2017-2018	Grade 1 Go Math! Quarter 2 Planner Chapter 4 Subtraction Strategies	10-12 Days

BIG IDEA: "Subtraction facts require more cognitive processing, possibly because they require reverse thinking so students are not as quick" (Kennedy, Tipps, & Johnson, 2004). Using related facts gives children the opportunity to **look for and express regularity in repeated reasoning**. For example, they learn that for every addition fact (except doubles) there is one related addition fact and two related subtraction facts (fact families). This can help students solve unknown facts. *Think Addition* is the major thinking strategy for learning and recalling subtraction facts. To use this strategy, students must understand the inverse relationship between addition and subtraction. They must have also master the addition facts (sums to 10).

Adapted from The Common Core Math Companion (Gojak & Miles, 2015, pg. 34, 39, 44).

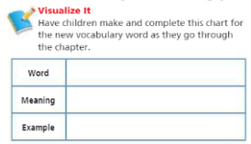
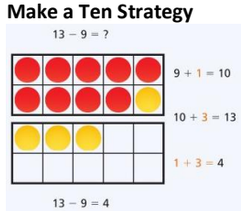
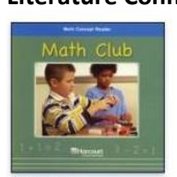
Professional Development Videos:
Models of Subtraction
Think Addition

Quarter 2 Fluency Resources:
Fluency Resources in Go Math!
Building Fluency Through Word Problems
Building Fluency Through Number Talks:Rekenreks
Building Fluency Through Number Talks:Double Ten-Frames
Building Fluency Through Number Talks:Number Sentences

ESSENTIAL QUESTION: How do you solve subtraction problems?
STANDARDS: 1.OA.1, 1.OA.4, 1.OA.5, 1.OA.6

ELD STANDARDS:
ELD.PI.1.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.1.3-Offering opinions and negotiating with/persuading others.
ELD.PI.1.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.1.9- Expressing information and ideas in oral presentations.
ELD.PI.1.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.1.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G1	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
4.1	Count Back	1.OA.5 MP 2 MP 4 MP 6 Companion Pg. 45	How can you count back 1, 2, 3?	Counting back from a number builds children's mental math skills. Children identify patterns as they count back, allowing them to understand the relationship between the numbers. This strategy also lays the foundation for adding and subtracting greater numbers and recognizing patterns between numbers within 100.	Number Line, Counters, Number Sentence Template	Practice counting on from 1,2,3… then 6,7,8. Then have students practice counting back 10, 9, 8… then 5,4,3. Students can work in pairs counting on and back from number 1-10.	Count back	**ELD Standards** • ELD Standards • ELA/ELD Framework • ELPD Framework • ELL Math Instruction Framework • Integrating the ELD standards into Math **Access Strategies** • Organizing Learning for Student Access to Challenging Content • Student Engagement Strategies • Problem Solving Steps and Approaches	Use pictures or words to explain how you can solve 7 – 3 by counting back.
4.2	Hands On • Think Addition to Subtract	1.OA.4 MP 3 MP 4 MP 7 Companion Pg. 42	How can you use an addition fact to find the answer to a subtraction fact?	Using addition to help with subtraction is a strategy that helps children understand relationships and properties. Children learn about related addition sentences using the Commutative Property of Addition. Children learn about related addition and subtraction sentences in this lesson. They use the addition facts they already know to solve related subtraction facts.	Number Line, Counters, Number Sentence Template Dominos Fact Families	Use a number line and/or counters to practice counting back for various equations: 9-2, 5-1, 7-3, 10-4, etc…	Fact families, Addition/ subtraction relationship		How can you use an addition fact to find the answer to a subtraction problem? How can you use an addition fact to solve 7 – 2?

