BIG IDEA: It is important for children to model and solve using a variety of contexts that support subtraction situations. There are three different types of subtraction situations that involve action: the result is unknown, the change is unknown, or the start is unknown. Examples along with number sentences for each follow: 1. Result Unknown: Five puppies were playing in a basket. Three of the puppies jumped out. How many puppies are in the basket now? (5-3 = __) 2. Change Unknown: Five puppies were playing in a basket. Some puppies jumped out. Then there were two puppies playing in the basket. How many puppies jumped out? (5 -__ = 2) 3. Start Unknown: Some puppies were playing in a basket. Three puppies jumped out. Then there were two puppies playing in the basket. How many puppies were playing in the basket at the start? (_ -3 =2). Children develop an understanding of subtraction through situations that involve the action of taking away. They use problem situations, pictures, and models. Children model subtraction sentences, circle the objects that are taken away from the set, and then cross out the subtracted set. It is very important that children learn that not all subtraction problems involve the action of taking away.

Adapted from Go Math: Teaching for Depth, pg. 221E.

Professional Development Videos

The Meaning of Addition and Subtraction, K-2, Segment 3

Additional Quarter 3 Resources

Number Talks with Double Five-Frames
Building Fluency Through Story Problems - Q3
Building Fluency Through Story Problems (Spanish) - Q3

ESSENTIAL QUESTION: How can you show subtraction?

STANDARDS: K.OA.1, KOA.2, K.OA.5

ELD STANDARDS:

ELD.PI.K.1-Exchanging information/ideas via oral communication and conversations.

ELD.PI.K.3-Offering opinions and negotiating with/persuading others.

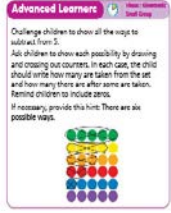ELD.PI.K.5-Listening actively and asking/answering questions about what was heard.

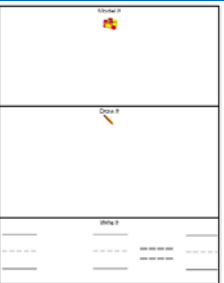ELD.PI.K.9- Expressing information and ideas in oral presentations.

ELD.PI.K.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.

ELD.PI.K.12-Selecting and applying varied and precise vocabulary.

LITERACY CONNECTIONS: Go Math! Math Readers (The actual books can be found in your Grab-and-Go Kits)

A Nutty Story (pg. 29): Students read the book and count the number of nuts Ed and Anna gather.

Lessons	Focus	Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools& Resources Go Math Teacher Resources GK	Vocabulary	Connections (ENGAGE prior knowledge)	Academic Language Support	Talk & Share
6.5 Algebra: Write Subtraction Sentences	Solve subtraction word problems within 5 and record the equation	K.OA.5 Companion pg. 30 MP 1 MP 2	How can you solve subtraction word problems and complete the equation?	In this lesson, children experience another kind of subtraction problem situation-take from change unknown. An example of this kind of problem is the following: Five turtles were in the water. Some climbed onto the beach. Now there are three turtles in the water. How many climbed onto the beach? In this type of problem, the acting and ending quantities are known and the change is unknown. Throughout the chapter, children are exposed to several different types of subtraction structures. Do not give them the names of the structures, but		Is equal to, Minus Taken away How many in all How many are left	Write the problem 4 – 1 on the board. Have students think of subtraction stories and share them in pairs.	**ELD Standards** ELD Standards ELA/ELD Framework ELPD Framework **Access Strategies** Organizing Learning for Student Access to Challenging Content Student Engagement Strategies	Have students solve with manipulatives. Carter has three slices of pizza. His brother ate some of his pizza. Now there is only 1 slice left. How many slices did his brother eat? Have students share their answers and tell how their model helped them find the answer. How would you write a number sentence for this

