of ten tens — called a “hundred." Understand that 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).

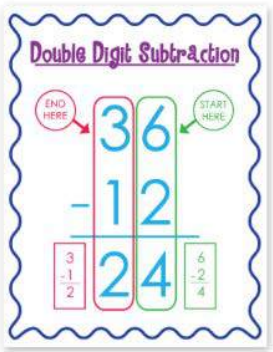
Week 10:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.CA.6:** Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.		
Students will: **Commutative Property:** • **Understand** how numbers are added will not change the sum • **Show** how numbers are added together without changing the sum • Understand how numbers are grouped and not change sum  **Associative Property:** • **Understand** how numbers are added will not change the sum • **Show** how numbers are added together without changing the sum • **Understand** how numbers are grouped and not change the sum  Strategies: Use objects	***AIMS:*** • *Saluting Subtraction and Addition* • *Make It Even* • *Blockout! Book* • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* ***Internet Resources:***	Addend **Associative property** **Commutative property** Describe **Fluently** Grouped Order Patterns Recognize **Sum**

Find Patterns		

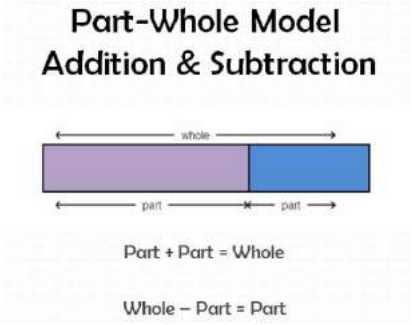
Week 11: (Subtraction will be week 13)

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.		
(2.CA.2 will be broken into sections) **Students will:** (Focus on addition without grouping) • **Add** within 100 using adding to • **Add** within 100 by putting together 12 + 3 15 • **Use** estimation to decide if answers are reasonable • **Communicate** thinking process	***AIMS:*** • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* • *Saluting Subtractions and Addition* • *Make it Even* • *Blockout! Book* • *Pond Problems*	Adding to Complete Demonstrate Drawings Illustrate Pictures Putting together Solve

  Strategy: Draw a picture	***Internet Resources:***	

Week 12:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.		

(2.CA.2 will be broken into sections) **Students will:** • **Use** a symbol for unknown numbers • **Solve** equation for unknown number • **Communicate** thinking process  Strategy: Draw a picture	***AIMS:*** • *Saluting Addition and Subtraction* • *Make it Even* • *Blockout! Book* • *Pond Problems* ***Internet Resources:***	Compare Complete **Compose** **Estimate** Solve **Value**

Weeks 13-15:

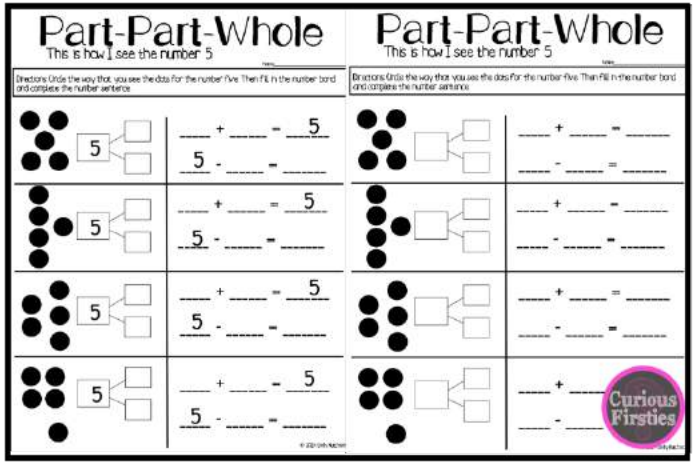
Problem Solving: Should be embedded within daily instruction:

Make sense of problems and persevere in solving them. PS.1	Reason abstractly and quantitatively PS.2	Construct viable arguments and critique the reasoning of others PS.3	Model with Mathematics PS.4	Use appropriate tools strategically PS.5	Attend to precision PS.6	Look for and make sure of structure PS. 7	Look for and express regularity in repeated reasoning. PS.8

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.CA.1: Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.CA.2:** Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). **Spiral**: (addition) **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.

Week 13: (Begin Subtraction…timed tests will begin week 18 for subtraction)

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.		
(2.CA.2 will be broken into sections) **Students will:** • **Subtract** numbers by taking apart • **Subtract** numbers by taking from  Strategy: use objects Draw a picture	***AIMS:*** • *Saluting Addition and Subtraction* • *Make it Even* • *Blockout! Book* • *Pond Problems* ***Internet Resources:***	**Decompose** Difference Equals Subtraction Taking apart Taking from

