



## TEACHER PAGE

**Lesson: Isosceles Triangles      Teacher-Author: Lorri Alonzo**  
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**New Arizona Math Strand 4 Geometry and Measurement      Grade 5**  
**Articulated 4M51-07** Classify triangles as scalene, isosceles or equilateral. **4M51-04**  
Identify the properties of 2- and 3-dimensional geometric figures using appropriate terminology and vocabulary.  
**Old Arizona Math Standard 4 Geometry Essentials 2      Grades 4-5**  
**4ME2PO 2** Classify triangles by their angles and sides e.g. equilateral, acute, isosceles.

### **Learning Objectives:**

The student will be able to:

Classify triangles by their angles and sides. This includes equilateral, acute, isosceles, obtuse, right and scalene triangles.

### **Materials or special things:**

-(real objects or pictures) tricycle, tricorn hat, plastic triceratops model

### **Overview:**

Students will learn to identify and classify many types of triangles by their angles and sides. This lesson also has English, Navajo and Spanish narrations and scripts. Find a Spanish/English math dictionary at: [www.math2.org/math/spanish/eng-spa.htm](http://www.math2.org/math/spanish/eng-spa.htm)

### **Engage students:**

Show student the objects or pictures of the objects: tricycle, tricorn, triceratops, and trio of students. Ask students the common attributes of the objects (tri). Explain or ask the students to define "tri."

### **Content:**

The isosceles triangle has two sides of equal, or congruent, length.

### **Follow-up, extensions:**

Students are to cut out different types, colors and sizes of triangles to create pictures and arrangements based on some teacher or student criteria to demonstrate understanding of the differences among equilateral, acute, isosceles, obtuse, right and scalene triangles. Use Navajo rugs as a source for uses of the different types of triangles or practice using them in model rugs.

### **Assessment:**

Students will select only isosceles triangles among all types of triangles. Students will also be able to demonstrate their understanding of the following terms: three, 60 degrees, polygon, exterior, two, 180 degrees, 200 degrees, closed, four, equal, interior and same.

