Summit Public Schools

Kindergarten
Mathematics Curriculum
Revised: July 2022

Course Description

In Kindergarten, instructional time should focus on four critical areas:

(1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., "making tens") to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.

(2) developing understanding of whole number relationships and place value, including grouping in tens and ones; Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.

(3) developing understanding of linear measurement and measuring lengths as iterating length units; Students develop an

understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.

(4) reasoning about attributes of, and composing and decomposing geometric shapes; Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

Instructional Supports for English Language Learners		
Sensory Supports	**Graphic Supports**	**Interactive Supports**
Real life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	With the Internet / Software
Videos & Film		In the home language
Broadcasts		With mentors

Models & Figures		
Instructional Supports for Special Education, At-Risk, 504		
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment Grading

Pacing

Semester 1	Semester 2
Cluster 1: Counting and Cardinality **Topic 1:** Numbers 0-5 **Topic 2:** Compare Numbers 0-5 **Topic 3:** Numbers 6-10 **Topic 4:** Compare Numbers 0-10 **Cluster 2: Measurement and Data**	**Cluster 3: Operations and Algebraic Thinking** **Topic 8:** More Addition and Subtraction **Cluster 4: Counting and Cardinality** **Topic 9:** Count Numbers to 20 **Cluster 5: Numbers and Computation**

Topic 5: Classify and Count Data **Cluster 3: Operations and Algebraic Thinking** **Topic 6:** Understand Addition **Topic 7:** Understand Subtraction	**Topic 10:** Compose and Decompose Numbers 11-19 **Cluster 6 : Counting and Cardinalty** **Topic 11:** Count Numbers to 100 **Cluster 7: Geometry** **Topic 12:** Identify and Describe Shapes **Topic 13:** Analyze, Compare, and Create Shapes **Cluster 8: Measurement and Data** **Topic 14:** Describe and Compare Measurable Attributes

Cluster 1: Counting and Cardinality (Topics 1-4)

Big Idea: **Representing, relating, and operating on whole numbers, initially with sets of objects**
Essential Questions *What provocative questions will foster inquiry, understanding, and transfer of learning?* ● How can you show, count, and write numbers 0 to 5? ● How can building and comparing sets help you compare numbers? ● How can you show, count, and write numbers 6 to 9? ● How can you show and compare numbers to 10?
Standards:
K.CC.A.1 Count to 100 by ones and by tens. **K.CC.A.2** Count forward beginning from a given number within the known sequence (instead of having to begin at 1). **K.CC.A.3** Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). **K.CC.B.4** Understand the relationship between numbers and quantities; connect counting to cardinality.

K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Instructional Plan

Lessons are organized within the structure of math workshop, which consists of a:
I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day

Topic 1– Numbers 0-5:

In Topic 1, students develop a fundamental understanding of number names, the counting sequence, and written numerals.
Key Vocabulary: count, one, two, three, number, four, five, zero, none, order

Topic Opener Day: This day can be used to complete the Student Edition "Review What You Know" (pre-assessment), preview vocabulary, explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations)

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 5 **Vocabulary:** count, one, two, three	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will count 1, 2, and 3 objects. We do this by: ● Clapping and knocking ● Holding up fingers ● Explaining mental	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the Topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 1	**Lesson 1 Exit ticket Suggestion:** Pick a number from 1-3 and draw that many circles on your whiteboard. Have your partner count your objects.

	images ● Convince Me! *Workbook pages 6-7	**At your seat– independent practice:** ● BacktoSchoolRollandColor.pdf ● Writing Numbers Kindergarten ● Cover That Number ● Subitizing Memory 0-5 - Use East/West cards or Match Number to the Ten Frame ● 4 in a Row **Technology:** ● Practice logging in and logging out. (reach out to tech coaches) ● Learn to access google classroom and select math activity assigned by teacher. (reach out to tech coaches) ● Savvas Math Tools ● Listen to Read aloud online: Pete the Cat and/or 10 Black Dots ● Counting Game ● Counting Game 2 ● iReady	
Lesson 2 Solve and Share:  *Workbook page 9 **Vocabulary:** No new vocabulary	**Lesson 2:** Today we will count groups of 1, 2, and 3 objects when they are shown in different ways. We do this by: ● counting and coloring. ● Convince Me! *Workbook pages 10-11		**Lesson 2 Exit ticket Suggestion:** Pretend your whiteboard is an "aquarium" Draw 3 fish and 2 rocks. Count each object carefully and share with a partner.
Lesson 3 Solve and Share:  *Workbook page 13 **Vocabulary:** number	**Lesson 3:** Today we will read and write the numbers 1, 2, and 3. We do this by: ● Counting and writing the number that tells how many. ● Convince Me! *Workbook pages 14-15		**Lesson 3 Exit ticket Suggestion:** Write the number 2 on your whiteboard then draw 2 circles. Share and check with a partner.
Lesson 4 Solve and Share:  *Workbook page 17 **Vocabulary:**	**Lesson 4:** Today we will count 4 and 5 objects in groups to find the total number. We do this by: ● counting and coloring. ● Convince Me! *Workbook pages 18-19		**Lesson 4 Exit ticket Suggestion:** Hold up the "count" vocabulary card. Have partners discuss how to explain what it means to count. Listen and assess.

Four, five			
Lesson 5 Solve and Share:  *Workbook page 21 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will count 4 and 5 objects in different arrangements. We do this by: ● Counting with an organized counting method. ● Convince Me! *Workbook pages 22-23		**Lesson 5 Exit ticket Suggestion:** Draw a picture of 5 goldfish in a bowl. Collect for data.
Lesson 6 Solve and Share:  *Workbook page 25 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will read and write the numbers 4 and 5. We do this by: ● Counting and writing the number that tells how many. ● Convince Me! *Workbook pages 26-27		**Lesson 6 Exit ticket:** With a partner, use a 5 frame and 2 different colored counters. Model 3 ways to make the number 5.
Lesson 7 Solve and Share:  *Workbook page 29 **Vocabulary:** none, zero	**Lesson 7:** Today we will use the word zero to tell when there are “none” in a group. We do this by: ● Recognizing that zero is special because it means none ● Not coloring when the number is zero		**Lesson 7 Exit ticket Suggestion:** Share something of which you would like to have zero. Chart for fun.

	● Convince Me! *Workbook pages 30-31		
Lesson 8 Solve and Share:  *Workbook page 33 **Vocabulary:** none, zero	**Lesson 8:** Today we will read and write the number zero. We do this by: ● Recognizing that zero means “none” ● Writing the number that tells how many ● Convince Me! *Workbook pages 34-35		**Lesson 8 Exit ticket Suggestion:** With a partner, use a 5 frame and take turns showing the numbers 0-5.
Lesson 9 Solve and Share:  *Workbook page 37 **Vocabulary:** order	**Lesson 9:** Today we will show the number before and the number after a given number from 0-5. We do this by: ● Using cube trains ● Counting forwards and backwards ● Convince Me! *Workbook pages 38-39		**Lesson 9 Exit ticket Suggestion:** Write the number 4 on your whiteboard. Then write the number that comes after in order.
Lesson 10 Solve and Share:  *Workbook page 41	**Lesson 10:** Today we will use math to explain what we know about counting. We do this by: ● using objects		**Lesson 10 Exit ticket Suggestion:** Show a set of 5 counters. Ask students to explain how they know there are five in the set.

Vocabulary: No new vocabulary	• using words • using a method • Convince me! *Workbook pages 42-43		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 1 Additional Resources

Number Sense:
- Subitizing with Dominoes-Domino Flash Cards
- Number of the Day (# of days or roll a number) On a hundreds chart, count to the number forwards and backwards by 1s, represent it on a ten frame, write the word, represent the number with a picture, one more, one less and more. Number of the Day Template
- Five Frame Games

Word Problem of the Day:
- Type: Both "Add to and Take From result unknown" - Word Problem Generator Use pictures and numbers.

