Unit 1 Counting and Cardinality – Numbers to 5
Kindergarten

Last Update: August 1, 2025

Archdiocesan Curriculum > Grade K > Math > Length of unit 17 days

Stage 1: Desired Results

General Information

In this unit, students will build foundational number sense by modeling, counting, and representing numbers from 0 to 5 using objects, number names, and written numerals. They will learn to count forward and backward within 5, understand that each successive number represents a quantity one larger, and develop strategies to solve problems by making models. Students will also explore decomposing the number 5 into pairs in multiple ways and begin to recognize quantities without counting. This unit introduces key vocabulary such as one through five, zero, pair, larger, smaller, forward, and backward to support their understanding.

Mathematical Practices

MP1 – Make sense of problems and persevere in solving them

MP2 – Reason abstractly and quantitatively

MP4 – Model with mathematics

MP7 – Look for and make use of structure

Essential Question(s)

- How do numbers help us understand and describe the quantities of objects around us?
- Why is it important to recognize the number that comes before or after another number when we count?
- How can we represent numbers in different ways to show the same quantity?
- What strategies can we use to figure out how many objects are in a group without counting each one?
- How can breaking apart numbers into smaller groups help us solve problems?

Enduring Understanding/Knowledge

Students will:

- Model and count 1 and 2 with objects.
- Represent 1 and 2 objects with number names and written numerals.
- Model and count 3 and 4 with objects.
- Represent 3 and 4 objects with number names and written numerals.

Review/Assess

- Model and count up to 5 with objects.
- Represent up to 5 objects with a written numeral.
- Use objects or drawings to decompose 5 into pairs in more than one way.
- Tell the number of objects in a group without counting.
- Know that each successive number refers to a quantity that is one larger.
- Count forward and backward within 5.
- Solve problems by using the strategy make a model.
- Represent 0 objects with a written numeral.

Review/Assess

Vocabulary

New	Review
one	count
two	number
match	numeral
three	object
four	group
five	add
pair	subtract
and	same
larger	different
forward	more
backward	less
fewer	
more	
zero	

Connections to Catholic Identity / Other Subjects

Religion/Catholic Identity:

- Counting falls into place during certain seasons of the year and some of the topics we explore in our Religion Curriculum, including Lent and Advent countdowns, the 7 days of Creation, the 2 parts of the Bible, the 12 Apostles.
- Use the Trinity to discuss the numbers 3 and 1.

Other Subject Here:

- **ELA:** Students will learn to read page numbers to follow along in their readers and textbooks.

Differentiation

Enrichment

- Explore Number Combinations – Encourage students to find all the different pairs that make up numbers 1–5 using objects or drawings, and explain their findings.
- Number Stories – Have students create simple stories or scenarios that represent quantities 1–5, using number names and numerals.
- Counting Games – Challenge students with games that involve counting forward and backward within 5, including skip counting by ones in different directions.
- Represent Numbers with Patterns – Ask students to use patterns or groupings (e.g., dots arranged in shapes) to represent numbers and discuss their observations.

Support

- Use Physical Objects for Counting – Provide manipulatives like counters, blocks, or beads for hands-on counting and modeling numbers 0–5.
- Visual Number Cards – Use number cards with both numerals and pictures to reinforce number recognition and quantity relationships.
- One-to-One Correspondence Practice – Scaffold counting practice by matching one object to one number word or numeral aloud and visually.
- Model “Make a Model” Strategy – Guide students through solving simple addition and subtraction problems using physical models or drawings.
- Sentence Frames and Vocabulary Support – Use sentence stems such as “I have ___ objects,” and introduce key vocabulary with pictures and gestures to aid understanding.

Standards & Benchmarks

Count, Write, and Represent 1 Through 4:

K.CC.5
Use counting to answer questions about “how many.” For example, 20 or fewer objects arranged in a line, a rectangular array, or circle; 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.

K.CC.B.5
Count to answer questions about “How many?” when 20 or fewer objects are 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 to 20, count out that many objects.

K.CC.B.4
Understand the relationship between numbers and quantities; connect counting to cardinality.

Count, Write, and Represent Numbers Through 5:

K.CC.3
Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 represents a count of no objects).

K.CC.4.a
When counting objects, say the numbers in the standard order. Pair each quantity of objects with one and only one number, and each number with the correct quantity of objects.

K.CC.5
Use counting to answer questions about “how many.” For example, 20 or fewer objects arranged in a line, a rectangular array, or circle; 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.

K.OA.1

Represent addition and subtraction with objects, fingers, mental images, simple drawings, or sounds. For example, use clapping, act out situations, and use verbal explanations, expressions, or equations.
K.CC.4.b
Understand that the last number said represents the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
K.CC.4
Understand the relationship between numbers and quantities; connect counting to cardinality.

Teaching Ideas/Resources

Websites/Resources:

- **Number Formation Poems**
- **Subitizing Cards** – Use these cards in a pocket chart. Spend one day focused on each number. Put correct and incorrect choices in the pocket chart. Have the children choose correct ways to show each number.
- **Number Gator Song** – This video is a great way to introduce greater than and less than.
- **Alligator Comparing** – Google slides that can be used as a whole group or done individually on a device.
- **Number Owls**