## Kindergarten Math Unit 8

## **Canterbury Public Schools**

Subject	Math
Grade Level	Kindergarten
Unit Title	Putting it all together
Unit Goals	Students consolidate and solidify understanding of concepts and skills on major work of the grade; continue to work toward fluency goals Section A Counting and Cardinality Concepts of counting and comparing Count and compare groups of objects and images Represent and write numbers up to 20 Add and subtract 1 Solve story problems Count forwards and backwards Order numbers to 20
	Section B Math in our school Highlights the presence of math in students' school community Answer mathematical questions about the community Identify number and quantity in the environment Represent and write numbers to 20 Use numbers to represent objects in their environment Notice and Wonder routines Which One Doesn't Belong
	Section C Fluency within 5 Enables students to practice composing and decomposing numbers within 5, as well as adding and subtracting within 5 Recognize compositions and decompositions of numbers to 5 Make groups of dots Section D All About 10 Composing and decomposing 10 Use understanding of 10 to work with numbers to 20 Relate equations to different compositions and decompositions of 10
Pacing (# of weeks)	In multiple ways 4 - 6 weeks
Standards	Section A:K.CC.A.1, K.cc.A.2, K.CC.A.3, K.CC.B.4, K.CC.B.4a, K.CC.B.5, K.CC.C,K.MD, B.3, K.NBT.A.1, K.OA.A.2

	Section B: K.CC, K.CC.A, K.CC.A.3, K.CC.B, K.MD,
	K.OA.A.1, K.OA.A.2, K.OA.A.5
	Section C: K.CC.A.2, K.CC.C.6, K.MD.B.3, K.OA.A.2, K.OA. A.5,
	Section D: K.OA.A.3, K.OA.A.4, K.CC.B.5, K,.NBT.A.1
Content/Conceptual Knowledge (know)	How to count (add and subtract) and write numbers to 5 Numbers and arrangements can both be helpful in comparing groups of numbers Numbers can be composed and decomposed in multiple ways
	Given a number, find how many more are needed to make 10 How equations relate to compositions and decompositions of numbers
Skills (be able to do)	Count, add and subtract numbers to 5 Sort, count, and compare groups of objects up to 20 Compose and decompose numbers to 19 Count on within 100 Subitize to describe images seen Count collections of up to 20 objects and represent their count with drawing and numbers Use grouping strategies Identify likenesses and differences/ compare and contrast Use knowledge of the count sequence to find certain sums Represent all, then cross off or remove to find the difference Add or subtract to find the value Reason about operations Compose and decompose 10 in multiple ways Develop fluency when adding and subtracting Fill in equations to represent compositions and decompositions of 10 Find the number that makes 10 when added to a given number Add to make 10 Compose and decompose numbers 11 - 19 Compose and decompose numbers 11 - 19 using 10 ones and some more ones
Essential Questions	What kinds of experiences help me to develop number sense?

	<ul> <li>Why do I need mathematical operations?</li> <li>How do I know where to begin when solving a problem?</li> <li>How do I use algebraic expressions to analyze or solve a problem?</li> <li>What strategies will help me to solve equations?</li> <li>How can illustrations help you to figure out "more than, less than"?</li> <li>What role does composing and decomposing numbers play in adding and subtracting</li> </ul>
Enduring Understandings	There are many ways to represent a number Representing mathematical ideas involves using a variety of representations including words, physical models, algebra/ equations to convey practical situations Number sense develops through experience
Vocabulary	Number words, more, less, count on, Too low, too high, about right Agree / disagree
Common Learning Experiences broken down by standard addressed in the unit	Lesson 3 Activity 2 Singing Students Lesson 13, Activity Compare Dots on Dominos Lesson 21 Activity 1 Where Will They Sit Choral Count: count on within 100 Compare amounts - more/less/altogether Count and compare collections of up to 20 objects Find someone who has more than 5 letters in their name. Plan with a partner to solve a mathematical question about their environment Identify math tools needed to solve a problem Share and solve story problems Draw pictures to solve story problems Write expressions to solve story problems Observe relationships between different types of story problems Count objects around the school Use a code to identify a color to use Find the value of expressions Find the missing value Write equations that equal 10 Use beads to show composition of 10

Assessments	Solve story problems with a total of 10 Estimate within 10 Use objects and equations to find a missing part with a total of up to 5 Compose and decompose teen numbers 11 - 19 Name numbers - count on count by 1's Identify quantities Fluently add and subtract within 5 Count all to find the sum Use knowledge of the count sequence to find certain sums Know certain sums Represent all, then cross off or remove to find the difference Use knowledge of the count sequence to find certain differences Know certain differences- compare sets of pattern blocks and decide which group
	has ore things and which group has fewer things Identify which single-digit number is greater for less Find the number that makes 10 with a given number Students solve take away, result unknown story problem
Student Resources	place value mats, concrete material) 10 frames, cubes, beads
Teacher Resources	For example:Texts, literature, math mats <u>One is a Snail, Ten is a Crab: A Counting by Feet Book</u> by April Pulley Sayre <u>Fish Eyes</u> by Lois Ehlert <u>One Duck Stuck</u> by Phyllis Root
Strategies	Learning centers , classroom tasks that show knowledge of concepts Identifying numbers on pages, counting items on pages of books Create number books School Walks- look for items to count to put in number books Students read books to peers in small groups Use dominoes to add and subtract using expressions Use a color code to color a picture Use games that identify goals for the unit Create a tool to work with the number 10- use two color beads