



# NCEA Math Lesson Plan

**Grade:** K

**Subject:** Mathematics

<b>Domain:</b> Geometry
<b>Standard Number(s) and Description:</b> K.G.A.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.
<b>Vocabulary to be Highlighted:</b> Above, below, beside, next to, inside, rectangle, square, triangle, star
<b>Mathematical Practices (#):</b> 4. Model with mathematics. 7. Look for and make use of structure.  <b>Essential Questions:</b> Can I put shapes together to make something else? How are position words useful?
<b>Materials/Tools (include technology):</b> Pre-cut shapes (rectangles, squares, and triangles of different sizes) Picture of Baby Jesus Black construction paper Scissors Crayons Glue, Religion cut outs or student drawings of: Mary, Joseph, angels, shepherds, animals You Tube video –“In, On, Under - Kids English Kindergarten Songs”:
<b>Connections to Other Math Domains:</b> K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
<b>Connections to Other Subject Areas:</b> L.K.1.E Use of prepositions (to, from, in, out, on, off, for, of, by, with). Religion (retell the story of Jesus’ birth) Art
<b>Catholic Identity Component:</b> The Nativity Story
<b>Resources (attachments):</b> <a href="http://www.youtube.com/watch?v=hx8i-Wq_jtc&amp;list=PL2A6532972ECB459B&amp;index=2">http://www.youtube.com/watch?v=hx8i-Wq_jtc&amp;list=PL2A6532972ECB459B&amp;index=2</a>

**Activities/Timeline:**

1 math class time (45 - 50 minutes)

Video: "In On Under - Kids English Kindergarten Songs":

[http://www.youtube.com/watch?v=hx8i-Wq\\_jtc&list=PL2A6532972ECB459B&index=2](http://www.youtube.com/watch?v=hx8i-Wq_jtc&list=PL2A6532972ECB459B&index=2)

Activity may be completed in a small group or whole class setting.

Activation: How are position words useful? What are some positional words we know and use?

\*List on board. How do you think Mary might have used positional words when talking about the animals?

Read the Nativity Story

Where was baby Jesus born? Describe what you think the stable looked like? How do you think the stable was built? The carpenters had to use tools and measure to put the materials together.

Option 1: How can you use shapes to build a stable for Baby Jesus? Use black construction paper to represent night. Ask students to use positional words to describe where they will place the shapes. Give help when needed.

(\* The star is above the stable, Baby Jesus will go inside the stable, rectangles will be used on the sides, smaller rectangles are used on top to make the roof, the triangle is used to make the top, the square will go inside the stable for the manger)

Have children use positional words to describe where they placed the angels; for example, next to the stable, inside the stable, and/or above the stable.

Option 2. Tell the story of Saint Helena and use shapes/position words to create a church.

\*Game (if time) Hide and seek playground (use a top or stuffed animal) The student who finds it describes where it was, (on the slide, under the balance beam, next to a tree).

**Formative Assessment (what to look for, how/when to look):**

The student's use of positional words is appropriate during the activity.

**Summative Assessment:**

The student's work: A stable for Baby Jesus.

Pieces are placed correctly according to teacher directions.

Student use of positional words and understanding.