

INSPIRE GK12 Lesson Plan



Lesson Title:	Building Congruent Triangles Part B (Kylie Lesson plan is part A)
Length of Lesson	1 Days
Created By	Michael Andre Hamilton
Subject	Geometry
Grade Level	10 th -12 th grade
State Standards	Geometry 2a
DOK Level	DOK 2
DOK Application	Graph, Compare, Estimate Infer, Predict, Interpret, Make Observation, Summarize
National Standards	Geometry for 9 – 12 th Math Standards
Graduate Research Element	Human Factors and Work Physiology

Student Learning Goal:

National Standards for Geometry for 9-12th

- A: analyze properties and determine attributes of two- and three-dimensional objects;
- B: explore relationships (including congruence and similarity) among classes of two- and three-dimensional geometric objects, make and test conjectures about them, and solve problems involving them;
- C: establish the validity of geometric conjectures using deduction, prove theorems, and critique arguments made by others;
- D: use trigonometric relationships to determine lengths and angle measures.

State Standards for 9 – 12th Geometry

- A: Apply problem solving skills to solve and verify the solutions for unknown measures in similar polygons.

Materials Needed (supplies, hand-outs, resources):

Writing utensils; Notebook paper; White board; Protractor, Scissors; Inspiring Minds;

Lesson Performance Task/Assessment:

The students will use protractors and paper to construct congruent Triangles.

Lesson Relevance to Performance Task and Students:

The relevance of this lesson is to get the student to understand what congruent triangles around and how to recognize them.

Anticipatory Set/Capture Interest:

At the beginning of class, I plan on bring some drawing of congruent triangles on the board. I will show them how congruency is used in building structures and bridges.



Guided Practice:

The student will create congruent triangle by cutting paper and by drawing them with a protractor.

Activity 1: Cutting congruent triangles

Step 1: Cut three strips of paper with lengths 7 in. 8 in. and 9 in.

Step 2: Use the strips to form a triangle on top of a piece of tracing paper. Mark each vertex of the triangle on the tracing paper

Step 3: Remove the strips. Use a ruler to draw the triangle.

Activity 2: Drawing classmate triangles

Step 1: Cut Use a ruler to draw a triangle on paper

Step 2: Use a protractor the write the angles of the triangle

Step 3: Write the measurements on an index card and swap with your classmates. Each student will draw each other triangle.

Step 4: Compare triangles with your classmates and check if they are congruent.

Independent Practice:

None, the student will perform each step with the instructor.

Remediation and/or Enrichment:

Remediation

Individual IEP; partner help throughout lesson; shorten parts of assignment; focus on few process

Enrichment:

The lesson can be expanded by providing the students will drawing and identifying the congruent angles in the structures. This will help in evaluating their understand of congruency.



Check(s) for Understanding:

Day 1:

1. Is your triangle congruent to your classmates?
2. What seems to be true when two triangles have congruent sides between two pairs of congruent angles?

Closure:

The instructor will talk about the importance of congruency and there important in our society.

Possible Alternate Subject Integrations:

*None.

Teacher Notes:

Mississippi Prentice Hall Mathematics Books “Geometry”