Unit 2b-Understand Addition

o 6-9

Essential Questions

• What types of situations involve addition?

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.
- 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.
- **Patterns, Relations, and Functions:** Relationships can be described and generalizations made for mathematical situations that have numbers or objects that repeat in predictable ways. For some relationships, mathematical expressions and equations can be used to describe how members of one set are related to members of a second set.
- **Practices, Processes, and Proficiencies:** Mathematics content and processes can be applied to solve problems.

CSDT Technology Connection

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

Enduring Understandings

Counting & Cardinality

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).

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.

K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

Operations & Algebraic Thinking

K.OA.A.1 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 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.5 Fluently add and subtract within 5. Demonstrate accuracy and efficiency for addition and subtraction within 5.