Songs and Read Alouds:
- Song - Jack Hartman - Five Little Fish

Math Vocabulary:
- Math Word Wall Introduce the words, place on your word wall and engage in activities for meaning:
  - hear it, see it, say it, draw it
  - Chant - clap, spell and act it out.
  - Guess My Word directions
  - Bingo bingo generator

Topic 2– Compare Numbers 0-5

In Topic 2, students compare numbers to 5 using matching and counting strategies.
Key Vocabulary: compare, equal, group, same number as, greater than, less than, model

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection

Lesson 1 Solve and Share:  *Workbook page 61 **Vocabulary:** compare, equal, group, same number as	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will compare groups to see if they are equal We do this by: ● Drawing lines to match objects ● Then compare to see if they have the same number ● Convince Me! *Workbook pages 62-63	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 2 **At your seat–independent practice:** ● Fall Counting Cards ● Roll and Write ● Identifying Numbers ● Writing Numbers ● Playdough 10 frames ● Build the Number ● Name in a Ten Frame ● Writing Numbers **Technology:** ● Monster Match ● Compare Objects ● Savvas Math Tools ● Connect the Dots ● Fuzz Bugs ● iReady	**Lesson 1 Exit ticket Suggestion:** Teachers: Provide students with a picture of 5 counters in the top row, and 5 counters beneath. Ask the students to compare the sets by matching, using a pencil. Collect.
Lesson 2 Solve and Share:  *Workbook page 65 **Vocabulary:** greater than	**Lesson 2:** Today we will tell whether one group is greater than another group by comparing. We do this by: ● Drawing lines to match ● Compare to see which group has a greater amount ● Circle the group with the greater amount ● Convince Me! *Workbook pages 66-67		**Lesson 2 Exit ticke Suggestiont:** Students: Using a dry erase board, draw a set of 5 counters in the top row. Give the students the dry erase marker and ask them to create a set below that is greater than the given set. Ask them to show understanding by matching. Share and check with a partner.
Lesson 3 Solve and Share:	**Lesson 3:** Today we will tell whether one group is		**Lesson 3 Exit ticket Suggestion:** Students: Using

 *Workbook page 69 **Vocabulary:** less than	less than another group by comparing. We do this by: ● Counting each group ● Writing the number that tells how many ● Circling the greater number ● Convince Me! *Workbook pages 70-71		a dry erase board, draw a set of 5 counters in the top row. Give the students the dry erase marker and ask them to create a set below that is less than the given set. Ask them to show understanding by matching. Share and check with a partner.
Lesson 4 Solve and Share:  *Workbook page 73 **Vocabulary:** no new vocabulary	**Lesson 4:** Today we will count to compare groups of objects. We do this by: ● Counting each group ● Writing the number that tells how many ● Use the counting sequence to compare the numbers ● Convince Me! *Workbook pages 74-75		**Lesson 4 Exit ticket** **Suggestion:** Watch this short clip. After seeing different examples of 7, have students draw their own way to show 7 on their whiteboard.
Lesson 5 Solve and Share:  *Workbook page 77	**Lesson 5:** Today we will compare numbers and objects. We do this by: ● Using cubes ● Drawing a picture ● Use numbers ● Convince Me!		**Lesson 5 Exit ticket** **Suggestion:** Show students 2 cube trains to: one with 3 and one with 5. Have them show 2 ways to compare 3 and 5.

Vocabulary: model	*Workbook pages 78-79		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 2 Additional Resources

Number Sense:

- Subitizing with Dots
- SPLAT!
- Calendar/Number of the Day: Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day by 1s forward and backward. Write the number, draw the number.

Songs and Read Alouds:

- Song - Counting to 5
- Song - Subitize 1 - 5
- Book - What Comes in 2's, 3's and 4's by Suzanne Aker

Math Vocabulary:

- Math Word Wall Introduce the words, place on your word wall and engage in activities for meaning:
  - hear it, see it, say it, draw it
  - Chant - clap, spell and act it out.
  - Guess My Word directions
  - Bingo bingo generator

Topic 3– Numbers 6-10

In Topic 3, students extend their understanding of number names, the counting sequence, and written numerals to 10.
Key Vocabulary: six, seven, eight, nine, ten

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:	**Daily Optional Mini-Lesson Support for Each**	**Suggestions for Lessons/Topic:**	**Lesson 1 Exit ticket Suggestion:** Students

 *Workbook page 93 **Vocabulary:** six, seven	**Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will count objects in groups of six and seven. We do this by: • Noticing that counting tells us how many objects are in a group • Convince Me! *Workbook pages 94-95	**Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 3 **Technology:** • Monster Match • Compare Objects • Savvas Math Tools • Connect the Dots • Fuzz Bugs • iReady • Count the objects • Count fish • Teddy Numbers **At your seat–independent practice:** • Writing Numbers • Playdough 10 frames • Build the Number • Name in a Ten Frame • Writing Numbers	demonstrate counting objects of 6 or 7 counters.
Lesson 2 Solve and Share:  *Workbook page 97 **Vocabulary:** No new vocabulary	**Lesson 2:** Today we will use the numbers 6 and 7 to represent groups of objects. We do this by: • Using a special symbol to show the number 6 • Using a special symbol to show the number 7 • Convince Me! *Workbook pages 98-99		**Lesson 2 Exit ticket Suggestion:** Students will skywrite the numbers 6 and 7. On paper they will draw 6 counters and label the number 6. Then draw 7 counters and label the number 7.
Lesson 3 Solve and Share:  *Workbook page 101	**Lesson 3:** Today we will count objects in groups of eight and nine. We do this by: • Using one to one correspondence • Noticing the last number I say is the number of objects in the group		**Lesson 3 Exit ticket Suggestion:** With your partner, count 8 objects in the classroom. Count together from 1-8. What objects did you count? (Cubbies… chairs…)

Vocabulary: eight, nine	• Convince Me! *Workbook pages 102-103		
Lesson 4 Solve and Share:  *Workbook page 105 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will use the numbers 8 and 9 to represent groups of objects. We do this by: • Noticing that numbers represent different amounts in groups • Noticing that numbers look different so they can be told apart • Convince Me! *Workbook pages 106-107		**Lesson 4 Exit ticket** **Suggestion:** Using your dry erase board, draw 8 or 9 counters and label them with the correct number. Have your partner check your work.
Lesson 5 Solve and Share:  *Workbook page 109 **Vocabulary:** ten	**Lesson 5:** Today we will count objects in groups of ten. We do this by: • Starting with one object • Counting up by ones • Arranging counters in any order on a ten frame • Convince Me! *Workbook pages 110-111		**Lesson 5 Exit ticket** **Suggestion:** Students will draw ten counters on a ten frame.
Lesson 6 Solve and Share: 	**Lesson 6:** Today we will use the number 10 to represent groups of objects. We do this by: • Learning the special symbol for 10 • Writing 10 when there are		**Lesson 6 Exit ticket** **Suggestion:** Give each student a ten frame with different colored counters. Have them show 3 ways to make 10.

*Workbook page 113 **Vocabulary:** No new vocabulary	ten objects in a group • Convince Me! *Workbook page 114-115		
Lesson 7 Solve and Share:  *Workbook page 117 **Vocabulary:** No new vocabulary	**Lesson 7:** Today we will count different groups of numbers from 0-10. We do this by: • Noticing that there is an order to numbers • Each number is one greater than the number before it • Convince Me! *Workbook pages 118-119		**Lesson 7 Exit ticket Suggestion:** Write the numbers 2, 4, 3, 5 on the board. Have students write them in the correct order from least to greatest.
Lesson 8 Solve and Share:  *Workbook page 121 **Vocabulary:** No new vocabulary	**Lesson 8:** Today we will problem solve by using patterns in our counting. We do this by: • Using patterns to find different ways to make a number in two parts • Organizing my answers to see that I have every way • Convince Me! *Workbook pages 122-123		**Lesson 8 Exit ticket Suggestion:** How many ways can you make 7 with yellow and red cubes?
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 3 Additional Resources

Numbers Sense Activities:
- SUBITIZING with dots
- Splat

● Calendar/ Number of the Day:
Use a hundred chart to count to Number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day (by 1s forward and backward). Write the number, draw the number.