4.3	Use Think Addition to Subtract	1.OA.4 MP 1 MP 5 MP 6 Companion Pg. 42	How can you use addition to help you find the answer to a subtraction fact?	In this lesson, children will think abstractly about how subtraction facts relate to addition facts.	Number Line, Counters, Number Sentence Template	There are 14 cats. 8 are black. The rest are yellow. How many yellow cats are there? Have students solve. Then have them write the related addition and subtraction facts. Have students share with a partner, small group, or whole class to discuss the various ways to solve this problem. <table><tr><td>8</td><td>?</td></tr><tr><td colspan="2">14</td></tr></table>	Fact families	**Equitable Talk** • Accountable Talk Simply Stated • Equitable Talk Conversation Prompts • Accountable Talk Posters • Five Talk Moves Bookmark • Effective Math Talks **Cooperative Learning** • Cooperative Learning Role Cards • Collaborative Learning Table Mats • Seating Chart Suggestions **Vocabulary Strategy**   **Model and Discuss** **Make a Ten Strategy**  **Literature Connection**  *Math Club*	How can you use an addition fact to find the answer to a subtraction fact? How can you use an addition fact to solve 7 – 2?
4.4	Hands On • Use 10 to Subtract	1.OA.6 MP 2 MP 5 MP 8 Companion Pg. 47	How can you make a ten to help you subtract?	Relating addition and subtraction is crucial for future work in algebra. Also, understanding that numbers can be composed and decomposed in different ways allows children to develop fluency with numbers.	Double Ten Frame Use this template to pose subtraction problems, but students can also use addition to solve.	What addition facts will help us solve 9-6? 7-4? How do we find the sum?	Decompose		How can you make a ten and addition to help you subtract? Using a ten frame and counters, show how to solve 18 -9.
4.5	Break Apart to Subtract	1.OA.6 MP 2 MP 4 Companion Pg. 47	How do you break apart a number to subtract?	In this lesson, children subtract by breaking apart a number to make a ten. A ten frame can help children see 10 as part of a teen number.	Double Ten Frame Use this template to pose a problem. Have students decompose and write a number sentence showing what they did. For example, 15-7 would be 15-5-2=8	How does making a ten help us solve subtraction problems? Have students work in pairs creating equations that can be solved by making a ten. Example: 16-8 16-6 = 10 10-2 = 8	Decompose		Use a ten frame and counters to show how you would break apart a number to find 14-6.
4.6	Problem Solving • Use Subtraction Strategies	1.OA.1 MP 1 MP 3 MP 4 Companion Pg. 36	How can acting out a problem help you solve the problem?	In this lesson, children decide which operation to use to solve a word problem. Then they choose a modeling strategy to help solve the problem. Remind children that when subtracting 8 or 9 from a teen number, the strategy of using a ten frame and making a ten may be useful.	Linking cubes Red/Yellow counters Steps to Word Problems Double Ten Frame Number Line, Counters, Number Sentence Template	Show your students 14-5. Ask: How many do you subtract to make 10? (4) Now subtract 1 from 10. (9) What is 14-5? (9) How are 14-5 and 14-4-1 alike? How are they different?	Number sentence		Use pictures or words to explain how you would act out the following problem. Joe has 9 toys. Dan has 6 toy cars. How many fewer toy cars does Dan have than Joe?

								Children read the book and learn to read number sentences. ***Miss Bumble's Garden***  Children read the book and practice subtraction strategies.  *The Class Party* Children read the book and learn to read addition and subtraction number sentences.	
Assessments: Go Math Chapter 4 Test Go Math Chapter 4 Performance Task The Corner Store									

2017-2018	Grade 1 Go Math! Quarter 2 Planner Chapter 5 Addition and Subtraction Relationships	13-15 Days

BIG IDEA: Emphasis on the relationship between addition and subtraction deepens students' understanding. Addition and subtraction are inverse operations. Students can conceptualize this relationship by using connecting cubes. Students can describe their models using language such as: "I made a train with 5 red cubes and 4 blue cubes to show 5 + 4 = 9. I can break off 4 blue cubes to show 9 – 4 = 5. The Commutative Property of Addition and related facts reduces the number of basic facts students need to memorize and allows students to make connections. The inverse relationship between addition and subtraction facilitates memorization of both addition and subtraction facts. Teaching addition and subtraction relationships for understanding provides an opportunity for students to construct viable arguments and critique the reasoning of others. They need to use concrete referents such as connecting cubes to communicate to their peers about related facts, different ways to build numbers, and the Commutative Property of Addition.

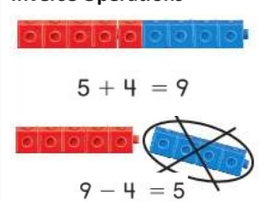
Adapted from The Common Core Math Companion (Gojak & Miles, 2015, pg. 34, 44, 48).