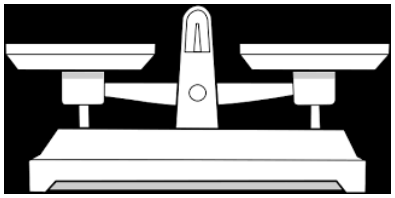
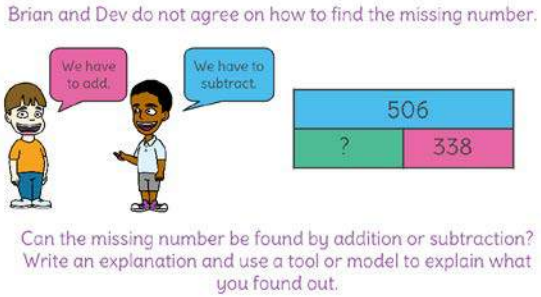
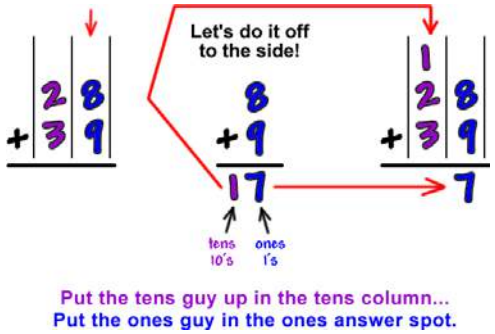
Week 14:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems. **2.CA.1:** Add and subtract fluently within 100.		
(2.CA.2 is broken into sections) **Students will:** • **Use** estimation when solving problems • **Compare** numbers • **Communicate** effectively how to solve the problem ***Focus***: Estimation/rounding	***AIMS:*** • *Saluting Addition and Subtraction* • *Make it Even* • *Blockout! Book* • *Pond Problems* ***Internet Resources:***	Compare **Estimate** **Reasonable** Subtraction

Strategy: Draw a picture		

Week 15:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems. **2.CA.1:** Add and subtract fluently within 100.		

(2.CA.2 will be done into sections) **Students will:** • **Understand** that the equal sign "is the same value" (1st grade) • **Use** a symbol for an unknown number • **Solve** an equation using a symbol to represent the unknown number • **Solve** an equation with an unknown number in any position • **Double** digit addition with carrying ***Focus***: Addition with Carrying  =   Strategy: Guess and Check	***AIMS:*** • *Saluting Addition and Subtraction* • *Make it Even* • *Blockout! Book* • *Pond Problems* ***Internet Resources:***	**Equation** **Symbol** Unknown number

Weeks 16-18:

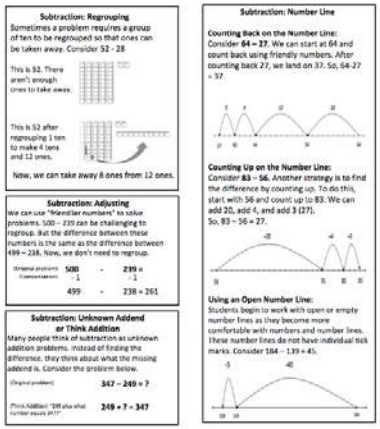
Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them.	**Reason abstractly and quantitatively**	**Construct viable arguments and critique the reasoning of others**	**Model with Mathematics**	**Use appropriate tools strategically**	**Attend to precision**	**Look for and make sure of structure**	**Look for and express regularity in repeated reasoning.**

PS.1	PS.2	PS.3	PS.4	PS.5	PS.6	PS. 7	PS.8

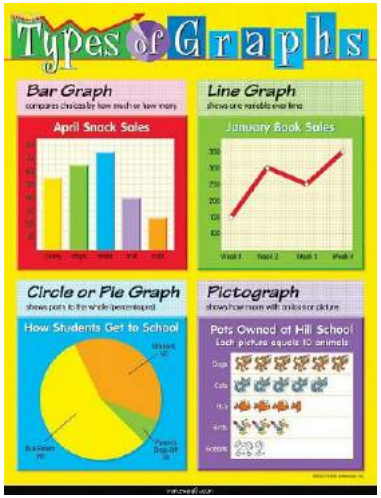
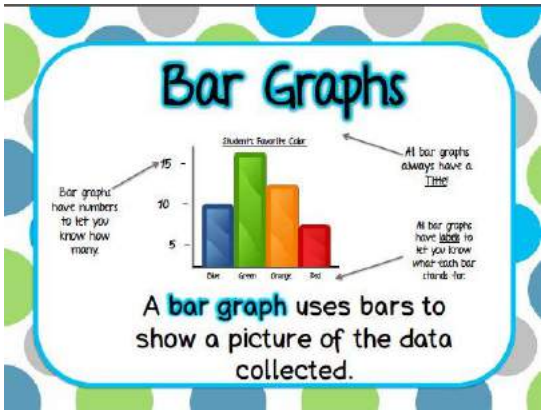
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.CA.1: Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems. **2.DA.1:** Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? Red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.CA.2:** Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). **1.DA.1:** Organize and interpret data with up to three choices (What is your favorite fruit? apples, bananas, oranges); ask and answer questions about the total number of data points, how many in each choice, and how many more or less in one choice compared to another. **Spiral**: 2.CA.2: Addition and subtraction