Picture Books/Songs:
● Song - Subitize Country
● Song -Counting to10
● Book - Ten Black Dots by Donald Crews
● Poem - Ten in theBed

Vocabulary:
● Math Word Wall: Intro. words and play activities like:
1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word
directions

Word Problem of the Day:
● Type: "Add to Result Unknown" problems: Word Problem Generator - Use pictures to solve.

Topic 4– Compare Numbers 0-10

In Topic 4, students compare numbers to 10 using matching and counting strategies.
Key Vocabulary: review previously learned vocabulary

Topic Opener Day: This day can be used to review previously learned vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 141	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will compare groups of up to ten objects.	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations	**Lesson 1 Exit ticket Suggestion:** Build a cube train (between 3-10). Then compare your cube train to your partner's. Who has more? How many more?

Vocabulary: No new Vocabulary	We do this by: ● Lining up and directly matching objects 1:1 ● Convince Me! *Workbook pages 142-143	**Hands on–game:** See Activity Centers For Topic 4 **At your seat–independent practice:** ● Bubble Gum Counting ● Counting Pirate's Gold ● Making Numbers: Playdough Number Mats Numbers 0-10 ● Identifying Numbers: Community Helpers Roll and Color ● Playdough 10 frames **Technology:** ● iReady ● Savvas math tools ● Counting on mathgames.com [count forward] ● Counting abcya [birthday candle count] ● Flip Grid - Use number cards, students compare numbers using the vocabulary words greater than or less than and math talk I know this	
Lesson 2 Solve and Share:  *Workbook page 145 **Vocabulary:** No new Vocabulary	**Lesson 2:** Today we will compare groups of numbers using numerals to 10. We do this by: ● Drawing pictures ● Using objects ● Matching objects 1:1 ● Notice that the group with more is the greater number ● Convince Me! *Workbook pages 146-147		**Lesson 2 Exit ticket** **Suggestion:** Build a cube train with 7 cubes. Add 2 more cubes. How many cubes are there now?
Lesson 3 Solve and Share:  *Workbook page 149 **Vocabulary:** No new Vocabulary	**Lesson 3:** Today we will compare groups of numbers by counting. We do this by: ● Counting the number of objects ● Finding where the number is in the sequence ● Determining the greater number ● Convince Me! *Workbook pages 150-151		**Lesson 3 Exit ticket** **Suggestion:** Build a number with counters on a ten frame. (between 3-10). Then compare your ten frame to your partner's. Who has more? How many more?

<table>
<tr>
<td>Lesson 4 Solve and Share:
 
*Workbook page 153

Vocabulary: No new Vocabulary</td>
<td>Lesson 4: Today we will compare two written numbers by using pictures and objects.

We do this by:
● Thinking about the counting sequence
● Thinking about which number comes first as the smaller number
● Convince Me!

*Workbook pages 154-155</td>
<td rowspan="2">Because....</td>
<td>Lesson 4 Exit ticket
Suggestion: Using counters, make a model of a set that is greater than 6. Share and check with your partner.</td>
</tr>
<tr>
<td>Lesson 5 Solve and Share:
 
*Workbook page 157

Vocabulary: No new Vocabulary</td>
<td>Lesson 5: Today we will count to problem solve.

We do this by:
● Counting a group
● Adding one more
● Noticing that I don't have to recount the group- I can count on
● Convince Me!

*Workbook pages 158-159</td>
<td>Lesson 5 Exit ticket
Suggestion: Count forward to 10 from 3, from 7, from 9.</td>
</tr>
<tr>
<td colspan="4">Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key</td>
</tr>
</table>

Topic 4 Additional Resources

Numbers Sense Activities:

- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.

Picture Books/Songs:
- Song - Subitize rock
- Song - Numbers Song Let's Count 1-10 New Version
- Book - Ten Red Apples by Pat Hutchins
- Poem - One Two Buckle My Shoe

Vocabulary:
- Math Word Wall: Intro. words and play activities like:

1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word- Directions

Cluster 2: Measurement and Data (Topic 5)

Before moving on to Topic 5, please administer the Topic 1-4 Benchmark Assessment

Big Idea: **Representing, relating, and operating on whole numbers, initially with sets of objects**
Essential Questions *What provocative questions will foster inquiry, understanding, and transfer of learning?* ● How can comparing objects help you measure them? ● How does sorting help you display information?
Standards:
K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. **K.MD.A.2** Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. **K.MD.B.3** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count
Instructional Plan Lessons are organized within the structure of math workshop, which consists of a:

I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day

Topic 5–Classify and Count Data

In Topic 5, students classify objects into categories. They count and compare the number of objects in each category.
Key Vocabulary: category, classify, chart, tally mark

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 173 **Vocabulary:** category, classify	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will sort and classify objects into categories. We do this by: • Grouping things by what they have in common • Convince Me! *Workbook pages 174-175	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 5 **Technology:** • Savvas math tools • iReady • Fuzz Bugs- counting sorting comparing • Splash Math sorting games • Dino sorting • Sort by Material	**Lesson 1 Exit ticket Suggestion:** Show a group of objects. Have partners turn and talk about how they would sort their objects.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will count and classify objects into categories and label with numbers. We do this by: • Sorting objects into two		**Lesson 2 Exit ticket Suggestion:** Draw a group of circles. Count them and label with a number. Draw a group of squares. Count them and label with a number. Have your partner check your work.

 *Workbook page 177 **Vocabulary:** chart, tally mark	groups • Count each category • Write the number for each category • Convince Me! *Workbook pages 178-179	**At your seat– independent practice:**	
Lesson 3 Solve and Share:  *Workbook page 181 **Vocabulary:** No new vocabulary	**Lesson 3:** Today we will sort objects and count the groups. We will then compare the number of objects in each category. We do this by: • Counting the number of objects in each category • Knowing that the number that comes later when i count is greater • Convince Me! *Workbook pages 182-183		**Lesson 3 Exit ticket** **Suggestion:** Whole class discussion: Share two groups of sorted objects. Count together. Label each group with a number. How can we compare these numbers?
Lesson 4 Solve and Share:  *Workbook page 185 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will use our problem solving skills and explain our thinking. We do this by: • Solve to see if the answers match • Using number words • Using pictures • Convince Me!		**Lesson 4 Exit ticket** **Suggestion:** Draw 5 counters and label the group with the number 6. Ask students if your number makes sense. Have them turn and talk.

	*Workbook pages 186-187		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Cluster 3: Operations and Algebraic Thinking (Topics 6-8)

Big Idea:
Representing, relating, and operating on whole numbers, initially with sets of objects

Essential Questions

- How can you show addition?
- How can you show subtraction?

Standards:

K.OA.A.1 Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings2 , sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
K.OA.A.5 Demonstrate fluency for addition and subtraction within 5.
K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Instructional Plan

Lessons are organized within the structure of math workshop, which consists of a:
I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day

Topic 6– Understand Addition

In Topics 6–8, students develop an understanding of addition and subtraction by representing the operations in different ways. They decompose numbers to 10 in more than one way.

Key Vocabulary: join, in all, part, whole, number sentence, add, plus sign, equal sign, equation, sum

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 201 **Vocabulary:** join, in all, part, whole	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will find the total number of objects in two groups. We do this by: ● Writing sentences ● Drawing pictures ● Using objects ● Using fingers ● Convince Me! *Workbook pages 202-203	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 6 **At your seat–independent practice:** ● Sum it Up ● Shake and Spill ● What's Missing? ● Polar Animal Counting ● Roll Shake Spill ● Plant the Seeds ● Addition Color by Number **Technology:** ● iReady ● Savvas math tools ● Splash Math addition games ● Marble addition ● Molly adds up to ten ● Addition with Pictures	**Lesson 1 Exit ticket Suggestion:** How can you find the total number of objects in 2 groups? Turn and talk to your partner about the strategy you chose.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will add the number of objects in one group to another group in order to find the total. We do this by:		**Lesson 2 Exit ticket Suggestion:** Show students two groups of objects. Have them find the total by using one collecting cubes.