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				help them recognize that subtraction is used to solve many different problems.	[Model Draw Write Equations](#) [Storyboards](#) Counters			[Problem Solving Steps and Approaches](#) **Equitable Talk** [Accountable Talk Simply Stated](#) [Equitable Talk Conversation Prompts](#) [Accountable Talk Posters](#) [Five Talk Moves Bookmark](#)	problem? Practice writing and reading the number sentence. Make connections to the story when discussing the numbers in the number sentence.
6.6 Algebra: Write More Subtraction Sentences	Solve subtraction word problems within 10 and record the equation	[K.OA.2](#) Companion pg. 27 [MP 1](#) [MP 2](#)	How can you solve subtraction word problems and complete the equation?	Skilled problem solvers look for ways to make sense of problems. In this chapter, children use different strategies to approach and solve subtraction problems. They act out problems, use manipulatives, analyze pictures, and tell subtraction word problems. As children work with subtraction, ask them to explain what problems mean and what questions need to be answered. Help them develop routines to make sure their reasoning is sound. Use prompts such as: tell how you found the answer. Why did you do it that way? What are other ways to solve the problem?	[Model Draw Write Equations](#) [Storyboards](#) Counters	Is equal to, Minus Taken away How many in all How many are left	Draw 4 apples on the board and cross one out. Have children identify a word problem that could go with the picture. How does the picture show the number in the set? How does the picture show the number eaten or taken away? How does the picture show the number left? How would we show this problem as a number sentence?	[Effective Math Talks](#) **Cooperative Learning** [Cooperative Learning Role Cards](#) [Collaborative Learning Table Mats](#) [Seating Chart Suggestions](#)	Use manipulatives to model and solve. There were some lemons in a lemon tree. Two lemons fell to the ground. There are four lemons still in the tree. How many lemons were in the tree to start? How would you show this with pictures and numbers?
6.7 Hands On: Algebra Addition and Subtraction	Understand addition as putting together or adding to and subtraction as taking apart or taking from to solve word problems	[K.OA.2](#) Companion pg. 27 [MP 2](#) [MP 5](#) [MP 8](#)	How can you solve word problems using addition and subtraction?	The operations of addition and subtraction are closely related. They are inverse operations: one operation undoes the other. We might think of adding 3 and 5 to have a sum of 8. If we then subtract 5 from 8, what number do we have? The original 3. Working with cube trains of three and five cubes, children can "see" and begin to understand these relationships. The idea of inverses and the order property of addition lead to discovering related facts in first grade. The related facts that include 3,5, and 8 contain these four interrelated facts: $3 + 5 = 8$, $5 + 3 = 8$, $8 - 3 = 5$, and $8 - 5 = 3$.	[Model Draw Write Equations](#) [Storyboards](#)	Is equal to, Minus, plus **Fluency Builder** **Numeral Card Subtraction** *Materials: Numeral Cards (1-5) (see a Teacher Resource)* *Distribute a set of numeral cards to children or have them write the numbers 1-5 on index cards, one number per card.* *Have children draw two cards and add the numbers. Children then subtract the number that is less from the number that is greater. Encourage children to use objects or a drawing to find the answer, needed.* *Children can repeat the activity by drawing two other cards.* *The activity can be done by pairs or small groups. They can expand the activity by mixing in a second set of numeral cards to increase the combinations of numbers to add and subtract.* *California Common Core Fluency Standard K.OA.2*	Have students write a number sentence for the following problem: Some students have 2 balloons. Another student comes and brings 5 more balloons. How many balloons are there now? Now there are __ balloons.		Have children build a cube train with 4 red and 5 blue cubes. What addition sentence could you write for this cube train? What subtraction sentence could you write for this cube train? Have children explain their answers in their group and have one student from each group share their thinking.

					Counters			5 balloons pop. How many balloons are left? Write a number sentence. How are the sentences the same? How are they different?		

Assessments:

Go Math **Chapter 6 Test**

Common Assignment Go Math Chapter 6 Performance Task: Sharing Stickers

BIG IDEA: This is students' first experience with place value, a fundamental structure of the whole number system. Students develop the concept of decomposing a number into a group of 10 ones and some more ones. Give students a variety of experiences with counting 10 ones and composing and decomposing ten using concrete materials such as linking cubes, straws, shapes, counting collections, and double ten frames. Children build on their understanding of numbers from 0 to 10 to conceptualize the numbers 11 to 19. Children practice the numbers 11 to 19, expressing each number as the sum of 10 and some more ones, and recording the number. Placing counters in two ten frames to show a number as 10 and some more is one way children can model numbers 11 to 19. Writing the number name and numeral also contributes to the understanding of numbers 11 to 19. The number names for the "teen" numbers are difficult for many children to understand and remember. It is helpful to pair single-digit number names with a related two-digit number name to help children understand the words. For example, for the number 15, write five and fifteen on the chalkboard. Tell children to notice that they both begin with the same sound.
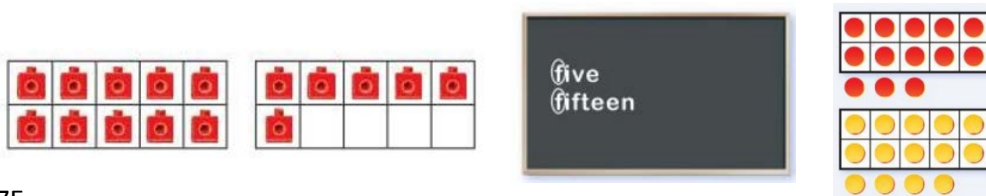
Adapted from Go Math: Teaching for Depth, pg. 257E