Week 16:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.		
Students will: ***Continue to add and subtract with and without carrying/borrowing*** • **Solve** real-world problems involving addition • **Solve** real-world problems using subtraction • **Solve** real-world problems using an unknown number • **Use** estimation to decide if answer is reasonable • **Communicate** process of solving the real-world problem • **Know** when to use addition • **Know** when to use subtraction • **Apply** methods of addition and subtraction  Strategy: Draw a picture	***AIMS:*** • *Saluting Addition and Subtraction* • *Make it Even* • *Blockout! Book* • *Pond Problems* ***Internet Resources:*** http://www.mathplayground.com/wordproblems.html http://www.mathplayground.com/gsmbegin.html http://www.abcya.com/first_grade_word_problems_add_subtract.htm http://mrnussbaum.com/wordproblems/	Equals **Equation** **Reasonable** **Represent** Solve **Symbol** Unknown number Variable

Week 17:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.DA.1:** Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? Red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.		
Students will: • **Identify** the parts of a picture graph (title, categories, category label, key, and data) and bar graph (title, scale, scale label, categories, category label, and data). • **Interpret** and explain data on a given picture graph and bar graph to solve put together, take-apart, and compare problems. • **Create** a picture graph and bar graph from a given set of data. • **Represent** up to four categories of data.   Strategy: Draw a picture	***AIMS:*** • *Tuber talk* • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* • *Saluting Subtraction and Addition* • *Blockout! book* ***Internet Resources:*** http://www.abcya.com/fuzz_bugs_graphing.htm http://www.topmarks.co.uk/maths-games/5-7-years/data-handling http://classroom.jc-schools.net/basic/math-graph.html http://www.softschools.com/math/data_analysis/bar_graph/activities/favourite_colors_bar_chart/ http://mrnussbaum.com/coolgraphing/	**Bar graph** Category Category label Data **Data set** Explain Graph Interpret Key **Picture graph** Represent Scale Title

Week 18:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100.		
Students will: This week will be review week. 1. Which standards need to be covered again? 2. Which standards do my students need more practice?		

Strategy:		

Weeks 19-21:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

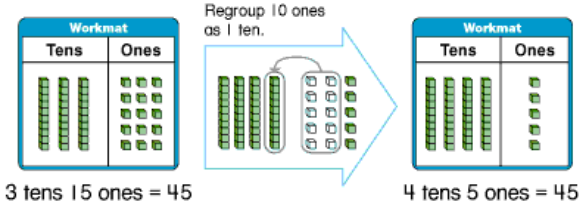
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation

2.CA.4: Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000. **2.CA.1:** Add and subtract fluently within 100. **2.G.1:** Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes. **2.G.2:** Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials. **2.G.3:** Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.	**1.CA.5:** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and that sometimes it is necessary to compose a ten. **1.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition within 100. **1.G.1:** Identify objects as two-dimensional or three-dimensional. Classify and sort two-dimensional and three-dimensional objects by shape, size, roundness and other attributes. Describe how two-dimensional shapes make up the faces of three-dimensional objects. **1.G.2:** Distinguish between defining attributes of two- and three-dimensional shapes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size). Create and draw two-dimensional shapes with defining attributes. **1.G.3:** Use two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. [In grade 1, students do not need to learn formal names such as "right rectangular prism."] **Spiral**: 2.NS.9: Using <, >, =.

Week 19: Begin subtraction timed tests

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.4:** Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds. **2.CA.7:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000. **2.CA.1:** Add and subtract fluently within 100.		

Students will: • **Add** within 1000 using models • **Add** within 1000 using drawings • **Add** within 1000 using various strategies based on place value • **Add** within 1000 using properties of operations • **Understand** the relationship between addition and subtraction • **Describe** a strategy and explain reasoning used to solve the problem • **Understand** adding/subtraction using place value (ones from ones, tens from tens, hundreds from hundreds  3 tens 15 ones = 45 4 tens 5 ones = 45  Strategy: Draw a picture	***AIMS:*** • *Base Place: The Pluses* • *Base Place: The Minuses* • *Saluting Subtraction and Addition* • *Blockout! book* ***Internet Resources:*** http://nlvm.usu.edu/en/nav/frames_asid_154_g_1_t_1.html?from=topic_t_1.html http://nlvm.usu.edu/en/nav/frames_asid_155_g_1_t_1.html?from=topic_t_1.html	Describe Drawings Explain Fact families Illustrate **Models** Operations Pattern **Place value** **Reasoning** Relationship Represent **Rule** Strategies

Week 20:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.G.1:** Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.		

Students will:

- **identify** two and three dimensional shapes by number of sides
- **describe** two and three dimensional shapes by number of faces
- **classify** two and three dimensional shapes by number of vertices
- **draw** two dimensional shapes

2-D Shapes	Picture	Number of sides	Number of faces	Number of vertices
Triangle		3	1	3
Square		4	1	4
Rectangle		4	1	4

3-D Shapes	Picture	Number of sides	Number of faces	Number of vertices
Cube		6	6	8
Prism		6	6	8

"Prisms have two opposite faces that are the same size and shape (congruent). All other faces, connecting these two opposite faces, are rectangles. In *rectangular prisms*, the two opposite faces are rectangles, so all six faces are rectangles. Most boxes are rectangular prisms. You can also call these shapes *rectangular solids*."

