

TEACHER PAGE



Lesson: Angle-Side Relationships Teacher-Author: Connie Dolezal ASSET Animator: Justin Helton

New Arizona Math Strand 4 Geometry and Measurement Grades 9-12
Articulated 4MH1-14 Solve contextual situations using angle and side length relationships.

Old Arizona Math Standard 4 Proficiency 2 Grades 9-12
4MP2PO2 Solve applied problems using angle and side length relationships.

Pre-requisite Information

- Understand the concepts of greater than and less than.
- Be able to measure angles and/or be able to visually identify larger and smaller angles.

Learning Objective The student will be able to:

- apply the angle and side length inequality relationship in a triangle.

Materials

Spaghetti (uncooked)
Protractor to measure angles

Overview/Content

Students will discover that sides and angles in a triangle have the same relationship (large angles opposite large sides, small angles opposite small sides). Students will discover that not all triangles are the same – angle and side relationships vary.

Note to Teacher

Include a variety of triangles (obtuse, acute, right, equilateral, isosceles, scalene).

Follow-up/Extensions

SO WHAT goes into camera points that relate to the lesson. TALK ABOUT IT gives students a chance to get their dogs a drink with the least effort and inconvenience to themselves. Make human triangle with students and then compare lengths and angle measures. Find triangles around the school to compare sizes and angles. Go to the web for extended exercises, glossary and AIMS help at <http://www.evtpc.org/tutor>

Assessment

Given various triangles, with three of the angles of the triangle measured and labeled, ask students to identify largest to smallest sides, and/or with three sides of a triangle measured and labeled, ask students to identify largest to smallest angles.

Bibliography

Geometry, Jurgensen, Ray; Brown, Richard, & Jurgensen, John. Houghton-Mifflin, 1997, pp 219-231.