 *Workbook page 205 **Vocabulary:** addition sentence	• Adding groups of connecting cubes • Convince Me! *Workbook pages 206-207		
Lesson 3 Solve and Share:  *Workbook page 209 **Vocabulary:** No new vocabulary	**Lesson 3:** Today we will use the addition strategy called "putting together." We do this by: • Finding the number of objects in each group • Putting them together to find the total • Convince Me! *Workbook pages 210-211		**Lesson 3 Exit ticket Suggestion:** Show students two groups of objects. Have students find and write the total by using one of the strategies. Collect.
Lesson 4 Solve and Share:  *Workbook page 213 **Vocabulary:** add, plus sign, equal sign, equation, sum	**Lesson 4:** Today we will write an addition equation as a way to show addition. We do this by: • Using + and = to show parts of a whole added together • Convince Me! *Workbook pages 214-215		**Lesson 4 Exit ticket Suggestion:** With your fingers, show me the symbol for addition.
Lesson 5 Solve and Share:	**Lesson 5:** Today we will solve "add		**Lesson 5 Exit ticket Suggestion:** Choose the

 *Workbook page 217 **Vocabulary:** No new vocabulary	to" addition word problems. We do this by: ● Trying strategies: *using objects *drawing pictures *using fingers *acting out *writing an equation ● Convince Me! *Workbook pages 218-219		strategy that works best for you. Turn and talk to your partner about why you chose this strategy.
Lesson 6 Solve and Share:  *Workbook page 221 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will solve "put together" addition word problems. We do this by: ● Trying strategies: *using objects *drawing pictures *using fingers *acting out *writing an equation ● Convince Me! *Workbook pages 222-223		**Lesson 6 Exit ticket** **Suggestion:** Show students 2 groups of objects and ask them to demonstrate "adding to" with their partner.
Lesson 7 Solve and Share:  *Workbook page 225 **Vocabulary:** No new vocabulary	**Lesson 7:** Today we will begin solving addition problems with fluency. We do this by: ● Adding in any order ● Noticing as one number increases the other number decreases ● Convince Me!		**Lesson 7 Exit ticket** **Suggestion:** On whiteboards, have students solve 3 + 2

	*Workbook pages 226-227		
Lesson 8 Solve and Share:  *Workbook page 229 **Vocabulary:** No new vocabulary	**Lesson 8:** Today we will solve addition problems by drawing pictures and writing equations We do this by: ● Thinking about how information in a story problem can be shown in different ways to help us understand: *Picture *Number *Objects *Or another model ● Convince Me! *Workbook pages 230-231		**Lesson 8 Exit ticket** **Suggestion:** Have students draw a picture to solve 4 + 1
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 6 Additional Resources

Numbers Sense Activities:

- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.

Picture Books/Songs:

- Song- Adding with a Pirate
- Song- Addition Song
- Book - Animals on Board

- Book- Mission: Addition

Vocabulary:
● Math Word Wall: Intro. words and play activities like:
1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word
Directions
4. Math alphabet book

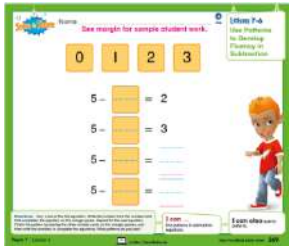
Topic 7– Understand Subtraction

In Topics 6–8, students develop an understanding of addition and subtraction by representing the operations in different ways. They decompose numbers to 10 in more than one way.
Key Vocabulary: left, separate, difference, subtract, minus sign

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 249 **Vocabulary:** left	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will explore different ways to represent subtraction. We do this by: ● Drawing pictures ● Other drawings ● Objects ● Fingers	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the Topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 7 **At your seat–independent practice:** ● 5 Frame Subtraction ● Subtraction Smash	**Lesson 1 Exit ticket** **Suggestion:** What was your favorite strategy today? Turn and talk.

	● Acting out ● Convince Me! *Workbook pages 250-251	● Subtract it! ● How many are hiding? **Technology:** ● iReady ● Savvas math tools ● Balloon Pop ● Subtraction Games- Splash Math ● Buncee - post Subtraction problems. Students solve with stickers/ pictures.	
Lesson 2 Solve and Share:  *Workbook page 253 **Vocabulary:** separate	**Lesson 2:** Today we will represent subtraction as taking apart. We do this by: ● Take a number apart by separating it into smaller parts. *Workbook pages 254-255		**Lesson 2 Exit ticket** **Suggestion:** Start with 8 cubes. Break it apart. Put it back together and break apart again.
Lesson 3 Solve and Share:  *Workbook page 257 **Vocabulary:** subtraction sentence, take away	**Lesson 3:** Today we will represent subtraction as taking from. We do this by: ● Noticing the part that leaves the story is the part that is taken away from the whole group ● Convince Me! *Workbook pages 258-259		**Lesson 3 Exit ticket** **Suggestion:** Share a "taking from" word problem with the class. Have the students turn and talk about which part is the part that is taken away from the whole group.
Lesson 4 Solve and Share:  *Workbook page 261	**Lesson 4:** Today we will represent subtraction with equations. We do this by: ● Using - and = to show what is left after some are taken away ● Convince Me!		**Lesson 4 Exit ticket** **Suggestion:** Say a subtraction sentence aloud. Have students write on their whiteboards. Hold them up.

Vocabulary: difference, subtract, minus sign	*Workbook pages 262-263		
Lesson 5 Solve and Share:  *Workbook page 265 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will solve subtraction word problems by taking from and apart. We do this by: ● Drawing pictures ● Other drawings ● Objects ● Fingers ● Acting out ● Convince Me! *Workbook pages 266-267		**Lesson 5 Exit ticket** **Suggestion:** Share a word problem with the class. Have them solve. Collect.
Lesson 6 Solve and Share:  *Workbook page 269 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will begin solving subtraction problems with fluency. We do this by: ● Notice that as the number I am taking away goes up, the difference goes down ● Notice that there are pairs of subtraction equations that have the same numbers in a different order (ex: 5-0=5 and 5-5=0) ● Convince Me! *Workbook pages 270-271		**Lesson 6 Exit ticket** **Suggestion:** What pattern did you learn about today when solving subtraction problems? Turn and talk.
Lesson 7 Solve and Share:	**Lesson 7:** Today we will use tools to subtract numbers.		**Lesson 7 Exit ticket** **Suggestion:** What subtraction tool feels like the best tool for

 *Workbook page 273 **Vocabulary:** No new vocabulary	We do this by: ● Thinking about the problem ● Thinking about what happens and what I need to find out ● Choosing the right tool to solve ● Convince Me! *Workbook pages 274-275		you? Is there more than one? Tell your partner.
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 7 Additional Resources

Numbers Sense Activities:

- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.

Picture Books/Songs:

Book- Deductive Duck
Book- Pigeon Math
Book- Monster Musical Chairs
Song- Monkey Math
Song- Donut Mystery
Song- Subtraction Song

Vocabulary:

- Math Word Wall: Intro. words and play activities like:

1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word

Directions
4. Math alphabet book

Topic 8– More Addition and Subtraction

In Topics 6–8, students develop an understanding of addition and subtraction by representing the operations in different ways. They decompose numbers to 10 in more than one way.
Key Vocabulary: break apart, operation

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 293 **Vocabulary:** break apart	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will solve word problems where parts are unknown. We do this by: ● Writing an equation in a new way ● Convince Me! *Workbook pages 294-295	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 8 **At your seat–independent practice:** ● Sum it Up ● Shake and Spill ● What's Missing? ● Polar Animal Counting ● Roll Shake Spill ● 5 Frame Subtraction ● Subtraction Smash ● Subtract it! ● How many are hiding? ● Plant the Seeds	**Lesson 1 Exit ticket Suggestion:** Write a word problems on the board. Have students turn and talk about how they would solve the word problem.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will learn about related facts. We do this by: ● Noticing that subtraction becomes easier when we		**Lesson 2 Exit ticket Suggestion:** Write 3 numbers on the board. Have students write 2 facts with those numbers.

