Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Math 3 Photography STEM Project

This project will consist of photographs you will take of various geometric and mathematical concepts discussed in the first 3 units of Math 3. You may display your pictures in book format, large poster, presentation board, or use electronic presentation programs such as PowerPoint or Word. Either you or a “Flat Stanley” of you, or some selected object should be in each of the pictures. There are 10 groups and you are to illustrate one item from each group. The photos must appear in the order listed below. You are to take a photograph of an item in real life that represents each concept, label each picture, and explain in sentences why or how your picture illustrates each mathematical term.

**Scoring Rubric**

|  |  |
| --- | --- |
| Accuracy of Pictures | \_\_\_\_\_/50 points |
| Label pictures | \_\_\_\_\_/10 points |
| Spelling/Grammar – The explanations must be written in complete sentences and all words should be spelled correctly. | \_\_\_\_\_/20 points |
| Creativity/Neatness/Effort – Overall Presentation – All pages neatly bound together. | \_\_\_\_\_/10 points |
| Each group page should be numbered and in the correct order. | \_\_\_\_\_/5 points |
| Cover Page with Student’s First and Last Name, Teacher’s Name and Title | \_\_\_\_\_/5 points |

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| --- | --- | --- | --- |
| Geometric Groups | **Picture accurately depicts concept**  **5 points each** | **Pictures are each labeled**  **1 point each** | **Spelling and Grammar**  **2 points each** |
| 1. Tetrahedron, Octahedron, Cross-sections of 3D figure |  |  |  |
| 1. Circle with more than 1 radius   Angles formed by secants or tangents of a circle |  |  |  |
| 1. A full circle with no segments intersecting it   A minor or major arc that is not just part of a full circle |  |  |  |
| 1. Circle with 1 or more diameters or circle with chord that is not a diameter   Central or inscribed angles of a circle |  |  |  |
| 1. Congruent triangles, Parallelogram or similar triangles |  |  |  |
| 1. Parallel lines with a perpendicular transversal or   with a non-perpendicular transversal |  |  |  |
| 1. Semicircle or tangent circles |  |  |  |
| 1. Corresponding angles, alternate interior angles, or same-side interior angles |  |  |  |
| 1. Sine graph, cosine graph, or area of a sector |  |  |  |
| 1. Vertical angles formed by two intersecting lines   Complementary adjacent angles formed by two intersecting lines  Supplementary adjacent angles formed by two intersecting lines |  |  |  |
| Total |  |  |  |