Professional Development Videos:
Turn Around Facts
Think Addition

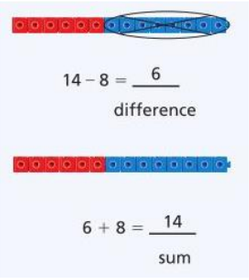
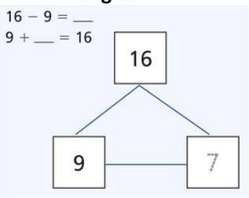
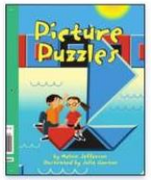
ESSENTIAL QUESTION: How can relating addition and subtraction help you to learn and understand facts within 20?
STANDARDS: 1.OA.1, 1.OA.6, 1.OA.7, 1.OA.8

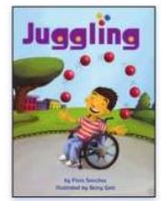
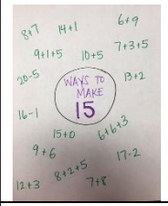
ELD STANDARDS:

ELD.PI.1.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.1.3-Offering opinions and negotiating with/persuading others.
ELD.PI.1.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.1.9- Expressing information and ideas in oral presentations.
ELD.PI.1.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.1.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G1	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
5.1	Problem Solving • Add or Subtract	1.OA.1 MP 1 MP 2 MP 4 Companion Pg. 36	How can making a model help you solve a problem?	The word problems in this lesson require finding a missing addend when one part is given. The bar models are used to show the whole and the parts that make up the whole.	Cubes Part-Part-Total Template Steps to Word Problems	Play *Guess My Number* with the class. I am thinking of a number. When you double it, you get 8. What is my number? (4) …When you double it and add 1, you get 13. (6) …When you double it and subtract 1, you get 17. (9)	Number sentence, sum, Addend, difference	**Vocabulary Strategy** Draw a two-column chart for related addition and subtraction facts. Related Facts: Addition: 3 + 2 = 5; Subtraction: 5 – 3 = 2 **Model and Discuss** **Inverse Operations**  5 + 4 = 9 9 – 4 = 5	Liz has 9 toy bears. Then she buys some more. Now she has 15 toy bears. How many toy bears did she buy? Draw a picture or use a model to explain your answer.
5.2	Hands On • Record Related Facts	1.OA.6 MP 5 MP 7 MP 8 Companion Pg. 47	How do related facts help you find missing numbers?	In this lesson, children record related facts. Continue to make the connection for children that two addition sentence can be related through the Commutative Property of Addition.	Counters Facts to 10 Facts to 20	Have students solve the following with a picture: Sam has 4 more books than Ed. Sam has 9 books. How many books does Ed have? How did the picture help you solve the problem?	Number sentence, sum, addend, difference		How does knowing one related fact help you in finding all the related facts? Using the number 3, 6, and 9, write the four related fact sentences and create

5.2-5.4 focus on Fact Families and the relationship of addition and subtraction.