Professional Development Videos

Additional Quarter 3 Resources
Number Talks with Double Ten-Frames
Building Fluency Through Story Problems – Q3
Building Fluency Through Story Problems (Spanish) - Q3

ESSENTIAL QUESTION: How can you show, count, and write numbers 11 to 19?
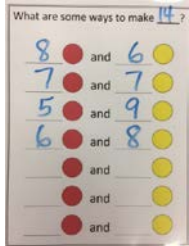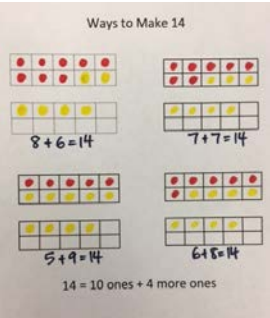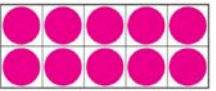
STANDARDS: K.NBT.1, K.CC.3

ELD STANDARDS:
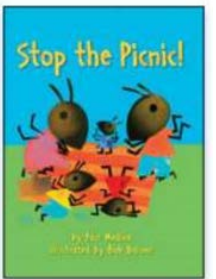
ELD.PI.K.1-Exchanging information/ideas via oral communication and conversations.

ELD.PI. K.9- Expressing information and ideas in oral presentations.

ELD.PI.K.3-Offering opinions and negotiating with/persuading others.

ELD.PI. K.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.

ELD.PI.K.5-Listening actively and asking/answering questions about what was heard.
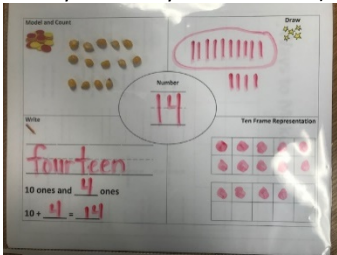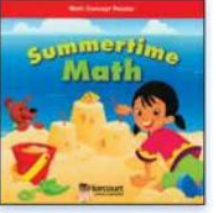
ELD.PI.K.12-Selecting and applying varied and precise vocabulary.

LITERACY CONNECTIONS: Go Math! Math Readers (The actual books can be found in your Grab-and-Go Kits)

Stop the Picnic Students read the book and compare the number of things the ants see at their picnic.

Summertime Math Students read the book and count and compare objects up to 15.

Lessons	Focus	Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools& Resources Go Math Teacher Resources GK	Vocabulary	Connections	Academic Language Support	Talk & Share
7.1 Model and Count 11 and 12 7.2 Count and Write 11 and 12	Model, Count, Represent, and Write Numbers 11- 15.	K.NBT.1 Companion pg. 77 – 78 MP 2 MP 3 MP 7	How can you use objects to show 11-15 as ten ones and some more ones?	These are the first of several lessons in which children will work with numbers greater than 10. The lessons place great emphasis on 10. Children picture numbers such as 11 as a set of 10 and 1 more one. To model numbers 11 to 15, children will use a ten frame. They use a full ten frame to show 10 and then add more	Ten Frame Go Math! Grab and Go Kit: This link provides an overview on how to utilize this in the classroom.	Eleven, Twelve, Thirteen, Fourteen, Fifteen, Sixteen, Seventeen,	What are some ways to show _____? How would you know that a model shows 10? What do you know about the number __?	**ELD Standards** ELD Standards ELA/ELD Framework ELPD Framework **Access Strategies**	Use of Ten Frame to count 10 and some more (Download to your desktop and add or delete apples to represent numbers 11-15)

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| 7.3 Count 13 and 14

7.4 Count and Write 13 and 14

7.5 Model, Count, and Write 15 | Use objects to decompose numbers into ten ones and some more ones.

Model, Count, Represent, and Write Numbers 11- 15.