Polygon: many sides

Strategy: Use objects

AIMS:

- *Saluting Subtraction and Addition*
- *Blockout! Book*
- *On Board with Shapes*
- *Shapes All Around Us*

Internet Resources:

http://www.learnalberta.ca/content/mejhm/index.html?l=0&ID1=AB.MATH.JR.SHAP&ID2=AB.MATH.JR.SHAP.SHAP&lesson=html/object_interactives/shape_classification/use_it.html

http://www.math-play.com/Geometry-Math-Games.html

2-dimensional
3-dimensional
Classify
Cube
Describe
Draw
Edges
Faces
Identify
Illustrate
Polygon
Rectangle
Rectangular prism
Shape
Side
Solids
Square
Triangle
Vertices/vertex

Week 21:

Benchmarks to be taught:	Activities	Vocabulary

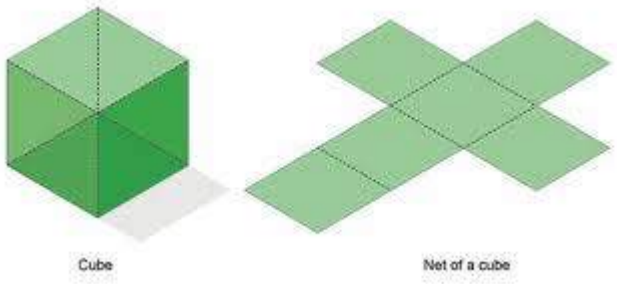
Standards:

2.G.2: Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials.

2.G.3: Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.
2.CA.1: Add and subtract fluently within 100.

Students will:

- **Create** squares using appropriate materials
- **Create** rectangles using appropriate materials
- **Create** triangles using appropriate materials
- **Create** cubes using appropriate materials
- **Create** right rectangular prisms using appropriate materials
- **Investigate** result of composing and decomposing two and three dimensional shapes
- **Predict** the result of composing and decomposing two and three dimensional shapes



Strategy: Use objects

AIMS:

- *Base Place: The Pluses*
- *Base Place: The Minuses*
- *Composing with Cubes*

Internet Resources:
http://www2.learningtoday.com/player/swf/Geometry_2DShapes_L2_V2_T1a.swf
http://www.turtlediary.com/game/compose-shapes-using-one-square-four-triangles.html
http://www.turtlediary.com/game/tangrams.html

2-Dimensional
3-Dimensional
Create
Cube
Investigate
Predict
Prism
Rectangles
Solid
Squares
Triangles

Weeks 22-24:

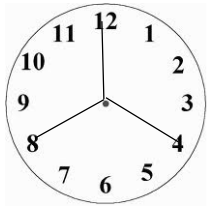
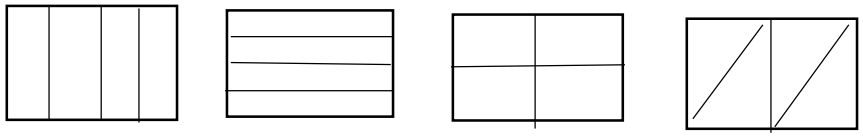
Problem Solving: Should be embedded within daily instruction:

Make sense of problems and persevere in solving them. PS.1	Reason abstractly and quantitatively PS.2	Construct viable arguments and critique the reasoning of others PS.3	Model with Mathematics PS.4	Use appropriate tools strategically PS.5	Attend to precision PS.6	Look for and make sure of structure PS. 7	Look for and express regularity in repeated reasoning. PS.8

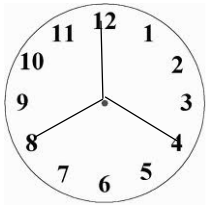
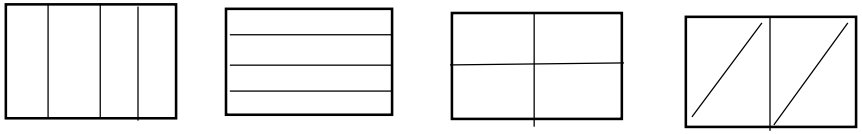
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.CA.1: Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.G.4:** Partition circles and rectangles into two and four equal parts; describe the parts using the words halves, fourths, and quarters; and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of, the parts. Understand for partitioning circles and rectangles into two and four equal parts that decomposing into equal parts creates smaller parts. **Spiral**: Addition and subtraction **2.G.1:** Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.

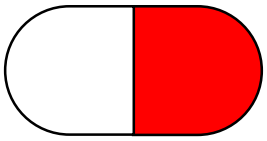
Week 23:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.		
Students will: • **Partition** circles into two, three, or four equal shares • **Partition** rectangles into two, three, or four equal shares • **Describe** the shares using **words** such as: halves, thirds, half of, a third of, etc • **Describe** the whole as two halves, three thirds, four fourths, etc  Divide a rectangle in fourths: (at least____ ways)  Strategy: Draw a picture Use an object	***AIMS:*** • *Fresh Baked Fractions* ***Internet Resources:*** http://www.topmarks.co.uk/maths-games/7-11-years/fractions-and-decimals http://www.sheppardsoftware.com/mathgames/earlymath/fractions_shoot.htm http://www.counton.org/games/map-fractions/spring/ (can be 2 player)	Circle Describe **Fourths** Fourth of Half of **Halves** **Identical wholes** Identify **Partition** Rectangle Third of **Thirds**

