

Name _____

Due Date: April 28, 2014

Spring Break Geometry Project:

Geometry Scrapbook

For this project you will create a geometry scrapbook. The scrapbook will contain specific items as described below. The items will be pictures cut from magazines, newspapers, advertisements, and/or commercial packaging. Items should be taped or glued neatly and labeled as requested. Your scrapbook should be stapled together or placed in a report binder.

Cover: Name, title, and a geometric logo designed by you.

Page 1: Triangles Measure and record the length of all 3 sides of an acute, obtuse, isosceles, and right triangle and the degree measure of each angle of the triangle. Find the perimeter and area of the right triangle. Don't forget to include your units.

Page 2: Rectangles Measure and record the length and width of the rectangle and use the Pythagorean Theorem to find the measure of the diagonal. Find the perimeter and area of the rectangle. Don't forget to include your units.

Page 3: Circles Measure and record the radius and diameter of the circle. Find the perimeter and area of the circle.

Page 4: Parallel Lines Find parallel lines that demonstrate function versus design. For example, railroad tracks must be parallel. Explain the function of the parallel lines in your photo.

Page 5: Perpendicular Lines Find perpendicular lines that demonstrate function versus design. For example, the floor of a porch must be perpendicular to the pillars that hold up the roof of the porch. Explain the function of the perpendicular lines in your photo.

Page 6: Congruent Shapes Find congruent shapes that are not triangular nor rectangular. For example, a pair of socks are congruent shapes. Explain what would happen if the shapes were similar instead of congruent.

Page 7: Symmetric Logos Find three different logos which contain rotational or line symmetry. Describe the symmetry of each logo.

Page 8: Trigonometry Find an example of angle of elevation and/or depression. Use your photo to write a real world problem using angles of elevation and/or depression.

Page 9: Solids Find and label a sphere, cylinder, pyramid, cone, and prism.

Page 10: Geometric Sample Find a photo of something that you think relates to geometry. Explain what you think the connection is to geometry.

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Rubric

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|-----------------------|---|---|
| Cover Page | Name, title, and logo | 3 points |
| Triangles | 4 pictures, 4 side measurements, 4 angle measurements, 1 perimeter, 1 area | 14 points |
| Rectangle | 1 picture, 2 measurement, 1 perimeter, 1 area, 1 Pythagorean Theorem | 6 points |
| Circles | 1 picture, 2 measurements, 1 perimeter, 1 area | 5 points |
| Parallel Lines | 1 picture and 1 explanation | 2 points |
| Perpendicular Lines | 1 picture and 1 explanation | 2 points |
| Congruent Shapes | 1 picture and 1 explanation | 2 points |
| Symmetric Logos | 3 pictures and 3 explanations | 6 points |
| Trigonometry | 1 picture, 1 real world problem, and 1 solution | 3 points |
| Solids | 5 pictures and 5 labels | 10 points |
| Geometric Sample | 1 picture and 1 explanation | 2 points |
| Shows Calculations | All mathematical equations and calculations are provided and solved correctly | 10 points - all 13 calculations correct 7 points - 10 correct calculations 4 points - 7 calculations correct 0 points - less than 7 calculations correct |
| Uses Units of measure | Measurements in inches or centimeters | 10 points |
| Neatness | | 25 points |

Total Points ____/100