Use objects to decompose numbers into ten ones and some more ones. | MP 8

K.NBT.1 Companion pg. 77 – 78

MP 2
MP 7
MP 8

K.NBT.1 Companion pg. 77 – 78

MP 2
MP 5
MP 7 | How can you count and write 11-15 with words and numbers?

How can you use objects to show 11-15 as ten ones and some more ones?

How can you count and write 11-15 with words and numbers? | counters to show some more ones. For 11, children can see that 11 is just one more than 10, and for 13 children can see that 13 is three more than 10. Because a ten frame is arranged as two sets of 5, children may also see that 10 and 15 are made up of sets of 5; thus they gain informational knowledge of multiples of 5.

Teacher Prompts:
Let's count to ___.
How can you show __?
How many counters are there?
Are there enough counters to make a set of 10?
How many would we have if there was one more? Two more? Let's count.
What are some ways you could show __?

For the number 15:
The bead string has 20 beads arranged in four sets of five. Although students may not be able to subitize, or visually take in, the total number of beads on the string, they can learn to see the sets of five beads displayed in a row. | Ways to Make ___?

(You can give a pair of students a cup with a set number (11-15) of red/yellow counters inside. They pour the counters out and record how many red and yellow there are. Then as a whole group plot these on 2 ten frames. Students can then explain how regardless of how many were red or yellow, they all equal the same number. An example is provided for the number 14 below.

Storyboards
Have students create their own story problems.

Counters

Numeral Cards with 10 and ___ more phrase cards
Students match numeral cards with phrase of "10 ones and __ ones"
Feel free to move to using a double ten frame after having | Eighteen, Nineteen

10 and ___ more

Eleven, Twelve, Thirteen, Fourteen, Fifteen, Sixteen, Seventeen, Eighteen, Nineteen

10 and ___ more | Encourage children to talk about and use counting and modeling strategies to discuss numbers 11-15.
Have them count the counters as they place the counters in the ten frame?
How many counters did you use to fill the ten frame?
How many counters are left? Place the counters that are left below the ten frame.

Building Number Sense: Have students take turns using ___ cubes to make 2 sets of colored cubes. Invite students to write the number pairs to show different way to make __.
Example: Show the various ways to make 11.

 3 + 8 = 11
Or 1 + 10, 7 + 4, 6 + 5, etc. | Organizing Learning for Student Access to Challenging Content

Student Engagement Strategies

Problem Solving Steps and Approaches

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

Interactive Activities

Kindergarten Interactive Activities Chapter 7 | Have students count out 10 - 15 objects from a collection. Use the Multiple Representation graphic organizer for them to model, count, and write the number.

How can you show the number __?

How can you show __ with your counters?

How does the way the counters are placed help you know how many there are?

Why does it make sense to use a ten frame to solve problems about the number __? |
|---|---|---|---|---|---|---|---|---|---|