Week 23:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape.		
Students will: • **Partition** circles into two, three, or four equal shares • **Partition** rectangles into two, three, or four equal shares • **Describe** the shares using **numbers** such as: 1/2., 1/3, 1/4 • **Describe** the whole as two halves, three thirds, four fourths, etc  Divide a rectangle in fourths: (at least____ ways)  Strategy: Use pictures Use Objects	***AIMS:*** • *Fresh Baked Fractions* ***Internet Resources:***	¼ ½ 1/3 **Fourths** **Halves** Part out of whole **Thirds**

Week 24:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.G.5:** Partition circles and rectangles into two, three, or four equal parts; 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 parts of identical wholes need not have the same shape. **2.CA.1:** Add and subtract fluently within 100.		
Students will: • **Recognize** equal parts of identical wholes need not have same shape • **Describe** equivalent shares using words such as halves, thirds, fourths, half of, etc • **Describe** a whole as two of two equal parts, three of three equal parts, etc  	***AIMS:*** • *Fresh Baked Fractions* ***Internet Resources:***	**Partition** Part out of whole

Strategy: Use objects Draw a picture		

Weeks 25-27:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation

2.CA.1: Add and subtract fluently within 100. **2.M.5:** Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour. **2.M.6:** Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.M.2:** Tell and write time to the nearest half-hour and relate time to events (before/after, shorter/longer) using analog clocks. Understand how to read hours and minutes using digital clocks. **Spiral**: Addition and Subtraction **2.NS.1:** Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.

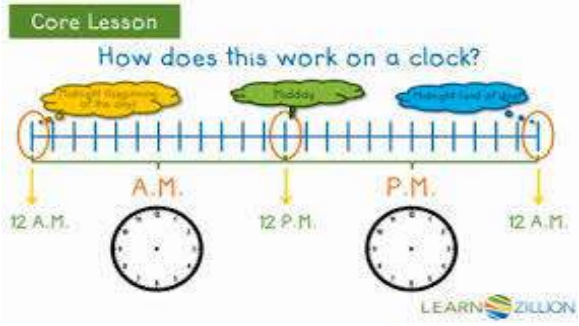
Week 25:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.M.5:** Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.		

Students will: (Focus on the top 5 bullets. The bottom 2 will be week 26) • **Skip** count by 5's to tell time in five-minute intervals on an analog clock. • **Determine** the time on an analog clock • **Write** the time as it would appear on a digital clock when given a time to the hour, half-hour, and five minute intervals. • **Determine** the time on a digital clock and draw in the hands on an analog clock when given a time to the hour, half-hour, and five minute intervals. • **Use** a.m. and p.m. correctly • **Solve** real world problems with addition of time intervals on the hour or half hour • **Solve** real world problems with subtraction of time intervals on the hour or half hour Example: *Attack of the 50ft Turnip* plays at 7:10. It is now quarter to seven. How long before the movie starts? Example: *Mikey Mongoose* begins at 2:35. It ends at 4:05. How long is the movie? Strategy: Use objects	***AIMS:*** • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* • *Time by Fives* • *How Time Flies* • *Double Time* • *Can you Tell Time?* ***Internet Resources:*** http://interactivesites.weebly.com/timeclocks.html http://resources.woodlands-junior.kent.sch.uk/maths/measures.htm http://www.internet4classrooms.com/skill_builders/telling_time_math_third_3rd_grade.htm	**Analog clock** Day Digital clock Explain Hours Minutes Nearest Seconds Time

Week 26:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100.		

2.M.6: Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.		
Students will: • **Solve** real world problems with addition of time intervals on the hour or half hour • **Solve** real world problems with subtraction of time intervals on the hour or half Example: *Attack of the 50ft Turnip* plays at 7:10. It is now quarter to seven. How long before the movie starts? Example: *Mikey Mongoose* begins at 2:35. It ends at 4:05. How long is the movie? • Describe the relationships of time • Understand how seconds relate to a minute • Understand how minutes are related to hours • Understand how hours are related to days • Understand how days are related to weeks • Understand how weeks are related to months • Understand how months are related to years  Strategy: Draw a picture	***AIMS:*** • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* • *Time by Fives* • *How Time Flies* • *Double Time* • *Can you Tell Time?* ***Internet Resources:*** http://mathsframe.co.uk/en/resources/resource/118/adding_time_word_problems# https://www.quia.com/rr/37585.html http://mrnussbaum.com/timew/ (these are a bit harder, down to the minute)	a.m. **Analog clock** Day Describe Digital Elapsed Hour Intervals Minutes Months p.m. Seconds Solve Week Year

Week 27:

Benchmarks to be taught:	Activities	Vocabulary

Standards: **2.CA.1:** Add and subtract fluently within 100.		
Students will: **Review week! ** This will be used at your discretion. 1. Which standards does my class need more practice? 2. Which standards need more time to ensure mastery? Strategy:	***AIMS:*** ***Internet Resources:***	

Weeks 28-30:

Problem Solving: Should be embedded within daily instruction:

Make sense of problems and persevere in solving them. PS.1	Reason abstractly and quantitatively PS.2	Construct viable arguments and critique the reasoning of others PS.3	Model with Mathematics PS.4	Use appropriate tools strategically PS.5	Attend to precision PS.6	Look for and make sure of structure PS. 7	Look for and express regularity in repeated reasoning. PS.8

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation
2.CA.1: Add and subtract fluently within 100. **2.M.2:** Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter. **2.M.3:** Understand that the length of an object does not change regardless of the units used. 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 chosen. **2.M.4:** Estimate and measure volume (capacity) using cups and pints.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **1.M.1:** Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature.