								Related Facts 6 + 7 = 13 13 − 6 = 7 7 + 6 = 13 13 − 7 = 6 **Difference/Sum**  **Math Triangles**  **Literature Connection**  *Picture Puzzles* Children read the book and learn about addition and subtraction facts through 12.	a story for one of the sentences.
5.3	Identify Related Facts	1.OA.6 MP 4 MP 7 MP 8 Companion Pg. 47	How do you know if addition and subtraction facts are related?	In this lesson, children continue to build understanding of the relationship between addition and subtraction.	Cubes, small manipulatives, red/yellow counters, etc. Facts to 10 Facts to 20	Write the numbers, 2, 8, and 10 on the board. Have students write the 4 related fact sentences. Then have them draw a picture to model the sentences. Ask them: How are the pictures the same? How are they different? How are addition and subtraction opposites? How are the sentences the same? How are they different?	Number sentence, sum, addend, difference		Use numbers and pictures to show related facts with the numbers 7,9, and 16.
5.4	Use Addition to Check Subtraction	1.OA.6 MP 4 MP 7 MP 8 Companion Pg. 47	How can you use addition to check subtraction?	Understanding why addition and subtraction are inverse relationships is the key to working with various types of problems and developing fluency in computation.	Cubes, small manipulatives, red/yellow counters, etc.	Have pairs work together to form two teams. Each team writes ten subtraction sentences. (Ex. 15-8) Encourage teams to make up subtraction sentences with a variety of differences. Teams take turns reading one of their subtraction sentences aloud. The other team responds orally with a related addition sentence. Correct responses earn a point.	Number sentence, sum, addend, difference		Find 12-9. Then write or draw how you can add to check your answer.
5.5	Hands On: Algebra • Unknown Numbers	1.OA.8 MP 1 MP 7 MP 8 Companion Pg. 50	How can you use a related fact to find a unknown/ missing number?	Have children use concrete models and explain their work as they attempt to find the unknown number in the related addition and subtraction facts. Make sure children understand that unknown addends may be found using different methods, and encourage them to use the relationship between addition and subtractions to help find the unknown numbers.	Cubes, small manipulatives, red/yellow counters, etc. Domino Fact Families Build a Number Bond	Ask students to solve 14-8=____ (difference) Then have them solve 6+8=____(sum) How are these equations similar? How are they different?	Number sentence, sum, addend, difference		Use words, pictures, or numbers to show how to find the unknown numbers for 8+___=17 and 17-8+___.
5.6	Algebra • Use Related Facts	1.OA.8 MP 2 MP 4 Companion Pg. 50	How can you use a related fact to find a missing number?	Use the triangle model in this lesson to show children that inverse operation is a good strategy for solving an unknown number problem.	Part-Part-total template	Rick has 10 party hats. He needs 19 hats for his party. How many more party hats does Rick need? Solve. **Focus students on the number sentence that matches the story.** Many students will use subtraction to solve, and not practice the skill of having an unknown addend (10 + ? = 19).	Number sentence, sum, addend, difference		Write 11- ? = 5 on the board. Have students create a story that matches the number sentence, fill in a part-part-total model, and then solve. Use addition to check.
5.7	Choose an Operation	1.OA.1 MP 3 MP 4 MP 6	How do you choose when to add and when to subtract to solve a problem?	This lesson allows children to explore and demonstrate their understanding of addition and subtraction. The word problems ask children not only to choose an operation, but also to explain their solution. Children may use objects, draw	Small objects for students to use as they solve the word problems, so that they can	Place a set number of red/yellow counters in a cup. Have partners shake the cup and spill out the counters onto the table. Have the students count the red and yellow	Number sentence, sum, addend, difference		Select a word problem that the students solved in the lesson. Have students use words,

		Companion Pg. 36		pictures, or write to explain their work. For each problem, encourage partners to share and justify their reasoning.	explain and justify their reasoning. Part-Part-total template	counters. Have the students write both addition sentences. Then have them write the 2 subtraction sentences.		 *Juggling* Children read the book and practice addition and subtraction facts through 12.	numbers, or pictures to explain how a classmate solved that problem.
5.8	Hands On : Algebra • Ways to Make Numbers to 20	1.OA.6 MP 5 MP 7 Companion Pg. 47	How can you add and subtract in different way to make the same number?	As you work through this lesson, be sure that children realize they are to look for ways to make the given number. Remind them that the addition and subtraction expressions do not need to be related.	Expressions with Equal Values	Pick a number between 5 and 20 and ask students to find all the ways to make that number. 	Number sentence, sum, addend, difference		Use numbers and pictures to show multiple ways to make the number 12. (See examples in the connections column)
5.9	Algebra • Equal and Not Equal	1.OA.7 MP 6 MP 7 Companion Pg. 49	How can you decide if a number sentence is true or false?	The concept of equality is an important foundation of algebraic understanding. For many children, however, the equal sign does not signify equality but represents a request for an answer.	Expressions with Equal Values	Play *Guess My number.* "It is the sum of 3 and 5. It is the difference between 9 and 1. What is my number? What is another way to make 8?" If time permits, have students come up with their own riddles and share them with a partner or the class.	Number sentence, sum, addend, difference		Write 5 + ___ = 6 + 8 on the board. Students write a number to make the sentence true. Draw a quick picture to explain.
5.10	Basic Facts to 20	1.OA.6 MP 2 MP 6 Companion Pg. 47	How can addition and subtraction strategies help you find sums and differences?	In this lesson, children will use strategies they have learned for basic facts to 10 to work out basic facts with numbers that now have two digits. They will see that they can use the same strategies when working with greater numbers. It is important that children understand why a particular strategy works. You can foster this understanding by asking children to explain why they chose a particular strategy and to describe what happens to the numbers when the strategy is used.	Linking Cubes, Counters Number Line Facts to 20 Part-Part-total template	Have students play *War* in partners. Have students divide numeral cards evenly. Partners turn over their top cards at the same time. They add mentally and call out the sum. The partner that says the correct sum gets both cards. In a tie, partners keep their own card and place it at the bottom of their deck.	Number sentence, sum, addend, difference		Choose two numbers from 5 to 9. Use your number to write an addition sentence. Draw a picture to show your work.