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									Model and Share:
					students place the remaining ones under the first ten frame. Count and Circle Beads and String				Counters
7.6 Problem Solving: Use Numbers to 15	Solve problems by using the strategy *draw a picture.*	K.CC.3 Companion pg. 7 MP 1 MP 2 MP 4	How can you solve problems using the strategy *draw a picture*?	Have students draw pictures to solve word problems. Representing a problem with a drawing can help a child work toward a solution. A drawing may show such things as size, quantity, or action. It is not important that students draw a detailed picture. They can draw pictures of manipulatives, circles, lines, or other representations for the objects in the problem. Encourage students to develop a plan to solve a problem by identifying the information needed, carrying out the plan by drawing a picture, and checking whether their answer makes sense. Have students spend time sharing how they solved the problem.	Storyboards Have students create their own story problems. Counters	Eleven, Twelve, Thirteen, Fourteen, Fifteen, Sixteen, Seventeen, Eighteen, Nineteen 10 and ___ more	There are 14 baseball hats and 15 children. How many hats are needed so every child has a hat?	Ten Frame Linker Cubes Two Color Beads 	Stella has 14 pencils. She has 1 more pencil than Joseph. How many pencils does Joseph have? How can you solve this by drawing a picture?
7.7 Model and Count 16 and 17 7.8 Count and Write 16 and 17 7.9 Model and Count 18 and 19 7.10 Count and Write 18 and 19	Model, Count, and Write numbers 16-19	K.NBT.1 Companion pg. 77 – 78 MP 2 MP 3 MP 7 MP 8	How can you use objects to show 11-19 as ten ones and some more ones? How can you count and write 11-19 with words and numbers?	If students, ask "Why do we say sixteen instead of ten-six?" "Where did the name eleven come from?" These logical questions show that students are thinking of teen numbers as a set of 10 ones and more ones. You might respond that for a long time people called 16 "six and ten" and 17 "seven and ten." People liked that idea because it told what the number meant. Now we call it six-teen and seven-teen. In this chapter, we have used counters in ten frames, bead strings, pictures of objects, groups of children, drawings, and addition sentences to show teen numbers. Along with children's words and gestures, these representations all help children to build understanding and develop mental images of teen numbers.	Ten Frame Go Math Activity page 279: Paper Bags/Ziploc Bags, craft sticks, rubber bands, numeral cards. Prepare bags with various numbers of sticks in each bag, the numeral cards that matches the number of sticks, and a rubber band. Give a bag to a pair of students. Together they remove the sticks to show a set of 10 ones and places a rubber band around that set. Then remove the extra sticks to model that number. Students can make a drawing to represent what was in their bag. Partners can then trade bags with another set of partners. Students can record their work on the following template: Representing Numbers 11-19.	Eleven, Twelve, Thirteen, Fourteen, Fifteen, Sixteen, Seventeen, Eighteen, Nineteen 10 and __ more	What are some ways to show ____? How would you know that a model shows 10? What do you know about the number __? Encourage children to talk about and use counting and modeling strategies to discuss numbers 11-19. Have them count the counters as they place the counters in the ten frame. How many counters did you use to fill the ten frame? How many counters are left? Place the counters that are left below the ten frame.	**Literacy Connections:** **Literature** 	Use of Ten Frame to count 10 and some more (Download to your desktop and add or delete apples to represent numbers 11-19) Have students count out 10 - 19 objects from a collection. Use the Multiple Representation graphic organizer for them to model, count, and write the number. How can you show the number __? How can you show __ with your counters? How does the way the counters are placed help

				Have students place numeral cards 8-19 facedown in a stack. Ask each student to flip over a numeral card, say the number out loud, and complete Multiple Representation Mat. (Put in sheet protector for students to repeat activity with a dry-erase marker.) Counters			Literature 	you know how many there are? Why does it make sense to use a ten frame to solve problems about the number __?

Assessments:
Go Math Chapter 7 Test
Go Math Chapter 7 Performance Task: Buttons and Flowers

BIG IDEA: It is important for students to build on their knowledge of numbers from 0 to 20 and extend their number understanding to 100. Ten frames and connecting cubes are used to model 20. Students record the number 20 as the numeral 20 and the word twenty to build understanding. Writing the missing numbers in the sequence of 1 to 20 helps reinforce students' learning. Multiple representations for numbers promote learning. Therefore, students need a variety of experiences with representing numbers. These may include physical objects, word names, drawings, and numerals. A hundred chart extends student's ability to count to 100 and to identify number patterns on the hundred chart. Students should use a hundred chart to count. After counting, they compare the positions of numbers on the hundred chart by using the phrases *greater than* and *less than*. Students compare sets by counting and then recording the number of objects in each set. Then they can identify the set that has more or fewer objects.

Adapted from Go Math: Teaching for Depth, pg. 305E

Professional Development Videos

The Meaning of Addition and Subtraction, Grades K-2, Segment 1

Additional Quarter 2 Resources

Number Talks with Double Ten-Frames
Building Fluency Through Story Problems – Q3
Building Fluency Through Story Problems (Spanish) - Q3

ESSENTIAL QUESTION: How can you show, count, and write numbers to 20 and beyond?

STANDARDS: K.CC.1, K.CC.2, K.CC.3, K.CC.5, K.CC.6

ELD STANDARDS:

ELD.PI.K.1-Exchanging information/ideas via oral communication and conversations.
ELD.PI.K.3-Offering opinions and negotiating with/persuading others.
ELD.PI.K.5-Listening actively and asking/answering questions about what was heard.

ELD.PI.K.9- Expressing information and ideas in oral presentations.
ELD.PI K.11- Supporting opinions or justifying arguments and evaluating others' opinions or arguments.
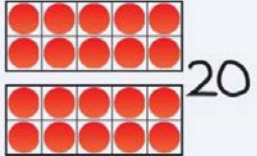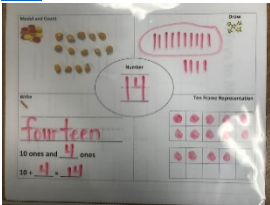ELD.PI.K.12-Selecting and applying varied and precise vocabulary.