Week 28:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.M.2:** Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.		
Students will: • **Describe** attributes of a standard linear measurement tool (equally spaced numbers, consecutive numbers….) • **Understand** that length tells how long, how tall, or how wide something is • **Select** an appropriate tool to measure the length of an object • **Measure** and record the length of various objects to the nearest inch, foot, centimeter, or meter Strategy: Use objects	***AIMS:*** • *Base Place: The Pluses* • *Base Place: The Minuses* • *Composing with Codes* • *Time by Fives* • *How Time Flies* • *Double Time* • *Can you Tell Time?* ***Internet Resources:*** http://interactivesites.weebly.com/measurement.html http://www.funbrain.com/measure/ https://www.sheppardsoftware.com/mathgames/menus/measurement.htm http://www.softschools.com/measurement/games/	Appropriate Centimeter **Estimate** Foot Inch **Length** **Measure** Measuring tape Meter Meter stick Object Rulers Tools Yard Yardsticks

Week 29:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.M.3:** Understand that the length of an object does not change regardless of the units used. 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 chosen.		
Students will: Review 2.M.1: • **Understand** length does not change regardless of units used • **Describe** how two measurements relate to size of unit used Strategy: Use objects Make a table	***AIMS:*** • What's in Your Yard? • Inching Along • Tuber Talk ***Internet Resources:*** http://interactivesites.weebly.com/measurement.html http://www.funbrain.com/measure/ https://www.sheppardsoftware.com/mathgames/menus/measurement.htm http://www.softschools.com/measurement/games/	Centimeter **Estimate** Foot Inch **Length** **Measure** Meter Meter sticks Metric units Rulers Standard units **Unit** Yard Yardsticks

Week 30:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **2.M.4:** Estimate and measure volume (capacity) using cups and pints.		
Students will: • **Estimate** volume • **Measure** volume • **Understand** the difference between volume and length • **Know** what tools to use for length and liquids	***AIMS:*** ***Internet Resources:*** http://interactivesites.weebly.com/measurement.html	Capacity Cups **Estimate** Fluid Measure Pints **Volume**

Strategy: Use Objects	http://www.funbrain.com/measure/ https://www.sheppardsoftware.com/mathgames/menus/measurement.htm http://www.softschools.com/measurement/games/	

Weeks 31-33:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

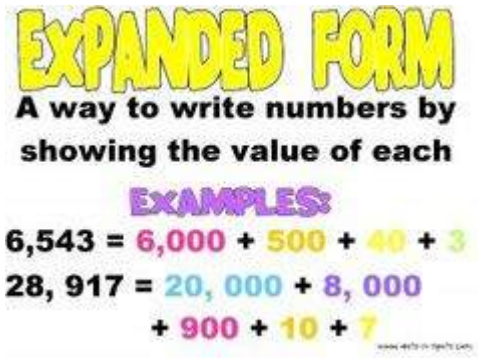
DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

Standards for 3 weeks:	Grade Level Correlation

2.CA.1: Add and subtract fluently within 100. **3.NS.1**: Read and write whole numbers up to 10,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 10,000. **3.NS.2:** Compare two whole numbers up to 10,000 using >, =, and < symbols. **3.NS.9**: Use place value understanding to round 2- and 3-digit whole numbers to the nearest 10 or 100.	**1.CA.1:** Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction. **2.NS.2:** Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000. **2.NS.7:** Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

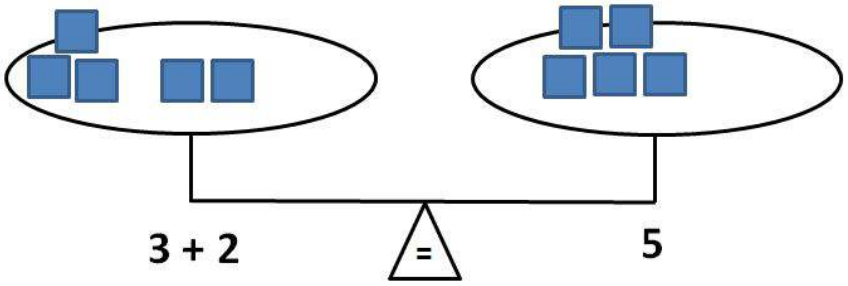
Week 31:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **3.NS.1:** Read and write whole numbers up to 10,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 10,000.		

