

# Canterbury Public School

## **Illustrative Mathematics promotes the following:**

“In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in kindergarten should be devoted to numbers than to other topics. Upon completion of this course students will have the ability to:

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.
- Understand addition as putting together and adding to and understand subtraction as taking apart and taking from.
- Work with numbers 11-19 to gain foundations for place value.
- Describe and compare measurable attributes.
- Classify objects and count the number of objects in each category.
- Identify and describe shapes.

Analyze, compare, create, and compose shapes

## Scope and Sequence

### Narrative

The big ideas in kindergarten include: representing and comparing whole numbers, initially with sets of objects; understanding and applying addition and subtraction; and describing shapes and space. More time in kindergarten is devoted to numbers than to other topics.

The mathematical work for kindergarten is partitioned into 8 units:

1. Math in Our World
2. Numbers 1–10
3. Flat Shapes All Around Us
4. Understanding Addition and Subtraction
5. Composing and Decomposing Numbers to 10
6. Numbers 0–20
7. Solid Shapes All Around Us
8. Putting it All Together

In these materials, particularly in units that focus on addition and subtraction, teachers will find terms that refer to problem types, such as Add To, Take From, Put Together or Take Apart, Compare, Result Unknown, and so on. These problem types are based on

common addition and subtraction situations, as outlined in Table 1 of the Mathematics Glossary section of the Common Core State Standards.”

Unit 1 Kindergarten Math

Math	
Grade Level	Kindergarten
Unit Title	Unit 1 Math In Our World
Unit Goals	<p><b>Section A: Explore Our Math Tools</b></p> <p>Students recognize numbers and quantities in their world</p> <p>K.CC, K.G, K.G.B</p> <p><b>Section B: Recognize Quantities</b></p> <p>Recognize and name groups of up to 4 objects and images without counting</p> <p>K.CC, K.CC.B.4</p> <p><b>Section C: Are There Enough? Count and compare numbers and quantities</b></p> <p>K.CC</p> <p><b>Section D: Counting Collections: count numbers in sequence, count on</b></p> <p>K.CC, K.CC.A.1, K.CC.B, K.CC.B.4, K.CC.B.4.a, K.G.B</p>



Standards Addressed	<p>K.CC, K.G, K.G.B</p> <p>Section B: Recognize Quantities</p> <p>K.CC, K.CC.B.4</p> <p>Section C: Are There Enough?</p> <p>Answer are there enough questions</p> <p>Count and compare numbers and quantities</p> <p>K.CC</p> <p>Section D: Counting Collections: count numbers in sequence, count on, identify and draw shapes</p> <p>Count up to 10 objects and answer “how many of ____ are there?”</p> <p>1 – 1 matching</p> <p>Idea of cardinality the last number tells how many there are</p> <p>K.CC, K.CC.A.1, K.CC.B, K.CC.B.4, K.CC.B.4.a, K.G.B</p> <p>Counting and Cardinality: I know when I count the last number is how many objects there are, I know that no matter which wait I count the objects, the number will still be the same.</p> <p>I can count objects one at a time, saying one number at a time as I count.</p>
Essential Questions	<p>How do I count?</p> <p>How can I use tools to help me count objects?</p> <p>How do I know how many?</p>
Enduring Understandings	<p>Math can be found everywhere around me</p> <p>I can use math tools to help me count objects</p> <p>There are strategies that I can use to help me count and identify quantities</p>
Vocabulary	<p>Over, under, besides, square, cube, rectangle,</p>

<p>Common learning Experiences</p>	<p><b><i>Explore our Math Tools</i></b>  <b><i>Explore and use math tools.</i></b>  Explore and use connecting cubes  Orally describe a mathematical idea  Explore and use pattern blocks  Share mathematical ideas with a partner  Explore and use counters and 5 frames  Repeat mathematical ideas shared by a partner  Explore and use geoblocks  Repeat mathematical ideas shared by a partner  Explore and use math tools  Listen to partner’s mathematical ideas  Describe to a partner how they saw groups of objects or images</p> <p>Learn structures and routines for centers, create norms for classroom learning,  And begin to build a mathematical community of learners.</p> <p>PLC Lesson 2 warm-up, Notice and Wonder, Pattern Blocks  PLC Introduce picture books – Activity 2  PLC Activity 2 Are There Enough  PLC Activity 1 counting collections</p>
<p>Assessments</p>	<p>The cool-down (also known as an exit slip or exit ticket) is to be given to students at the end of the lesson. This activity serves as a brief check-in to determine whether students understood the main concepts of that lesson. Teachers can use this as a formative assessment to plan further instruction.</p> <p>Each unit (starting in Kindergarten, Unit 2) includes an end-of-unit written assessment that is intended for students to complete individually to assess what they have learned at the conclusion of the unit. In K–2, the assessment may be read aloud to students, as needed.</p> <p>Formative assessment to assess students’ counting concepts and skills, observing students or asking them to count small groups of objects while they work  Sections A- D Checkpoint  Formative assess by observing counting concepts and skills</p>

Resources needed				
	5-frame (groups of 1)			
	Geoblocks Stage 2 (groups of 8)			
	Different Groups, Same Quantity (groups of 2)			
	Picture Books Stage 2 Recording Sheet (groups of 1)			
	Pattern Blocks Stage 3 Directions (groups of 2)			
	Counting Mat (groups of 1)			
	Egg Carton Counting (groups of 1)			
	Connecting Cubes Stage 3 Directions (groups of 2)			
	5-frames		• none	
	Chart paper		e	
	Collections of objects			
Counting mats				
Materials from previous centers				
5-frames				
Chart paper				
Collections of objects				
Counting mats				
Egg cartons				
Materials from previous centers				
5-frames				
Connecting cubes				
Counting mats				

Strategies used	Turn and talk Count using manipulatives
Other information	