

Geometry Map Project: Lines, Angles and Triangles

Math Fundamentals

Goal

Your goal is to design a map that includes several different kinds of lines, angles and shapes.

Role

You are an intern at Hasbro, a company that designs board games.

Audience

The audience is your immediate supervisor and a group of volunteer testers between the ages of 8 and 15.

Situation

You have been asked to create a map of a made up place for a board game. Upon completion of this project you will present your map to the class as if you are presenting your map to your supervisor, and the volunteer testers.

Product Performance and Purpose

You need to draw a template of the map for the board game. Your map must include the following:

1. A title
2. Two sets of streets that are parallel
3. Two sets of streets that are perpendicular
4. One street that intersects another street to form an obtuse angle
5. One street that intersects another to form an acute angle
6. One street that is a line segment
7. One street that is a line
8. One street that is a ray
9. A minimum of five local attractions (such as an ice cream parlor, swimming pool, school, gas station, movie theater, etc.)
10. A compass rose
11. You are also to write out five different sets of directions from one place to another. Each set of directions must have one of these terms: parallel, intersecting or perpendicular. These directions should be able to get your volunteer testers from one place to another on your map without getting lost!

Standards and Criteria for Success:

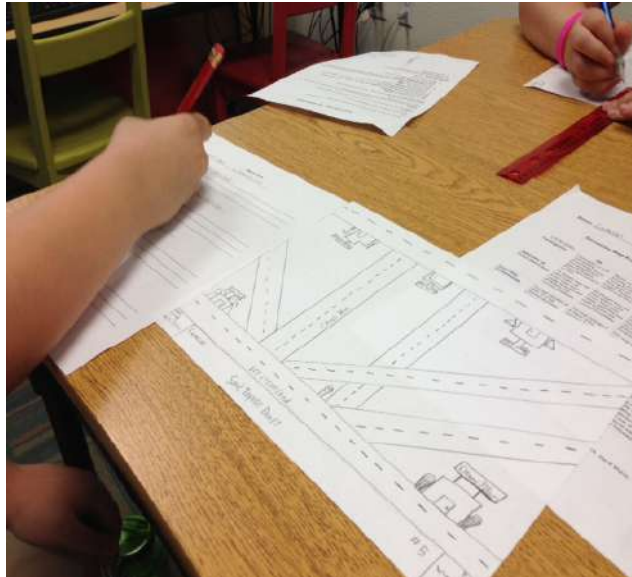
EQ: How can we show our understanding of line segments, angles, and shapes?

MCC3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Your map needs to include:

- * Accurate representations of each of the requirements listed above
- * Complete directions with correct use of terminology and attractive design

* Neat



Geometry Map Project checklist

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- _____ 10. A compass rose
- _____ 11. Map is attractive in terms of design, layout and neatness
- _____ 12. Name on project
- _____ 13. You are also able to write out five different sets of directions from one place to another. Each set of directions must have one of these terms: parallel, intersecting or perpendicular. These directions should be able to get your volunteer testers from one place to another on your map without getting lost!

$$(12 - 13 \checkmark's = 3; 11 - 8 \checkmark's = 2; 7 - 0 \checkmark's = 1)$$

PROJECT DUE MARCH 14, 2014