Students will: • **Read** whole numbers up to 10,000 • **Write** whole numbers up to 10,000 • **Use** words for standard form • **Use** models for standard form • **Represent** equivalent forms of whole numbers  Strategy: Use a Number Sentence	***AIMS:*** ***Internet Resources:*** http://www.funbrain.com/numwords/ http://www.sheppardsoftware.com/mathgames/placevalue/mathman_place_exp.htm http://www.math-play.com/place-value-games.html	**Equivalent form** **Models** **Place value** **Represent** **Standard form** **Whole number**

Week 32:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100.		

3.NS.2: Compare two whole numbers up to 10,000 using >, =, and < symbols.		
Students will: • **Compare** whole numbers • **Use** the greater than symbol • **Use** the less than symbol • **Use** the equal sign correctly  Strategy: Draw a picture	***AIMS:*** ***Internet Resources:*** http://www.gameclassroom.com/game/45533-3750/compare-numbers-10000/compare-numbers-game http://www.sheppardsoftware.com/mathgames/placevalue/FSCompareNumbers.htm	Compare Equal to Greater than Less than **Place value** **Symbol**

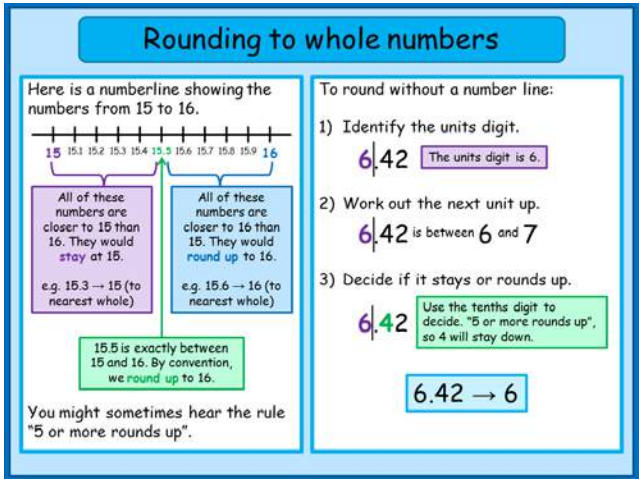
Week 33:

Benchmarks to be taught:	Activities	Vocabulary

Standards:
2.CA.1: Add and subtract fluently within 100.
3.NS.9: Use place value understanding to round 2- and 3-digit whole numbers to the nearest 10 or 100.

Students will:

- **Round** 2-digit whole numbers
- **Round** 3-digit whole numbers



Strategy: Use a Number Sentence

AIMS:

Internet Resources:
http://www.math-play.com/Rounding-Numbers-Pirate-Game.html
http://mrnussbaum.com/halfcourt/
http://www.sheppardsoftware.com/mathgames/round/mathman_round_hundreds.htm

Estimate
Place value
Round
Whole number

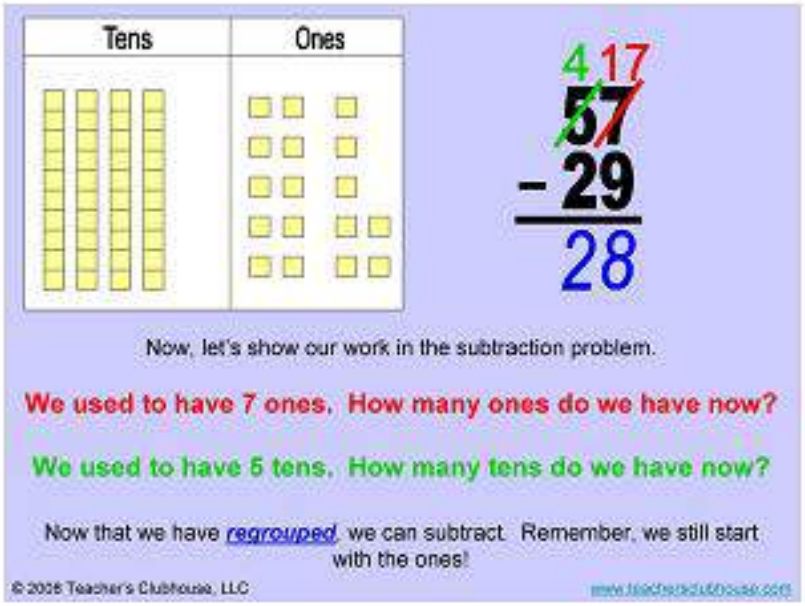
Weeks 34-36:

Problem Solving: Should be embedded within daily instruction:							
Make sense of problems and persevere in solving them. **PS.1**	**Reason abstractly and quantitatively** **PS.2**	**Construct viable arguments and critique the reasoning of others** **PS.3**	**Model with Mathematics** **PS.4**	**Use appropriate tools strategically** **PS.5**	**Attend to precision** **PS.6**	**Look for and make sure of structure** **PS. 7**	**Look for and express regularity in repeated reasoning.** **PS.8**

DOK (Depth of Knowledge)			
Level 1: identify, list, label, illustrate, measure, state, tell, use, match	**Level 2:** graph, classify, cause/effect, estimate, compare, infer, construct, summarize, interpret, estimate	**Level 3**: Revise, critique, construct, investigate, cite evidence, conclusions, assess	**Level 4**: Design, connect, synthesize, critique, analyze, create, prove, apply concepts

