

Polygon Challenge

Action Faction 2012-2013

This mini-project will be done in pairs. You will have 20 minutes to race around HTHCV in a hunt for as many different types of polygons as possible. You will use your phone(s) to take pictures of real-life examples of triangles, quadrilaterals, and other polygons. **You must find at least five different examples of polygons.**

When you get back to class, you will have the rest of the period to upload your photos and construct a 10-slide Google Presentation.

Directions:

1. Create a Google Presentation. Name your presentation using the following format: **Polygon Challenge – FirstName1 & FirstName2** (include first initial of last name if there is more than one person with your first name on our team). Example: **Polygon Challenge – Jose F & Oscar**
2. Share your presentation with Aliza with editing privileges.
3. Narrow down your pictures to 10, and place one picture on each slide.
4. Order the slides in order from least to most amount of sides. You can include section headers slides if you want.

Minimum requirements for each slide:

1. Only one picture in which the shape of the polygon is clear and distinct (I shouldn't have to guess what you were looking at when you took the picture!)
2. The type of polygon as the title of the slide (Triangle, Quadrilateral, Pentagon, etc.)
3. A brief description of the polygon's properties and how you know it is that type of polygon. **You must include a minimum of three distinguishing properties for each polygon.**
4. Consider the following elements:
 - a. Classification of shape by number of sides
 - i. For triangles: Equilateral, Isosceles, Scalene, Acute, Right, Obtuse
 - ii. For quadrilaterals: Which of the seven types is it? How do you know?
 - b. Angles (right, acute, obtuse, reflex)
 - c. Concave or convex
 - d. Regular or irregular
 - e. Simple or complex
 - f. Parallelism
 - g. Any other property you can think of!

You will earn points based on the different types of polygons (finding a rectangle and square will be worth more points than finding two different rectangles) and the uniqueness of the shapes you find. Incorporating more math into your presentation than is minimally required will earn you more points. I strongly encourage you to be creative and think out of the box! *Hint: How do you know for SURE that a rectangle is a square?*

Your presentation is due by 11:59 pm on Wednesday, November 20, 2013.

Have fun!