Unit 3: Numbers 6-9: Represent, Count and Write

Content Area: **Mathematics**
Course(s): **Math K**
Time Period: **October**
Length: **3 weeks**
Status: **Published**

Unit Summary

In this unit, students will represent, count and write numbers numbers from 6 to 9. They will be able to understand the relationship between numbers and quantities and their arrangement.

Standards

MA.K.CC.A	Know number names and the count sequence.
MA.K.CC.A.1	Count to 100 by ones and by tens.
MA.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
MA.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).
MA.K.CC.B	Count to tell the number of objects.
MA.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MA.K.CC.B.4a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
MA.K.CC.B.4b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
MA.K.CC.B.4c	Understand that each successive number name refers to a quantity that is one larger.
MA.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.
MA.K-12.7	Look for and make use of structure.
	Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7 × 8 equals the well remembered 7 × 5 + 7 × 3, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2 × 7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 – 3(x – y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.

Student Learning Objectives

Students will learn to...

- model and count 6, 7, 8, and 9 with objects.
- represent 6, 7, 8, and 9 with number names and written numerals.
- use objects or drawings to decompose numbers 6, 7, 8 and 9 into pairs in more than one way.
- know that each successive number refers to a quantity that is one larger.
- solve problems using the make a model and draw a picture strategy.

Essential Questions

- How can you show and count up to 9 objects?
- How can you count and write numerals 6 though 9 with words and numbers?

Enduring Understandings

Students will understand that...

- numerals represent numbers and have many uses.
- number names describe the number of objects.

Application

Students will be able to independently use their learning to...

- write the numerals 6 through 9.
- count a group of up to 9 objects.
- decompose numbers 6, 7, 8 and 9 into pairs in more than one way.

Skills

Students will be skilled at...

- representing, counting and writing numbers to 6 through 9.