

# Sherman School

## Unit Overview

**Subject: Mathematics**  
**Unit: Two Dimensional Geometry**

**Grade: K**  
**Pacing: 20 days/February**

**Essential Question(s): What shapes can we find in the environment and what words can we use to tell where they are?; How are shapes related?**

**Big Idea(s):**

- Two dimensional shapes have specific attributes different from three dimensional shapes.
- Attributes can be used to describe, sort, and classify shapes.
- Numbers can be compared using greater than, less than, or equal.

<b>CCSS Priority Standards</b>
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.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.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.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.2 Correctly name shapes regardless of their orientations or overall size.
K.G.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

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)**

- 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.
- Decompose numbers less than or equal to 10 into pairs in more than one way.
- Classify objects into categories, count the number of objects in different categories.
- Sort categories of objects by the numbers of objects they contain.
- Describe and identify objects in the environment using geometric shape names.
- Identify shapes, regardless of orientation or size.
- Identify shapes as two-dimensional or three-dimensional.
- Analyze and compare two-dimensional shapes and use informal language to describe their parts and attributes.
- Model two-dimensional shapes in the world by drawing them.
- 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

Think Alouds

Tactile/Concrete experience

**Assessments:**

M1, S4 Sort & Count Checkpoint, Bridges

M3, S4 Two-Dimensional Shapes & Their Attributes Checkpoint, Bridges

5A-5F Workplace Observational Assessments, Bridges

**Instructional Resources:**

Unit 5: Two Dimensional Geometry, Bridges; [The Math Learning Center](#)

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