Congruency and Similarity

A WebQuest

Whiteboard Storm

- Grab a whiteboard marker
- Find some white space on the board
- Describe (words, pictures, equations,…) anything or all you know about:

Congruency and **Similarity**

WebQuest: The Task

- Research your group's topic
- Create a poster summary of the research
- Present the poster to the class

WebQuest: The Topics

1. The Definition of "Congruent"
   - What do we mean by two shapes being congruent?
2. Rigid Motion (Translation, Rotation and Reflection)
   - What happens when we translate, rotate or reflect a shape?
3. The Relationship between Rigid Motion and Congruency
   - How are Rigid Motion and Congruency related?
4. Triangle Congruency
   - How do we know if 2 triangles are congruent?
5. The Definition of "Similarity"
   - What do we mean by 2 shapes being similar?
6. Triangle/Shape Similarity
   - How do we know if any 2 arbitrary shapes are similar?
   - How do we know if 2 triangles are similar?
7. Dilation
   - What do we mean by dilating a shape?
   - What is the connection between dilation and similarity?

WebQuest Group Roles

- Artist or Graphic Designer
  - Primarily responsible for design/creation of Poster Summary
- Lead Researcher
  - Primarily responsible for mathematical content on Poster Summary
- Presenter
  - Primarily responsible for presenting mathematical content on Poster Summary
- Coordinator/Liason
  - Coordinates and support group's work
  - Only group member that can ask Dr. Drew questions

WebQuest Steps

1. Research your topic
    - Be sure to take notes and record your sources
2. Draft your poster
    - Sketch your poster concept, including the content, on a sheet of paper
3. Get Dr. Drew to sign-off on your concept poster
    - You will then be given the actual poster paper
4. Create your poster

WebQuest FAQ

- How long are the presentations?
  - 3-5 minutes is the target. 6 minutes is the hard cut-off.
- Can we print images for the poster?
  - No. It must be completely hand-drawn/constructed. You can attach anything you create to your poster.
- Can we use computers?
  - Yes! The Internet is at your disposal. Use it wisely.
- How much time do we have to get ready?
  - Plan on about 60 minutes of prep time
- Do we have to fill the poster?
  - Hmmm… yes, scale accordingly ☺
- How are we graded?
  - Your participation and contribution to your group's effort