

Sherman School

Unit Overview

Subject: Mathematics

Grade: K

Unit: Adding, Subtracting, & Measuring

Pacing: 20 days/January

Essential Question(s): What happens when we combine groups and break groups apart?; How can we use measurement to describe and compare objects?

Big Idea(s):

- Some real-world problems involving joining, separating, part-part-whole, or comparison can be solved using addition; others can be solved using subtraction.
- The longer the unit of measure, the fewer units it takes to measure the object.

CCSS Priority Standards
K.CC.1 Count to 100 by ones and by tens.
K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
K.CC.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.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.
K.CC.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.
K.CC.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.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings (drawings need not show details, but should show the mathematics in the problem), sounds

(e.g., claps), acting out situations, verbal explanations, expressions, or equations.

K.OA.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.5 Fluently add and subtract within 5.

K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)

K.MP.6 Attend to precision.

Skills (What Students Need to Be Able To Do)
• Count to 20 by 1s. • Count backward from any number in the range of 10 to 1. • Count forward from a given number, rather than starting at 1. • Write numbers from 0 to 20. • Count up to 20 objects one by one, saying the numbers in the standard order and pairing each object with only one number name. • Identify the number of objects as the last number said when counting a group of objects. • Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions. • Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups of up to 10 objects. • Compare two numbers from 1 to 10 presented as written numerals.

- Represent addition with objects, fingers, verbal explanations, drawings, or equations.
- Represent subtraction with objects, drawings, or equations.
- Add with sums to 10.
- Fluently add with sums to 5.
- Describe the length of an object.
- Directly compare the lengths of two objects, and describe the differences between their lengths.
- Classify objects into categories

Research Based Effective Teaching Strategies

Practice

Non-linguistic representations

Cooperative learning

Productive struggle

Implicit instruction

Relating to story

Explicit instruction

Modeling

Think Alouds

Tactile/Concrete experience

Assessments:

M1, S4 Numeral Order Checkpoint, Bridges

M2, S3 Foxes & Dens Checkpoint, Bridges

M3, S3 Counting & Writing Numbers Checkpoint, Bridges

M4, S4 Money March Partner Game Checkpoint, Bridges

4A-4E Workplace Observational Assessments, Bridges

Number Corner Checkup 2, Number Corner

Instructional Resources:

Unit 4; Paths to Adding, Subtracting, & Measuring, Bridges; [The Math Learning Center](#)

January Number Corner; [The Math Learning Center](#)