Module [6] Understanding: Analyze, Compare, Create and Compose Shapes	**Grade level: Kindergarten** **(Shaded standard(s) are the focus standard(s) for this module.)**
Subject Area: Math	**Time Frame: 3 Weeks**
Designed By: Kindergarten Instructional Team	**Beginning Date:**
School: Morrilton Primary School	**Ending Date:**

Stage 1 – Desired Results

Standards: (Text in bold indicates changes/additions in wording of new Arkansas standards.)

K.CC.A.4 Understand the relationship between numbers and quantities; connect counting to cardinality.

When counting objects:

- Say the number names in the order, pairing each object with only one number name and each number with only one object (one to one correspondence).
- Understand that the last number name said tells the number of objects counted.
- Understand that each successive number name refers to a quantity that is one larger.

(Students should understand that the number of objects is the same regardless of their arrangement or the order in which they were counted.)

K.G.B.4 Analyze and compare 2-D and 3-D 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).
(NOTE: 2-D shapes: squares, circles, triangles, rectangles, and hexagons - 3-D shapes: cube, cone, cylinder, and sphere)

K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and by drawing shapes.

K.G.B.6 Compose two-dimensional shapes to form larger two-dimensional shapes. (For example, join two squares to make a rectangle or join six equilateral triangles to form a hexagon.)

Goal(s):

Sort shapes by attributes.
Identify 2D and 3D shapes in real world.
Use 2-D shapes to form larger 2-D shapes
Connect numeral to quantity
Describe relative position using ordinal numbers

Goal(s): conti.-

Compare & contrast shapes of different sizes/orientations
Identify ordinal positions
Create models of 2D & 3D shapes
Draw 2D shapes
Represent a quantity with a numeral

Essential Question(s):

Explain defines a shape?
Demonstrate how you can sort shapes by attributes (number of sides, vertices, sides of equal length)?
Can you describe and explain what defines a shape?
Demonstrate how you can construct/build a shape?
Illustrate how you can draw a shape?
Can you give examples how you can use shapes to make new shapes?
Can you explain what number to write to show a quantity?
Can you explain what ordinal number to use to describe relative positions?
Construct a bigger 2-D shape from a smaller 2-D shape?

Students will know…	**Students will be able to…**
• Sides and Vertices (square, triangle. Hexagons) • Squares • Triangles • Hexagons • Rectangles (attributes 2-long & 2-short) • Circles • 2-D shapes • 3-D shapes • Ordinal Positions (1st-10th) • Number quantities	• identify different shapes regardless of size, orientation, or position • build models of 2-D and 3-D shapes • **draw 2-D shapes and use those to construct bigger 2-D shape**s • write a number for quantities represented • use ordinal language to identify position(s)

Stage 2 – Acceptable Evidence	
Performance Tasks:	**Other Evidence:**
• identify different shapes regardless of size, orientation, or position • build models of 2D and 3D shapes • draw 2D shapes • write a number for quantities represented • use ordinal language to identify position • Interactive Smartboard lessons	• Teacher Observation • Formal Assessments • Demonstration • Oral Explanations

Stage 3: Part 1 – Weekly Learning Plan

Week	Activities/Lessons	Assessments	Materials	CCSS
35	• Compare and Contrast Attributes using concrete shapes (2-D and 3-D) that include squares, circles, triangles, rectangles, hexagons, cube, cone, cylinder and sphere. • Explain and Demonstrate • Icky Bug Shapes	Week 35 Formative Assessment	• 2-D and 3-D shapes (manipulatives that are both wooden and plastic)	• K.CC.B.4 • K.G.B.4 • K.G.B.5 • K.G.B.6
36	• Build shapes using materials • **Graphing with candy (3-D)** • Twizzler Math • Play dough Creations (2-D & 3-D)	Week 36 Formative Assessment	• Pretzel sticks • Small marshmallows • Twizzlers • Toothpicks • Tootsie Rolls • Bugles, Hershey Kisses • Caramels, Whoppers, Cheese Cubes • Play Dough	• K.CC.B.4 • K.G.B.4 • K.G.B.5 • K.G.B.6

37	• Make a different shape using other shapes i.e. (2 squares = 1 rectangle) (2 trapezoids = 1 hexagon) (2 triangles – 1 square) (2 semi-circles = 1 circle) • The Shape of Things	Week 37 Formative Assessment	• 2-D shapes manipulatives • Attribute blocks • Geo boards w/bands • Pattern Blocks • Sidewalk Chalk	• K.CC.B.4 • K.G.B.4 • K.G.B.5 • K.G.B.6

Stage 3: Part 2 – Pacing Resources& Materials

Vocabulary Definitions:

vertices (vertex) face compare contrast quantity ordinal corner attribute sides length

Web Links

- YouTube, YT Kids
- Storybots
- BrainPOP Jr

Additional Resources:

K.CC.B4

- http://www.crickweb.co.uk/Early-Years.html
- http://illuminations.nctm.org/Activity.aspx?id=3526
- http://illuminations.nctm.org/Lesson.aspx?id=3250
- http://pocketfullofkinders.blogspot.com/2011/09/math-stations-week-one-and-printables.html
- file:///Users/Elizabeth/Downloads/nti-may-2014-grade-k-module-6-ordinal-numbers-handout.pdf
- https://www.engageny.org/sites/default/files/resource/attachments/math-gk-m1-full-module.pdf

K.G.B.4

- http://www.math-play.com/geometric-figures-game/geometric-figures-game.html
- http://www.bbc.co.uk/schools/teachers/ks2_activities/maths/shapes.shtml
- http://catalog.mathlearningcenter.org/files/pdfs/PBLCCSSK2-0412w.pdf

K.G.B.5

- http://www.kindergartenworks.com/guided-math/activities-videos-teach-2d-shapes/
- http://illuminations.nctm.org/Activity.aspx?id=3587
- http://www.internet4classrooms.com/common_core/model_shapes_world_building_shapes_from_geometry_kindergarten_math_mathematics.htm

K.G.B.6

- http://illuminations.nctm.org/Activity.aspx?id=3577
- https://www.mheonline.com/eminstructionalbridge/pdf/K/lesson_4-7.pdf