Assessments:

Go Math Chapter 5 Test

Go Math Chapter 5 Performance Task Carla's Tulips

2017-2018	Grade 1 Go Math! Quarter 2 Planner Chapter 6 Count and Model Numbers	13-15 Days

BIG IDEA: Students may be able to count to 100, but they may not be applying place value concepts. There are several activities that will help children build their understanding of place value. 1) Representing how many groups of tens and ones are in a given number will help children understand that the position of a digit in a number matter in our place value system. 2) Counting objects by ones and grouping them by tens reinforces the base-ten structure of the place value system. 3) Similarly, exchanging or trading 10 ones for 1 ten also helps children build a foundation for understanding the place value system. 4) Representing numbers in a variety of ways with cubes, base-ten blocks, drawings, and words builds conceptual understanding of the standard form. 5) Modeling a number with base-ten blocks allows students to connect the value of each digit with its position in the number. For example, 13 ones is equal to 1 ten and 3 ones. They apply this knowledge to solve addition and subtraction problems that strengthen place value concepts as they group tens with tens and ones with ones. Manipulatives such as connecting cubes and base-ten blocks facilitate student's understanding of the problem. Visual models, such as the hundred chart, help students make connection to concrete models. Students can use mental math to add or subtract multiples of ten. These practices lead students to construct meaning for the operations and to connect them to written procedures.

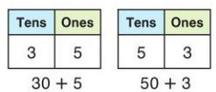
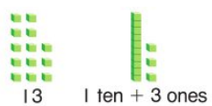
Adapted from The Common Core Math Companion (Gojak & Miles, 2015, pg. 82, 84).

Professional Development Videos:
Base Ten Notation

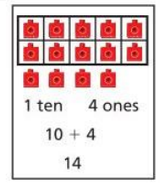
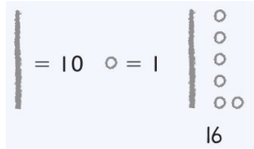
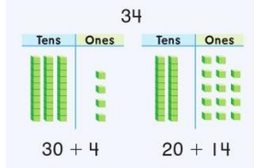
ESSENTIAL QUESTION: How do you use place value to model, read, and write numbers to 120?
STANDARDS: 1.NBT.1, 1.NBT.2, 1.NBT.3

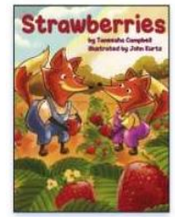
ELD STANDARDS:

ELD.PI.1.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.1.3-Offering opinions and negotiating with/persuading others.
ELD.PI.1.5-Listening actively and asking/answering questions about what was heard.
ELD.PI.1.9- Expressing information and ideas in oral presentations.
ELD.PI.1.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
ELD.PI.1.12-Selecting and applying varied and precise vocabulary.