 *Workbook page 297 **Vocabulary:** operation	think about the related addition fact • Convince Me! *Workbook pages 298-299	**Technology:** • iReady • Savvas math tools • Splash Math addition games • Marble addition • Molly adds up to ten • Addition with Pictures • Molly adds and subtracts • Balloon Pop • Splash math subtraction games	
Lesson 3 Solve and Share:  *Workbook page 301 **Vocabulary:** No new vocabulary	**Lesson 3:** Today we will create our own number stories to match an equation. We do this by: • First, studying the equation • Draw to solve • Explain how the drawing and story help prove the equation is true • Convince Me! *Workbook pages 302-303		**Lesson 3 Exit ticket** **Suggestion:** Write a number story on the board. Have students turn and talk to share a number story with their partner.
Lesson 4 Solve and Share:  *Workbook page 305 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will practice fluently solving facts within five. We do this by: • Using related facts • Making a drawing • Using objects • Counting on • Counting back • Convince Me!		**Lesson 4 Exit ticket** **Suggestion:** Write facts within 5 one at a time. Have students solve and hold up their whiteboards for observation.

	*Workbook pages 306-307		
Lesson 5 Solve and Share:  *Workbook page 309 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will solve word problems with sums of 6 and 7. We do this by: ● First, using counters or a drawing to show the parts being added ● Add the counters to find the total ● Convince Me! *Workbook pages 310-311		**Lesson 5 Exit ticket** **Suggestion:** With counters, solve this word problem. Write your answer on paper. Collect.
Lesson 6 Solve and Share:  *Workbook page 313 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will solve word problems with sums of 8 and 9. We do this by: ● First, using counters or a drawing to show the parts being added ● Add the counters to find the total ● Convince Me! *Workbook pages 314-315		**Lesson 6 Exit ticket** **Suggestion:** With counters, solve this word problem. Write your answer on paper. Collect.
Lesson 7 Solve and Share:	**Lesson 7:** Today we will make 2 groups of 10 in lots of ways. We do this by: ● Using a ten frame ● Noticing that changing the		**Lesson 7 Exit ticket** **Suggestion:** Make 2 groups of 10 with connecting cubes. Share with your partner.

 *Workbook page 317 **Vocabulary:** No new vocabulary	order of the parts does not change how many objects are in the group. ● Convince Me! *Workbook pages 318-319		
Lesson 8 Solve and Share:  *Workbook page 321 **Vocabulary:** No new vocabulary	**Lesson 8:** Today we will solve word problems with sums of 10. We do this by: ● using a ten frame to show different combinations for 10 ● Convince Me! *Workbook pages 322-323		**Lesson 8 Exit ticket** **Suggestion:** With counters, solve this word problem. Write your answer on paper. Collect.
Lesson 9 Solve and Share:  *Workbook page 325 **Vocabulary:** No new vocabulary	**Lesson 9:** Today we will find number partners for 10 and write them as equations. We do this by: ● Using cubes to show the part we know ● Adding cubes on until we get 10 ● Convince Me! *Workbook pages 326-327		**Lesson 9 Exit ticket** **Suggestion:** Start with a set of cubes less than 10. Have your partner add on until they make a 10.
Lesson 10 Solve and Share:	**Lesson 10:** Today we will continue		**Lesson 10 Exit ticket** **Suggestion:** Write a number

 *Workbook page 329 **Vocabulary:** No new vocabulary	finding missing parts to make ten. We do this by: ● Thinking about the number pairs we know ● Use them to solve ● Convince Me! *Workbook pages 330-331		on the board. Have students add on until they make a 10. Turn and talk about the number partners that made a ten.
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 8 Additional Resources

Numbers Sense Activities:
- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Ten Frames
- Disappearing Dan
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.

Picture Books/Songs:

Book- Deductive Duck
Book- Pigeon Math
Book- Monster Musical Chairs
Song- Monkey Math
Song- Donut Mystery
Song- Subtraction Song
- Song- Adding with a Pirate
- Song- Addition Song
- Book - Animals on Board
- Book- Mission: Addition

Vocabulary:

● Math Word Wall: Intro. words and play activities like:
1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word
Directions
4. Math alphabet book

Cluster 4: Counting and Cardinality (Topic 9)

Before moving on to Topic 9, please administer the Topic 1-8 Benchmark Assessment

Big Idea: Representing, relating, and operating on whole numbers, initially with sets of objects
Essential Questions *What provocative questions will foster inquiry, understanding, and transfer of learning?* ● How can you show, count, and write numbers 11 to 19? ● How can you show, count, and write numbers to 20 and beyond?
Standards:
K.KBTA.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
Instructional Plan Lessons are organized within the structure of math workshop, which consists of a: **I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day**

Topic 9– Count Numbers to 20

In topic 9, students extend their understanding of number names, the counting sequence, and written numerals to 20.
Key Vocabulary: eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, row

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 349 **Vocabulary:** eleven, twelve	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will count and write the numbers 11 and 12. We do this by: ● Counting the number of objects in a group ● Using the unique symbol to write the matching number ● Convince Me! *Workbook pages 350-351	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 9 **At your seat–independent practice:** ● One more one less ● Pirate Flag Counting ● Splash Math- place value games **Technology:** ● iReady ● Savvas math tools ● Count to 20 ● Number Bubble Skip Counting ● Number Chart ● Flip Grid- teacher	**Lesson 1 Exit ticket Suggestion:** Divide your whiteboard into two parts. One one side write the number 11. Write 12 on the other side. Hold them up when you are ready.
Lesson 2 Solve and Share: 	**Lesson 2:** Today we will count and write the numbers 13, 14, and 15. We do this by: ● Counting the number of		**Lesson 2 Exit ticket Suggestion:** Model a group of counters. Count as a group. Have students write the number.

*Workbook page 353 **Vocabulary:** thirteen, fourteen, fifteen	objects in a group ● Using the unique symbol to write the matching number ● Convince Me! *Workbook pages 354-355	posts a word problem. Students explain how to solve it using pictures and numbers. ● Teen numbers- Splash Math	
Lesson 3 Solve and Share:  *Workbook page 357 **Vocabulary:** sixteen, seventeen	**Lesson 3:** Today we will count and write the numbers 16 and 17. We do this by: ● Counting the number of objects in a group ● Using the unique symbol to write the matching number ● Convince Me! *Workbook pages 358-359		**Lesson 3 Exit ticket** **Suggestion:** On a ten frame, model the number 16. Show and count the 16 counters together. Have students write 16. Collect.
Lesson 4 Solve and Share:  *Workbook page 361 **Vocabulary:** eighteen, nineteen, twenty	**Lesson 4:** Today we will count and write the numbers 18, 19, and 20. We do this by: ● Counting the number of objects in a group ● Using the unique symbol to write the matching number ● Convince Me! *Workbook pages 362-363		**Lesson 4 Exit ticket** **Suggestion:** With your partner, call out a number (18, 19, or 20). Write the number on your whiteboard with your partner. Then, have your partner call out a number to write.
Lesson 5 Solve and Share:	**Lesson 5:** Today we will count forward from any number		**Lesson 5 Exit ticket** **Suggestion:** On a piece of paper, write the number that

 *Workbook page 365 **Vocabulary:** row	within 20. We do this by: ● Start at a number ● Think about the counting sequence ● Count on ● Convince Me! *Workbook pages 366-367		comes after 12. Collect.
Lesson 6 Solve and Share:  *Workbook page 369 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will count objects in different ways. We do this by: ● Counting with precision ● Noticing the last number tells how many ● Convince Me! *Workbook pages 370-371		**Lesson 6 Exit ticket** **Suggestion:** Show students 2 groups of counters. One group with 5 and one group with 12. Ask students how they can tell which group has 12.
Lesson 7 Solve and Share:  *Workbook page 373 **Vocabulary:** No new vocabulary	**Lesson 7:** Today we will use reasoning to solve a number story. We do this by: ● Listening to the number story ● Solve to find all of the possible solutions ● Notice that if the numbers counted are different, my answer can be different too ● Convince Me! *Workbook pages 374-375		**Lesson 7 Exit ticket** **Suggestion:** How did we use reasoning to solve number stories today? Turn and talk.

Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key

Topic 9 Additional Resources

Numbers Sense Activities:

- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Ten Frames
- Disappearing Dan
- Number Sense Activities List
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.

- Guess my number

Picture Books/Songs:

Song- Teen Numbers
Song- Teen Number Rap
Book- City By Numbers
Book- Teeth, Tails, and Tentacles

Vocabulary:

- Math Word Wall: Intro. words and play activities like:

1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word: Directions
4. Math alphabet book

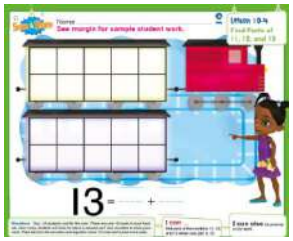
Cluster 5: Numbers and Computation (Topic 10)

Topic 10– Compose and Decompose Numbers 11-19

In topic 10, students compose and decompose numbers from 11-19 into ten ones and some further ones to build a foundation for understanding place value.
Key Vocabulary: How many more?

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 389 **Vocabulary:** How many more?	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will use drawing and equations to make the numbers 11, 12, and 13. We do this by: • Building 10 on a ten frame • Adding more until I get 11, 12, or 13 • Convince Me! *Workbook pages 390-391	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 10 **At your seat–independent practice:** • Build the number • Number Writing • Race To Finish Teen Numbers • Sum of all Dice **Technology:** • iReady • Savvas math tools • Complete the ten frame	**Lesson 1 Exit ticket** **Suggestion:** Show 12 on a ten frame as 10 and some more. Share with your partner.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will use drawing and equations to make the numbers 14, 15, and 16.		**Lesson 2 Exit ticket** **Suggestion:** Choose a number (14, 15, 16). Build on a ten frame. Have your partner count.

 *Workbook page 393 **Vocabulary:** No new vocabulary	We do this by: ● Building 10 on a ten frame ● Adding more until I get 14, 15, or 16 ● Convince Me! *Workbook pages 394-395	● Okta's Rescue ● Splash Math- place value games	
Lesson 3 Solve and Share:  *Workbook page 397 **Vocabulary:** No new vocabulary	**Lesson 3:** Today we will use drawing and equations to make the numbers 17, 18, and 19. We do this by: ● Building 10 on a ten frame ● Adding more until I get 17, 18, or 19 ● Convince Me! *Workbook pages 398-399		**Lesson 3 Exit ticket** **Suggestion:** With your partner, describe and demonstrate how you can show 17, 18, or 19 as ten ones and some more ones. Your partner will describe and demonstrate a different number.
Lesson 4 Solve and Share:  *Workbook page 401 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will find parts of the numbers 11, 12, and 13 when one part is 10. We do this by: ● Using objects or an equation to show the number in two groups ● Make a group of ten and a group of some more ones ● Convince Me! *Workbook pages 402-403		**Lesson 4 Exit ticket** **Suggestion:** Show students a cube train of 10. Ask how many more ones are needed to make 13. Have students share how they solved.

Lesson 5 Solve and Share:  *Workbook page 405 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will find parts of the numbers 14, 15, and 16 when one part is 10. We do this by: ● Using objects or an equation to show the number in two groups ● Make a group of ten and a group of some more ones ● Convince Me! *Workbook pages 406-407		**Lesson 5 Exit ticket** **Suggestion:** Turn and talk about how we think about 14 as 10 ones and more ones.
Lesson 6 Solve and Share:  *Workbook page 409 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will find parts of the numbers 17, 18, and 19 when one part is 10. We do this by: ● Using objects or an equation to show the number in two groups ● Make a group of ten and a group of some more ones ● Convince Me! *Workbook pages 410-411		**Lesson 6 Exit ticket** **Suggestion:** On your whiteboard, write an equation to show 17.
Lesson 7 Solve and Share:  *Workbook page 413	**Lesson 7:** Today we will use patterns to make and find the parts of numbers to 19. We do this by: ● Using number patterns to notice how teen numbers are made up of a group of ones from 1-9 ● Recognize that teen		**Lesson 7 Exit ticket** **Suggestion:** How can we use number patterns to make the parts of numbers? Turn and talk.

Vocabulary: No new vocabulary	numbers have a 10 ones as well ● Convince Me! *Workbook pages 414-415		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 10 Additional Resources

Numbers Sense Activities:
● SUBITIZING with dots
● Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
● Ten Frame Flashcards
● Math Talk Pictures
● Ten Frames
● Disappearing Dan
● Number Sense Games List

Picture Books/Songs:
Song- Teen Numbers
Song- Teen Number Rap
Book- City By Numbers
Book- Teeth, Tails, and Tentacles

Vocabulary:
● Math Word Wall: Intro. words and play activities like:
1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word: Directions
4. Math alphabet book

Cluster 6: Counting and Cardinality (Topic 11)

Topic 11– Count Numbers to 100

In topic 11, students extend their understanding of the counting sequence to 100. They count by tens and by ones from any number up to 100.

Key Vocabulary: column, ones, pattern, tens, decade, hundred chart

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 433 **Vocabulary:** column, ones, pattern, tens	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will count using patterns to 30. We do this by: • Using a number chart to see how number patterns repeat • Convince Me! *Workbook pages 434-435	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 11 **At your seat–independent practice:** • 100 Chart Puzzles **Technology:** • iReady • Savvas math tools • 100 Chart missing number • Complete the hundred chart • Number Bingo • Count to 100	**Lesson 1 Exit ticket Suggestion:** How can we use patterns on the hundred chart to count to 30?
Lesson 2 Solve and Share:  *Workbook page 437 **Vocabulary:** No new	**Lesson 2:** Today we will use patterns to count to 50. We do this by: • Using a number chart to see how number patterns repeat • Convince Me! *Workbook pages 438-439		**Lesson 2 Exit ticket Suggestion:** Hide a number on the hundred chart. Have your partner figure out the number by using number patterns.

vocabulary			
Lesson 3 Solve and Share:  *Workbook page 441 **Vocabulary:** decade, hundreds chart	**Lesson 3:** Today we will count by tens to 100. We do this by: ● Use a 100 chart to count down the 10 column ● Only say the numbers for the groups of 10 as I count 10 each time: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 ● Convince Me! *Workbook pages 442-443		**Lesson 3 Exit ticket** **Suggestion:** Start at 10. With your partner, count by tens on the hundred chart using the pattern you learned about today.
Lesson 4 Solve and Share:  *Workbook page 445 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will count by ones to 100 We do this by: ● Using a number chart to keep track as I count ● Using counting patterns on my number chart to count ● Convince Me! *Workbook pages 446-447		**Lesson 4 Exit ticket** **Suggestion:** Pick a number on the hundred chart. Count on by ones.
Lesson 5 Solve and Share: 	**Lesson 5:** Today we will problem solve by using a hundred chart. We do this by: ● Using patterns of counting in different ways.		**Lesson 5 Exit ticket** **Suggestion:** What pattern did you use on the hundred chart today? Turn and talk.