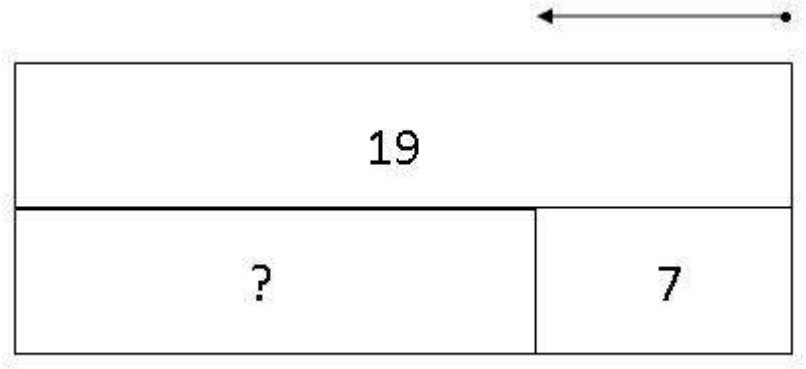
Critical Standards (check plus) for 3 weeks:	Grade Level Correlation
3.C.1: Add and subtract whole numbers fluently within 1000.	**2.CA.1:** Add and subtract fluently within 100.
3.AT.1: Solve real-world problems involving addition and subtraction of whole numbers within 1000 (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem).	**2.CA.2:** Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.
3.AT.4: Interpret a multiplication equation as equal groups (e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each). Represent verbal statements of equal groups as multiplication equations.	**2.CA.5:** Use addition to find 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 groups.

Week 34:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **2.CA.1:** Add and subtract fluently within 100. **3.C.1:** Add and subtract whole numbers fluently within 1000.		
Students will: • **Add** whole numbers with carrying/trading • **Subtract** whole numbers with regrouping  Strategy: Use Objects	***AIMS:*** ***Internet Resources:*** **http://mrnussbaum.com/drag-and-drop-math/** http://nlvm.usu.edu/en/nav/frames_asid_154_g_1_t_1.html?from=topic_t_1.html http://nlvm.usu.edu/en/nav/frames_asid_155_g_1_t_1.html?from=topic_t_1.html	Addends Addition Difference Regroup Regrouping Subtraction **Sum** Trading

Week 35:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **3.C.1**: Add and subtract whole numbers fluently within 1000. **3.AT.1:** Solve real-world problems involving addition and subtraction of whole numbers within 1000 (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem)		
Students will: • **Solve** real-world problems involving addition • **Solve** real-world problems involving subtraction • **Use** drawings to represent an unknown number • **Use** equations to represent an unknown number	***AIMS:*** ***Internet Resources:***	Drawing **Equation** **Represent** Solve **Symbol** Unknown number Variable

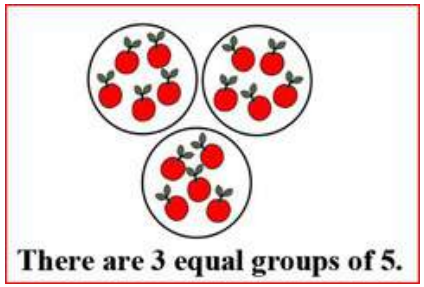
 Strategy: Use objects Draw a picture	http://www.mathplayground.com/wordproblems.html http://www.internet4classrooms.com/skill_builders/word_problems_math_fourth_4th_grade.htm	

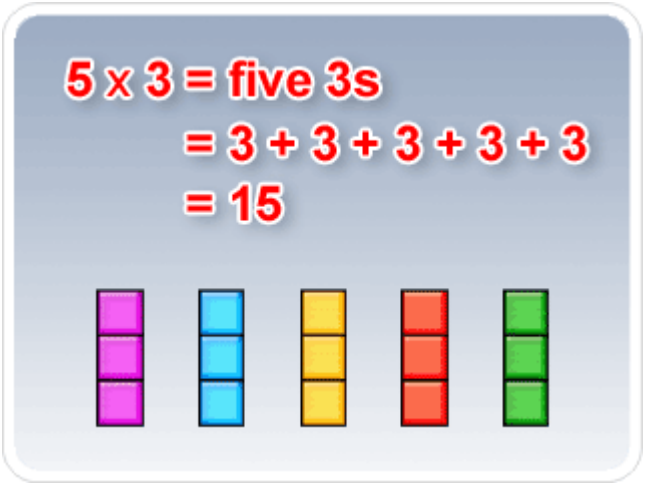
Week 36:

Benchmarks to be taught:	Activities	Vocabulary
Standards: **3.C.1**: Add and subtract whole numbers fluently within 1000. **3.AT.4:** Interpret a multiplication equation as equal groups (e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each). Represent verbal statements of equal groups as multiplication equations.		

Students will:

- **Interpret** multiplication as equal groups
- **Interpret** multiplication as repeated addition
- **Represent** multiplication by using objects





Strategy: Draw a picture
Find a pattern

AIMS:

Internet Resources:

Equal groups
Equation
Interpret
Multiplication
Objects
Represent
Verbal

Benchmarks to be taught:	Activities	Vocabulary
Standards:		
Students will:	***AIMS:*** ***Internet Resources:***	