Sherman School Unit Overview

Subject: Mathematics Grade: K

Unit: Numbers To Ten Pacing: 20 days/October

Essential Question(s): How do we use counting to describe groups of objects?

Big Idea(s):

- Small numbers of objects can be recognized without the need to count.
- Numbers can be decomposed into their sub parts.

CCSS Priority Standards

K.CC1 Count to 100 by ones and by tens.

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.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.3 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.G.6 Compose simple shapes to form larger shapes. For example, "can you join these two triangles with full sides touching to make a rectangle?"

K.MP.7 Look for and make use of structure.

Skills

(What Students Need to Be Able To Do)

- Count to 20 by ones.
- Write numbers from zero to ten.
- Count up to 10 objects one by one, saying the numbers in standard order and pairing each object with only one number name.
- Identify the number of objects as the last number said when counting group of objects.
- Count collections of objects in different ways to demonstrate that the arrangement of objects and the order in which they are counted do not change the total number of objects.
- Count up to 10 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 ten objects.
- Represent addition with objects and fingers.
- Decompose numbers less than or equal to 10 into pairs in more than one way.
- Compose simple shapes to form larger shapes.

Research Based Effective Teaching Strategies

Practice

Non-linguistic representations

Cooperative learning

Productive struggle

Implicit instruction

Relating to story

Explicit instruction

Modeling

Tactile/Concrete experience

Assessments:

M1, S5 Count & Compare Checkpoint, Bridges

M3, S4 Numbers & Number Racks Checkpoint, Bridges

2A-2E Workplace Observational Assessments, Bridges Number Corner Checkup 1, Number Corner

Instructional Resources:

Unit 2: Numbers to Ten, Bridges; <u>The Math Learning Center</u>

October Number Corner; The Math Learning Center