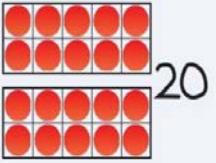**LITERACY CONNECTIONS:** Go Math! Math Readers (The actual books can be found in your Grab-and-Go Kit)
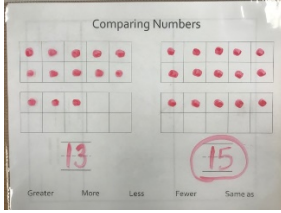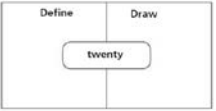
   Where's the Party?: Students read the book and recognize the order of numbers through 20.
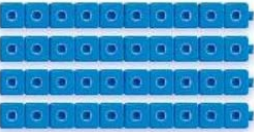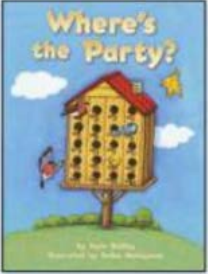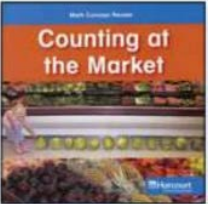   Counting at the Market: Students read the book and count fruit and vegetables up to 30.

Lessons	Focus	Standards & Math Practices	Essential Question	Math Content and Strategies	Models/Tools& Resources Go Math Teacher Resources GK	Vocabulary	Connections	Academic Language Support	Talk & Share
8.1 Model and Count 20

8.2 Count and Write 20 | Show, Count, and Write 20 (with counters, words and numbers). | K.CC.2 K.CC.3 K.CC.5 | How can you show and count 20 objects?

How can you write 20 with | As students work, encourage conversation and thinking with questions such as the following: How can you tell that there are 20 objects? Students may answer this by pointing out that two full ten frames are equal to 20 or two sets of 10, by counting or sharing varied responses. | Go Math! Grab and Go Kit This link provides an overview on how to utilize this in the classroom

Storyboards Have students create their | One two, three, four, five six, seven, eight, nine, ten, eleven, twelve, | Give students a sheet of paper divided into 3 segments. Let students choose an object (beans, counting bears, linking cubes, counters, | **ELD Standards** ELD Standards ELA/ELD Framework ELPD Framework

Access Strategies | How can you show and count to 20?

How can you write the number 20 with words and numbers? |

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| 8.3 Count and Order to 20 | | | | words and numbers?

How can you count forward to 20 from a given number? |

How do you know how many to draw to show 20? Students may know that they need to fill both ten frames to make 20 or two sets of 10, or they may count objects that are shown and then continue to count and draw until they have reached 20.

Using a double ten frame with cubes or counters to show the number 20 continues the work from the previous chapter. The ten frames clearly show sets of 5 and ten, and when both ten frames are full, students can see 20 cubes or counters. Ten frames allow students to see when a number is greater than 10 or less than 20. When students first begin using a ten frame, many will count every counter. They may see that each row has five and each ten frame has ten and they can start counting from 5 or 10. Using a ten frame helps students develop the relationship between given numbers and the anchors 5 and 10. Exposure to multiples of 5 and 10 prepares students for work with counting, telling time, and counting coins.

If a student asks why we put numbers in order, ask the class to discuss and make a list of the reasons they can name. Some responses may be: Knowing the order of numbers helps us count; if you know the sequence you can say them quickly and know what numbers come next. You use counting sequences in games, as players keep score. If you know the numbers in order you can tell who is winning in a game by looking at the greater score. You can use number order to tell if one person is older than another person. | own story problems.

Count and Circle

Double Ten Frame

Multiple Representation Mat

Counters | thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty | cheerios, etc.) and have them arrange the 20 items in 3 different ways. (2 rows of 10, 1 row of 20, 4 rows of 5, 5 rows of 4). Have partners share their objects with each other explaining how they counted to 20.