Lesson		Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools Go Math! Teacher Resources G1	Connections (ENGAGE prior knowledge)	Vocabulary	Academic Language Support	Journal
6.1	Count by Ones to 120	1.NBT.1 MP 5 MP 7 MP 8 Companion Pg. 83	How can knowing a counting pattern help you count to 120?	Identifying number patterns is important in developing number sense as children build an understanding of place value. Children may be able to count forward by ones, starting at 1, but may have difficultly counting on from any given number. Recognizing and mastering number patterns will help children count forward by ones from any number 1 to 120.	Hundred Chart	Practice counting to 120 starting from any given number: 8,22,45,67,81,99,105,etc…	Pattern, ones, tens	**Model and Discuss** **Place Value**   **Concrete and Pictorial Models**	Choose a number between 90 and 120. Write one more, one less, 10 more, and 10 less.
6.2	Count by Tens to 120	1.NBT.1 MP 2 MP 5 MP 8 Companion Pg. 83	How do numbers change as you count by tens to 120?	The work with counting by ones and tens in the first two lessons of this chapter is important to children's success in their future work with place value and operations. Children use counting charts to help them count by ones and by tens to 120. They explore how numbers change as they count by ones and tens, and look for patterns. Counting helps children develop an understanding of the structure of the base-ten number system. This understanding will	Hundred Chart	*Guess My Number*? Tell students that you're thinking of a number between 1-120. Give them clues like, "It's 20 away from 47", "It's 8 away from 98", etc. Have students use their charts to guess your number. Then ask them how they used the chart or a pattern to figure out the number.	Tens		Choose a number between 90 and 120. Write one more, one less, 10 more, and 10 less.

Lessons 1 and 2 focus on the patterns students find in the hundreds chart, blend counting by ones and tens.

				support children as they study how place value works in the structure. Guide children to identify the patterns they explore.				 **Quick Pictures**  **Using Multiple Representations**  **Literature Connection**  *Join Us* Children read the book and add the number of children until they get ten.	
6.3	Understand Ten and Ones	1.NBT.2b MP 3 MP 5 MP 6 Companion Pg. 85	How can you use different ways to write a number as ten and ones?	In this lesson, children use concrete and pictorial models to represent tens and ones. Children see that 1 ten can be shown by filling a ten frame with 10 connecting cubes. Children make connections between models for teen numbers and an expression that gives the value in each place. These multiple representations will extend children's understanding of place value and help establish a foundation for two-digit addition strategies.	Connecting cubes Building Numbers 11-20 Model Numbers	Have students choose a number independently and model it on the double ten frame. Then provide clues, like the ones below, and have students check to see if the number they chose is still reasonable before moving to the next clue. Clues to possibly use: • My number is greater than 6 • My number is less than 18 • My number has 2 rows of 5 • My number is one less than 15.	Digit, ones, ten		Show the number 14 using five different ways: •word form: fourteen •picture: (14 circles) •standard form: 14 •base ten notation: 1 ten and 4 ones •addition sentence: 10 + 4.
6.4	Hands On • Make a Ten and Ones	1.NBT.2b MP 2 MP 3 MP 4 Companion Pg. 85	How can you show a number as ten and ones?	In this lesson, children will transition from using groups of 10 connecting cubes to drawing quick pictures to represent tens and ones. When drawing quick pictures, a stick is drawn to represent 1 ten and circles are drawn to represent ones. The numbers 11 to 19 are sometimes difficult for children to conceptualize. As they become familiar with modeling these numbers, they will develop the idea that one ten and some ones is a "teen" amount.	Place Value Anchor Chart Conceptual Mat	Gina thinks of a number that has 7 ones and 1 ten. What is the number? Stephen's number has 0 tens and 1 one. What is the number? How would you model tens with a picture or drawing? How would you model ones with a picture or drawing?	Tens, ones, value, digit		Choose a number from 11-19. Write the number and number word. Use words and pictures to show how many tens and ones.
6.5	Hands On • Tens	1.NBT.2a, 1.NBT.2c MP 7 MP 8 Companion Pg. 85	How can you model and name groups of ten?	Making and counting representations of tens helps children understand place value and the structure of the base-ten number system. By counting groups of ones and then counting tens, children learn the efficiency of using 1 ten to represent 10 ones.	Connecting cubes Building Numbers 11-20	Display ten cubes. Count the cubes and then connect the cubes. How many ones makes one ten? Display another group of 10 cubes next to the ten (1 ten, 10 ones). Have students count on from ten to determine that there are 20 cubes in all. Have a volunteer put the cubes together. How many tens are there now? How many ones does it take to make 2 tens? Repeat for 30 and 40.	Tens, ones, value, digit		Draw a quick picture to show one way to make 30. How many tens and ones did you use? (Possible responses: 1 ten 20 ones, 2 tens 10 ones, 3 tens, 0 ones, 30 ones)
6.6	Hands On • Tens and Ones to 50	1.NBT.2 MP 4 MP 5 MP 6 Companion Pg. 85	How can you group cubes to show a number as tens and ones?	In this lesson, children use base-ten blocks to represent tens and ones. Base-ten blocks are pre-grouped models that are efficient to use, but children cannot take them apart or put them together to show number relationships.	Base ten blocks Place value chart	Using numeral cards, have students name how many tens and ones are needed to represent the different number combinations for a given card. Ask students to record their answers on their math mats or white boards. (Use the place value chart)	Tens, ones, digit, value		Draw a quick picture to show one way to make 47. Write how many tens and ones.

