**Geometry Picture Dictionary Project**

**Project Description**: Create a photo/picture geometry dictionary containing a title

page, 1 entry per term including definitions (in your own words) and pictures.

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**Materials:**

-a camera or digital images

-PowerPoint, Word, or Paper

Instructions:

1. Use the word list given to create your picture dictionary

2. Take photographs or find online pictures of geometric figures found in your world.

-You may **not** use the same photo/picture to describe two different geometric terms/concepts

-Pictures need to clearly depict the term or concept

-Pictures need to be appropriate for the school setting

-Photos may be in color or black/white

-Pictures cannot be student-constructed shapes (No Drawing)

-If half of the pictures are photographs (that you took with a camera), you will receive **one bonus point**. If 80% or more are taken by hand, you will receive **two bonus points**. If ALL photos are taken by hand, you will receive **three bonus points**.

3. Put together a dictionary with the following requirements:

a. Title Page including the name of your dictionary, your name, date, eye catching photos or designs

b. Entries in alphabetical order:

Each entry should include **the term**, the term’s **definition(in your own words)**, the **photo/picture** with the term highlighted/outlined and a **description** in complete sentences of how the picture is a demonstration of that term and/or the limitations of the picture.

c. Your dictionary should be done using PowerPoint, Word, or another software.

d. Your final page/slide should be a written reflection of what you learned. Specifically describe the importance of geometry in the world in which you live. Describe the value of understanding geometry and its concepts.

**HINTS:**

a. Build your project around something you love. It may be cars, music, a sport, your work, etc. This will make it more fun and it will help you to see how geometry is valuable in your life. b. Take the photos from different angles. Take some close up and some farther away. This will make it interesting for you and the reader.

c. Don’t wait until the last minute! Set deadlines for yourself. For example:

My photos will all be taken by: 20 November

My title page will be done by: 1 October

My entry pages will be done by: 21 December

My final reflection will be done by: 21 December

My project will be done by: 21 January 2013

**MY PROJECT IS DUE ON: 21 January 2013**

**Geometry Word List**

Remember: All definitions must be in your own words! (80 terms)

1. **Point**
2. **Line**
3. **Plane**
4. **Collinear points**
5. **Non-collinear points**
6. **Coplanar points**
7. **Non-coplanar points**
8. **Segment**
9. **Ray**
10. **Congruent segments**
11. **Bisector of a segment**
12. **Midpoint of a segment**
13. **Acute angle**
14. **Right angle**
15. **Obtuse angle**
16. **Straight angle**
17. **Congruent angles**
18. **Angle bisector**
19. **Triangle**
20. **Acute triangle**
21. **Right triangle**
22. **Obtuse triangle**
23. **Equiangular triangle**
24. **Scalene triangle**
25. **Isosceles triangle**
26. **Equilateral triangle**
27. **Adjacent angles**
28. **Vertical angles**
29. **Complementary angles**
30. **Supplementary angles**
31. **Perpendicular lines**
32. **Parallel lines**
33. **Skew lines**
34. **Polygon**
35. **Regular polygon**
36. **Congruent triangles**
37. **Median of a triangle**
38. **Altitude of a triangle**
39. **Parallelogram**
40. **Rectangle**
41. **Rhombus**
42. **Square**
43. **Trapezoid**
44. **Ratio**
45. **Proportion.**
46. **Pythagorean Theorem**
47. **Circle**
48. **Radius**
49. **Chord**
50. **Diameter**
51. **Secant**
52. **Tangent**
53. **Concentric circles**
54. **Congruent circles**
55. **Sphere**
56. **Arc**
57. **Semi-circle**
58. **Minor arc**
59. **Major arc**
60. **Central angle of a circle**
61. **Congruent arcs**
62. **Inscribed angles**
63. **Bases**
64. **Altitude**
65. **Lateral faces**
66. **Lateral edges**
67. **Lateral area**
68. **Surface area**
69. **Volume**
70. **Right Prism**
71. **Oblique prism**
72. **Cube**
73. **Triangular prism**
74. **Cylinder**
75. **Cone**
76. **Line of symmetry**
77. **Perimeter**
78. **Area**
79. **Volume**
80. **Circumference**

**Rubric**

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| **RubricCategory** | **0-5** | **6-14** | **15-19** | **20** | **Points Earned** |
| **Title Page** | **No title page, hard to read and follow.** | **2 or more parts of title page missing & lacking neatness.** | **1 Part of title page missing or lacking neatness.** | **Contains complete title page, easy to read.** |  |
| **Pictures** | **More than 15 pictures do not depict geometric terms.** | **10-15 pictures do not accurately depict the geometric term. Many pictures are shot basically the same way, some pictures are creative.** | **15 or fewer pictures are not accurate representations of the geometric term, photos are creative.** | **Dictionary contains pictures that are artistic and shot at different angles and are accurate representations of the geometric terms.** |  |
| **Dictionary Entries** | **More than 15 entries are inaccurate, not alphabetical, and misspelling makes it difficult to understand.** | **10-15 entries have mistakes or are somewhat vague or leave out required parts, some misspellings.** | **Up to 10 may have mistakes or are somewhat vague or missing parts. Mostly complete sentences, the majority of spelling is correct.** | **Contains all entries that are accurately described, defined, and complete sentences, spelling is correct.** |  |
| **Final Reflection** | **Writing is incomplete, many mechanical errors and very difficult to read.** | **Writing does not give detailed description of project and what was learned, missing vital info, mechanical errors make it somewhat difficult to read.** | **Writing is typed and describes the world in which the student lives and the importance of geometry in it. Some mechanical errors.** | **Writing describes the world in which the student lives and the importance of geometry in it. Mechanically correct and interesting to read, good use of mathematical language.** |  |
| **Creativity Neatness** | **Book is thrown together with little regard to neatness, no creative additions.** | **Pages are plain, little to no color added.** | **Most pages seem well put together and look visually appealing. Some color.** | **Book is creative, colorful, with lots of little extras that are eye catching, neat.** |  |