



TEACHER PAGE

Lesson: Triangles Introduction

Teacher-Author: Nellie Jo Hendricks

ASSET Animator: Harue Yoshida

New Arizona Math Strand 4 Geometry and Measurement Grades K, 1, 3 Articulated 4MK1-01 Identify two-dimensional shapes by attribute: size, shape, number of sides; **4M11-01** Use the words vertex and side when describing simple two-dimensional geometric shapes; **4M31-01** Build geometric figures with other common shapes.

Old Arizona Math Standard 4: Geometry, Foundations 1 Grades 1-3 4MF1-PO4 Identify two-dimensional shapes by name and attribute

Materials:

Math manipulatives, individual slates or white boards with appropriate writing tools, wall chart to place triangles on for demonstration.

Learning Objectives: The students will be able to:

- identify triangles as a two-dimensional shape
- describe a triangle by its attributes of sides and angles
- draw triangles of various shapes and compare the attributes among them.

Overview:

At the Foundation level (Grades 1-3) the Standard, 4MF1 reads, relate geometric concepts to number and measurement ideas. This lesson enables students to identify, compare and build triangles. Note many types of triangles are used. This lesson has English, Navajo and Spanish narrations and scripts.

Engage students:

Direct students to stand and place arms and shoulders in triangular shapes. Note the number of different triangles they make. Ask several students to stand in groups of three and form as many different triangular shapes as they can together. Lead students to observe that the shapes are the same geometric shapes, just larger or smaller in size.

Content:

Students learn that triangles are two-dimensional shapes. They are made of three sides that meet at points forming angles. All two-dimensional geometric shapes having three sides and three angles are called triangles. Right triangles are introduced in a lesson called Basic Right triangles.

Follow-up, extensions:

Encourage your students to undertake simple research on triangles. Observing, listing, and classifying activities encourage comparing activities. Carry over the observations to journal writing. Students draw various triangles to illustrate different attributes In the DIG DEEPER section, students go to the NCTM web site and make triangles on virtual geoboards. Use the SO WHAT for triangles in the world.

Assessment:

When viewing an assortment of shapes students will correctly identify triangles.