6.7 Combine lessons 6.6 and 6.7	Hands On • Tens and Ones to 100	1.NBT.2 MP 2 MP 4 MP 6 Companion Pg. 85	How can you show numbers to 100 as tens and ones?	The conceptual understanding of two-digit numbers takes time to develop. Having children count out tens and ones with base-ten blocks reminds them that numbers represent countable things, and can be decomposed in useful ways, such as tens and ones. This understanding builds a solid foundation for more advanced computation skills.	Base Ten blocks Place value chart	Have students work in pairs. Give each pair a set of number cards (10 - 99), base ten blocks, and a tens and ones place value mat. Have students place the cards face down. Have one partner select and show a card. Have both students use this sentence frame to say what is on the card: "I see ___, which is the same as ___ tens and ___ ones." Each student needs to represent the number differently. For example: 34 can be 3 tens, 4 ones or 2 tens and 14 ones.	Hundred, tens, ones, digit, value	 *Strawberries* Children read the book and use place value to find the number of strawberries.	Draw a quick picture to show one way to make 89. Write how many tens and ones.
6.8	Problem Solving • Show Numbers in Different Ways	1.NBT.2a, 1.NBT.3 MP 1 MP 6 MP 7 Companion Pg. 85	How can making a model help you show a number in different ways?	In this lesson, children use multiple representations to decompose two-digit numbers in different ways. This way encourages children to think flexibly about different ways that the same number can be modeled.	Base ten blocks, Number cards Model Numbers Place value mat	Build the number 45. Show as: 4 tens and 5 ones 3 tens and 15 ones 2 tens and 25 ones Etc. Decompose and compose the number back to 4 tens and 5 ones	Tens, ones, value, digit		Draw to show 55 three different ways.
6.9 Combine lessons 6.9 and 6.10	Hands On • Model, Read, and Write Numbers from 100 to 110	1.NBT.1 MP 4 MP 5 MP 7 Companion Pg. 83	How can you model, read, and write numbers from 100 to 110?	In this lesson, children use what they know about counting from 0 to 10 as they work with numbers 100 to 110. Children understand that the number 100 may be shown with 10 tens. By using the counting structure previously learned, children see that numbers over 100 may be described as 100 and 1 more, 100 and 2 more, and so on. Base-ten models help children visualize this structure.	Base ten blocks Model Numbers	Ask students, how many tens make a hundred? Model and write the following: 10 tens 10 tens and 1 more 10 tens and 2 more 10 tens and 3 more What's my pattern?	Tens, ones, (skip count by 10s)		Choose a number from 101-110. Write it and draw a picture to show it as 10 tens and more.
6.10	Hands On • Model, Read, and Write Numbers from 110 to 120	1.NBT.1 MP 4 MP 5 MP 7 Companion Pg. 83	How can you model, read, and write numbers from 110-120?	Children will use base-ten blocks to model, read, and write numbers from 110 to 120 in this lesson. Children can gain a deeper understanding of place value by applying the concepts they have learned about counting tens and ones to counting real-world objects.	Base ten blocks Model Numbers	Draw a quick picture of 10 tens and 1 ones. Ask students how many tens are in this picture? How many ones? What number does the quick picture show? Repeat with different numerals: 22,36,45,etc…	Model, read, and write numbers, tens, ones, groups of		Choose a number from 111-120. Write it and draw a picture to show it as 10 tens and more.

Assessments:

Go Math Chapter 6 Test

Go Math Chapter 6 Performance Task Minka's Birdhouses

****Common Assignment** Critical Area Performance Task At The Block Party