*Workbook page 449 **Vocabulary:** No new vocabulary	• Convince Me! *Workbook pages 450-451		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Topic 11 Additional Resources

Numbers Sense Activities:
- SUBITIZING with dots
- Subitizing on Ten Frames up to 10-Teacher Tools for Interactive Whiteboards
- Ten Frame Flashcards
- Math Talk Pictures
- Ten Frames
- Disappearing Dan
- Number Sense Games List
- Calendar/ Number of the Day:

Use a hundred chart to count to the number of the day. Use 5 frame or 10 frame to show the number of the day. Choral count to the number of the day(by 1s forward and backward). Write the number, draw the number.
- Guess my number

Songs and Books:
- **Song: Count to 50 by ones**
- **Song: The Singing Walrus counts to 100 by 10s**
- **Song: Counting by 10s**
- **Book: One is a snail ten is a crab**
- **Book: 100 Hungry Ants**
- **Book: 100 Things that Make Me Happy**

Vocabulary:
- Math Word Wall: Intro. words and play activities like:

1. hear it, see it, say it, draw it
2. Chant - clap, spell and act it out.
3. Guess My Word: Directions
4. Math alphabet book

Cluster 7: Geometry (Topics 12-13)

Topics 1-11 Benchmark Assessment is NOT Required

Big Idea:
Describing shapes and space

Essential Questions
What provocative questions will foster inquiry, understanding, and transfer of learning?
- How can you identify, name, and describe two-dimensional shapes?
- How can identifying and describing shapes help you sort them?

Standards:

K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.A.2 Correctly name shapes regardless of their orientations or overall size
K.G.A.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6 Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

Instructional Plan
Lessons are organized within the structure of math workshop, which consists of a:
I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day

Topic 12–Identify and Describe Shapes

In topic 12, students identify and describe basic two- and three- dimensional shapes. They describe the relative position of shapes.
Key Vocabulary: sort, two-dimensional shape (flat), three-dimensional shape (solid), circle, triangle, side, vertex, vertices, rectangle, square, hexagon, cube, cylinder, cone, sphere, in front of, behind, next to, above, below, beside

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 465 **Vocabulary:** sort, two- dimensional shape (flat), three- dimensional shape (solid)	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will study and name flat and solid shapes. We do this by: • Thinking about solid objects in our environment • Explaining how flat objects are different from these solid objects • Convince Me! *Workbook pages 466-467	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 12 **At your seat–independent practice:** • Circle Sort • Square Sort • Rectangle Sort • Triangle Sort • Hexagon Sort • Color by shape • All About 3D Shapes • 2D shape sort **Technology:** • Savvas math tools • iReady	**Lesson 1 Exit ticket** **Suggestion:** Choose a shape from today's lesson. With your partner, use what you have learned today to explain why your shape is flat or solid.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will identify and describe flat figures: circles and triangles.		**Lesson 2 Exit ticket** **Suggestion:** Divide your whiteboard into two parts. Draw a triangle on one side and a circle on the other.

 *Workbook page 469 **Vocabulary:** circle, triangle, side, vertex/vertices (corner)	We do this by: ● Describing the shape ● Looking for patterns ● Convince Me! *Workbook pages 470-471	● Memory Shape Match ● Buncee - draw each shape to make a vocabulary book. ● Splash Math 2D ● Splash Math 3D ● Shape Construction ● Peg + Cat	Circle the vertices.
Lesson 3 Solve and Share:  *Workbook page 473 **Vocabulary:** rectangle, square	**Lesson 3:** Today we will identify and describe more flat figures: squares and other rectangles. We do this by: ● Describing the shape ● Looking for patterns ● Convince Me! *Workbook pages 474-475		**Lesson 3 Exit ticket** **Suggestion:** How can you identify and name squares? Use vocabulary from the word wall to explain. Turn and talk. Sentence Starter: "I know this is a square because…"
Lesson 4 Solve and Share:  *Workbook page 477 **Vocabulary:** hexagon	**Lesson 4:** Today we will identify and describe another flat figure: hexagons. We do this by: ● Studying groups of shapes. ● Looking for patterns. ● Naming a hexagon. ● Convince Me! *Workbook pages 478-479		**Lesson 4 Exit ticket** **Suggestion:** With your partner, complete this sentence: "Every hexagon has…"
Lesson 5 Solve and Share:	**Lesson 5:** Today we will identify and describe solid		**Lesson 5 Exit ticket** **Suggestion:** Choose a shape.

 *Workbook page 481 **Vocabulary:** cube, cylinder, cone, sphere	figures: sphere, cube, cylinder, cone We do this by: ● Using what I already know about solid shapes in my environment ● Using patterns ● Convince Me! *Workbook pages 482-483		Name the shape then complete this sentence: "Every (name the shape) has…"
Lesson 6 Solve and Share:  *Workbook page 485 **Vocabulary:** in front of, behind, next to, above, below, beside	**Lesson 6:** Today we will use shape names and position words to describe shapes. We do this by: ● Saying the name of the shape ● Describing its position ● Convince Me! *Workbook pages 486-487		**Lesson 6 Exit ticket** **Suggestion:** Make a shape that is a triangle. Make a shape that is not a triangle. Collect
Lesson 7 Solve and Share:  *Workbook page 489 **Vocabulary:** No new vocabulary	**Lesson 7:** Today we will use position words to problem solve. We do this by: ● Explaining our answers to show our math ideas are clear. ● Convince Me! *Workbook pages 490-491		**Lesson 7 Exit ticket** **Suggestion:** Choose an object in the classroom. With your partner, use position words to describe the location of the object. Have your partner find it.

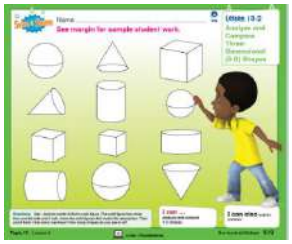
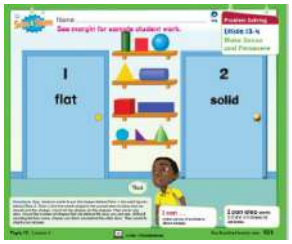
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key

Topic 13– Analyze, Compare, and, Create Shapes

In Topic 13, students analyze, compare, and create two- and three- dimensional shapes based on their attributes.
Key Vocabulary: roll, stack, slide

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 509 **Vocabulary:** No new vocabulary	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will compare 2-D shapes by their attributes. We do this by: ● Studying the number of sides and vertices ● Naming the shape ● Convince Me! *Workbook pages 510-511	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:** See Activity Centers For Topic 5 **At your seat–independent practice:** ● It's not just a… ● Count and match ● 2D sides and corners ● Color by shape 3D ● Roll stack slide ● Composing 2D shapes ● Composing 2D shapes (2) ● Composing 3D shapes	**Lesson 1 Exit ticket Suggestion:** Think of a 2-D shape. Describe attributes of that shape to your partner. See if they can guess your shape using your clues.
Lesson 2 Solve and Share:	**Lesson 2:** Today we will study the attributes of 3-D shapes that allow them to roll, stack, and slide.		**Lesson 2 Exit ticket Suggestion:** Think of a 3-D shape. Describe attributes of that shape to your partner. See if they can guess your shape

 *Workbook page 513 **Vocabulary:** roll, stack, slide	We do this by: • Identifying shapes that can roll as cylinder, sphere, cone • Identifying shapes that can stack as a cylinder, cube, or, cone • Identifying shapes that can slide as a cube, cone, or cylinder. • Convince Me! *Workbook pages 514-515	**Technology:** • Savvas math tools • iReady • Memory Shape Match • Buncee - draw each shape to make a vocabulary book. • Splash Math 2D • Splash Math 3D • Shape Construction • Peg + Cat • 2D/3D shape sort	using your clues.
Lesson 3 Solve and Share:  *Workbook page 517 **Vocabulary:** flat surface	**Lesson 3:** Today we will compare 2-D shapes and 3-D shapes. We do this by: • Finding 2-D shapes on the flat surfaces of 3-D shapes • Convince Me! *Workbook pages 518-519		**Lesson 3 Exit ticket** **Suggestion:** Hold up a 3-D shape. Have students draw a 2-D shape in the flat surface.
Lesson 4 Solve and Share:  *Workbook page 521 **Vocabulary:** No new vocabulary	**Lesson 4:** Today we will problem solve by using what we have learned about flat and solid shapes. We do this by: • Using clues to eliminate choices • Checking that the remaining choice fits the clues • Convince Me! *Workbook pages 522-523		**Lesson 4 Exit ticket** **Suggestion:** Tell your partner two objects you know that are spheres. "I know ____ is a sphere because…"