With numeral cards, place them in order from 1-20. Turn over a few cards randomly and ask which numbers are missing. Ask: How can you tell what numbers are missing?

 | Organizing Learning for Student Access to Challenging Content

Student Engagement Strategies

Problem Solving Steps and Approaches

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 | How can you count forward to 20 from a given number? |

8.4 Compare Numbers to 20	Comparing numbers within 20.	K.CC.6	How can you solve problems using the strategy *make a model* when comparing numbers?	In this lesson and others, numbers are represented in a variety of ways. This not only enhances students' understanding, it also shows that a single idea may have many different representations. Manipulatives such as connecting cubes are used to model numbers in concrete ways. In this lesson, students use connecting cubes to help them identify whether the number of objects in one set is greater than, less than, or equal to the number of objects in another set. Modeling with manipulatives helps students visualize quantities and compare and contrast numbers.	Linking cubes (2 sets of twenty; 2 colors) Counters Double ten frame Compare to 20 Comparing Numbers	Greater than More than Less than One two, three, four, five six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty	Alma has a number of yellow cubes one greater than 15. Juan has a number of green cubes one less than 17. Who has more cubes? With all problems in the lesson you can ask: Which set is larger/smaller? How do you know? Which number is greater? Using your model or drawing explain how you know?	**Interactive Activities** Kindergarten Interactive Activities Chapter 8 **Vocabulary Strategy:** Graphic Organizer	Define Draw twenty	I have 14 Cheerios. Jet has two less than me. Summer has 3 more than me. Draw a picture and write the number showing how many Jet and Summer have.
8.5 Count to 50 by Ones 8.6 Count to 100 by Ones 8.7 Count to 100 by Tens 8.8 Count by Tens	Count to 50 and 100 by ones and tens	K.CC.1	How does the order (pattern) of numbers help you count to 50 by ones? 100 by ones? How does the order (pattern) of numbers help you count to 100 by tens? How can you use sets of tens to count to 100?	In these lessons students are introduced to a number chart. Using a number chart helps students see at a glance which number follows another. They begin to detect patterns in numbers not as obvious when using manipulatives such as connecting cubes. Ask students the following: What do you notice about the numbers in this column? How are the numbers in this row like the ones in the next row? The number chart is a very important tool in the development of place value concepts in later grades. Van de Walle recommends that teachers encourage students to explore counting patterns on hundred charts. Students should explore patterns in the sequence of numbers and look for relationships between "neighboring numbers". Even though students in Kindergarten may not have an understanding of place value, they can learn much about the sequence of numbers to 100 by using a hundred chart. It is important that they look for patterns in the way that numbers are made. For example, each row of ten has a pattern using the 1 to 9 order. Also, each number in the last column has a pattern with the first number being in the 1 to 9 order and the second number always having a 0. As students use the hundred chart, suggest they touch or point to each number as they count. This	Hundreds Chart Linking cubes Count each connecting cube from 1 to 20 with students. How many connecting cubes are there in all? Make two ten-cube trains with the connecting cubes. How many sets of 10 ones do you have? Repeat this activity with 30, 40, and 50.	Tens 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 Tens 10, 20, 30, 40, 50, 60, 70, 80, 90, 100	**Secret Number Activity**: Give each student their own hundred chart. Students listen to clues in order to find what your secret number is. Example: My secret number is between 60 and 80. It comes right after 69. What is my secret number? When you were listening to my riddle, how did you know where to look on the hundred chart?	**Model and Share:** Double Ten Frame Linking cubes Hundreds Chart **Literacy Connections:**	Starting with 34, what are the next 5 numbers? Starting with 67, what are the next 8 numbers? How can you count to 100 by tens on a hundred chart? How would you count by tens starting at 34? A friend gives you 60 crayons but does not say how many. You want to count the crayons. Do you need to count by ones?

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| | | | | will help them as they count forward starting with different numbers.
Counting sets of tens is a means of describing quantities. For example, 2 sets of ten is a way of describing 20 objects. Sets of ten should be accepted as standing for a single set which can then be counted (10, 20, 30…). Counting by sets is a new idea for students who have never thought about counting a set of ten objects as a single set.
As students count sets of objects, ask them questions to help them construct knowledge about the relationship between the sets of tens and individual objects, such as: How can we really be sure that this set shows 30 cubes? What number do you think we will get if we count these cubes one by one? |
How many sets of 10 do we have?
How many cubes is that?
(This builds coherence with students beginning to learn that 4 tens = 40)

Counters | | | Literature

Literature
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Assessments:

Go Math Chapter 8 Test

Go Math Chapter 8 Performance Task: You Can Count On It

Common Assignment Critical Area Performance Task: How Many Marbles?