

Classifying Triangles

Brief Overview:

In this unit the students will learn how to classify triangles based on angle measurement and side length. The students are expected to have prior knowledge of angle types (obtuse, acute, and right) and measuring angles with a protractor before beginning this unit. The students will be taking a discovery/hands-on approach to reach the objectives of the lessons. Technology is incorporated into two of the three lessons. Informal and formal assessments are included, with a summative assessment after lesson three.

NCTM Content Standard/National Science Education Standard:

[Analyze characteristics](#) and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships

- Identify, compare, and analyze attribute of two- and three-dimensional shapes and develop vocabulary to describe the attribute;
- Classify two- and three-dimensional shapes according to their properties and develop definitions of classes of shapes such as triangles and pyramids.

Grade/Level:

Grades 4 – 5

Duration/Length:

50 – 60 minutes; 3 days

Student Outcomes:

Students will:

- classify triangles by their angle measurements; acute, obtuse, and right
- create right triangles, acute triangles, and obtuse triangles using geoboards/geodot paper
- classify triangles by their side lengths; equilateral, isosceles, and scalene
- create equilateral triangles, isosceles triangles, and scalene triangles using Anglegs/flexible straws
- be able to calculate the sum of the angles of a triangle
- utilize a computer program to add angle measurements

Materials and Resources:

Day 1:

- Student Resources 1 - 3
- Teacher Resources 1 - 4
- Scissors