



TEACHER PAGE

Lesson: Navajo Yei

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New Arizona Math Strand 4 Geometry and Measurement Kindergarten Articulated 4MK1-03 Identify shapes in different environments – nature buildings, classroom, etc.

Old Arizona Math Standard 4: Geometry Readiness Kindergarten 4MR2 Recognize geometry in their surroundings

Materials:

1) Cut-out geometric shapes ready to be placed together in designs. 2) Art supplies to draw and color geometric shapes that occur in the Southwest.

Learning Objectives: Students will be able to:

- locate and identify given geometric shapes in a picture
- express a personal choice (aesthetics) while manipulating squares and triangles in different environments
- express cognitive skills in shape identification.

Overview and Content:

Using Native American figures, shapes and traditions will motivate young learners to recognize and identify specific geometric shapes in the context of the Navajo culture.

Navajos traditionally use geometric designs because of a natural fitting together – an aesthetics of these shapes. The human activity involved in making Navajo rugs produce results that are a spontaneously natural blending of math and art.

Follow-up, extensions:

Teachers should capitalize on the fact this content brings real-world uses of shapes to students and leads to numerous “like” learning activities in a Navajo cultural setting: Search the Internet for photographs of Navajo designs in rug weaving, sand paintings, and jewelry. Two suggestions:

<http://www.math.utah.edu/~clemens/art.html>

<http://www.math.utah.edu/~clemens/page2.html>

Provide geometric shapes to students and allow them to create their own designs for rugs and jewelry in the Navajo tradition.

Assessment:

Students will demonstrate identification of squares and triangles by using the correct shape.