Lesson 5 Solve and Share:  *Workbook page 525 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will use flat shapes to make new 2-D shapes. We do this by: ● Putting the sides of 2-D shapes together ● Convince Me! *Workbook pages 526-527		**Lesson 5 Exit ticket** **Suggestion:** Using 2-D shapes, design a flower and share with your partner.
Lesson 6 Solve and Share:  *Workbook page 529 **Vocabulary:** No new vocabulary	**Lesson 6:** Today we will use what we know about 2-D shape attributes to help us build shapes correctly. We do this by: ● Naming attributes ● Building a shape that has those attributes ● Convince Me! *Workbook pages 530-531		**Lesson 6 Exit ticket** **Suggestion:** Turn and talk about how a circle and square are different.
Lesson 7 Solve and Share:  *Workbook page 533 **Vocabulary:** No new vocabulary	**Lesson 7:** Today we will use 3-D shapes that can stack and roll to help us build new shapes. We do this by: ● Using flat surfaces to stack shapes ● Convince Me! *Workbook pages 534-535		**Lesson 7 Exit ticket** **Suggestion:** Pick two 3-D shapes. Use what you know about how shapes can stack and roll to create a new 3-D shape.

Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key

Unit 4 Additional Resources

Number Sense/ Reasoning Activities:
- **Subitizing on a Math Rack up to 10**
- **Disappearing Dan with numbers 1-10**
- Ten Frame Flashcards
- Math Talk Pictures

Calendar/ Number of the Day:
Use a hundred chart to count to the number of the day. Use 10 frame to show the number of the day. Choral count to the number of the day (by 1s forward and backward).Write
the number, draw the number. Decompose and compose the number.

Picture Books/Songs:
- **Song - The Singing Walrus**
- **Song - Shapes**
- **Numbers Song Let's Count 1-10 New Version Book - Mouse Shapes, by Ellen Walsh**
- **Book - The Greedy Triangle**
- **Book - Circus Shapes**
- **Book- Ship Shapes**
- **Book- Shapes That Roll**
- **Song- 3D Shapes**
- **Song- 2D Shapes**

Cluster 8: Measurement and Data (Topic 14)

Big Idea: **Representing, relating, and operating on whole numbers, initially with sets of objects**
Essential Questions *What provocative questions will foster inquiry, understanding, and transfer of learning?*

● How can comparing objects help you measure them?
● How does sorting help you display information?

Standards:

K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count

Instructional Plan

Lessons are organized within the structure of math workshop, which consists of a:
I. Warm-Up, II. Mini-lesson, III. MATH rotations activities, and IV. Share/Reflection every day

Topic 14– Describe and Compare Measurable Attributes

In Topic 14, students are introduced to the measurable attributes of length, height, capacity, and weight. They describe and compare objects by these attributes.
Key Vocabulary: height, length, longer, taller, shorter, capacity, heavier, lighter, weights, weight, balance scale, attribute

Topic Opener Day: This day can be used to preview vocabulary, complete the Student Edition "Review What You Know" (pre-assessment), explore materials and manipulatives, and pre-teach games or at your seat activities (and any other rotations).

Warm-Up	Mini-Lesson	Math Rotations	Share/Reflection
Lesson 1 Solve and Share:  *Workbook page 549	**Daily Optional Mini-Lesson Support for Each Lesson/Topic:** Watch Visual Learning Animation Plus Video **Lesson 1:** Today we will use comparing words to compare and describe objects by length and	**Suggestions for Lessons/Topic:** **Meet the teacher:** Skills based on the topic pre-test and observations **Hands on–game:**	**Lesson 1 Exit ticket Suggestion:** Display two objects. Have students turn and talk about the objects using comparing words.

Vocabulary: height, length, taller, shorter, taller	height. We do this by: ● Put the objects together ● Identify which object is: *taller/longer *shorter *same length/ height ● Convince Me! *Workbook pages 550-551	See Activity Centers For Topic 14 **Technology:** ● Savvas math tools ● iReady ● Length and Weight games ● Comparing words ● Comparing Words (2) **At your seat– independent practice:**	
Lesson 2 Solve and Share:  *Workbook page 553 **Vocabulary:** capacity	**Lesson 2:** Today we will identify capacity We do this by: ● Identifying objects that hold more ● Identifying objects that hold less ● Identifying objects that hold the same. ● Convince Me! *Workbook pages 554-555		**Lesson 2 Exit ticket** **Suggestion:** Which object could hold more water: a pitcher or a bathtub? Explain how you know. What is an object that would hold less water than a pitcher?
Lesson 3 Solve and Share:  *Workbook page 557 **Vocabulary:** heavier, lighter, weights, weight, balance scale	**Lesson 3:** Today we will compare objects by weight. We do this by: ● Finding which object is heavier ● Finding which objects is lighter ● Finding if the objects weigh the same ● Convince Me! *Workbook pages 558-559		**Lesson 3 Exit ticket** **Suggestion:** Draw an object that is heavier than you. Collect for data.

Lesson 4 Solve and Share:  *Workbook page 561 **Vocabulary:** attribute	**Lesson 4:** Today we will measure attributes of objects. We do this by: ● Measuring length ● Measuring height ● Measuring capacity ● Measuring weight *Workbook pages 562-563		**Lesson 4 Exit ticket** **Suggestion:** Show students a cube train and a measuring cup. Ask students to draw which of these objects can be used to measure a pencil. Collect.
Lesson 5 Solve and Share:  *Workbook page 565 **Vocabulary:** No new vocabulary	**Lesson 5:** Today we will measure objects by using the appropriate tool. We do this by: ● Naming the attribute that we want to measure (length, weight..) ● Choosing a tool that will measure that attribute (cube train, balance scale…) ● Convince Me! *Workbook pages 566-567		**Lesson 5 Exit ticket** **Suggestion:** Give students small objects. Have them choose the appropriate tool to measure their given object.
Lesson 6 Solve and Share:  *Workbook page 569 **Vocabulary:** No new	**Lesson 6:** Today we will solve word problems about objects by measuring with precision. We do this by: ● Lining up the ends of two objects ● Study the other ends ● The object that sticks out further is longer ● The other object is shorter		**Lesson 6 Exit ticket** **Suggestion:** Hold up two cube trains one long and one short. Ask students to turn and talk about which train would be used to measure a table top.

vocabulary	• Convince Me! *Workbook pages 570-571		
Review and Assessment: Use these days to review topic concepts/takeaways and administer the post assessment and score with answer key			

Unit 5 Additional Resources

Number Sense/ Reasoning Activities:
- **Subitizing on a Math Rack up to 10**
- **Disappearing Dan with numbers 1-10**
- Ten Frame Flashcards
- Math Talk Pictures

Videos/Songs
- **Sort Two Ways**
- **Tall, Taller, Tallest**
- **Sort and Count**
- **Patterns and classification**

Books:
- How Tall, How Short, How Far Away
- Measuring Penny
- Mighty Maddie (weight)
- Twelve Snails to One Lizard

Math Talks Word Problem of the Day
- Same or Different

- Which One Doesn't Belong

Problem of the Day
- "Part Whole Result Unknown" problem. Use pictures and counters to solve.

Please administer the Topic 1-14 Cumulative Assessment