Unit 3a-More Addition and Subtraction

Content Area: **Math**
Course(s): **Math K**
Time Period: **Marking Period 3**
Length: **MP3 Topic 8 8-1 to 8-10**
Status: **Published**

Essential Questions

- How can solving problems in more than one way help you learn about addition and subtraction?

Big Ideas

- **Equivalence:** Any number, measure, numerical expression, algebraic expression, or equation can be represented in an infinite number of ways that have the same value.
- **Operation Meanings and Relationships:** There are multiple interpretations of addition, subtraction, multiplication, and division of rational numbers, and each operation is related to other operations.
- **Basic Facts and Algorithms:** There is more than one algorithm for each of the operations with rational numbers. Some strategies for basic facts and most algorithms for operations with rational numbers, both mental math and paper and pencil, use equivalence to transform calculations into simpler ones.
- **Practices, Processes, and Proficiencies:** Mathematics content and processes can be applied to solve problems.

- **Variables, Expressions and Equations:** Letters and symbols, called variables, can be used to stand for a number or any number from a particular set of numbers. Some mathematical and real-world situations can be represented using variables, operations, and numbers in expressions and equations.

Cross Curricular Integration

Integration Area: Science

K-ESS3.A Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.

Activity: adding penguins in their natural habitat

CRLLKS- 21st Century

9.4.2CT3 Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

Activity:

Use spring shapes begin to make spring banner, trade with friends to have them complete the pattern.

CSDT Technology Integration

8.1.2.DA.3: Identify and describe patterns in data visualizations

Activity:
Students will identify and describe patterns when composing and decomposing numbers to 10

CSDT Technology Connection

8.2.2.ITH.3: Identify how technology impacts or improves life.

Diversity Integration

Race and Ethnicity

Objective: Students will create addition and subtraction number stories using their favorite cultural foods.

Activity: Students will pick two of their favorite cultural foods and create an addition or subtraction number story. Students will illustrate the story and write the number sentence to match.

Enduring Understandings

Operations & Algebraic Thinking

K.OA.A.1 (M) Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions or equations.

K.OA.A.2 (M) 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 (M) 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 (M) 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 (M) Fluently add and subtract within 5.