Modeling Monuments with Mathematics Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Monuments are often erected to pay tribute to people who did great things. When the 8th grade travels to Washington, D.C we will see many monuments, but have you ever thought of the math involved in making the monument? This activity will help you gain a deeper understanding of the math involved in creating monuments.

**Directions**: Each student must complete 2 parts. If a student completes all 3 parts with a passing score on each rubric, this project may be used as the Honor’s Project for the 3rd marking period. Information for projects may be displayed on a poster, essay or presentation.

**Part 1:** Decide on a monument and complete research about the monument. You should explain in writing who the artist was, why they made the monument, where the monument is and at least 2 other facts about it.

Options for monuments:

|  |  |  |
| --- | --- | --- |
| Louisville Bat  Statue of Liberty  MLK Memorial  Lincoln Memorial  Rocky Statue in Philadelphia  William Penn in Old New Castle | Mount Rushmore  Jefferson Memorial  Korean War memorial  Vietnam War Memorial  Eiffel Tower in Vegas compared to Original in Paris | Booker T. Washington  \*Any other monument must be approved by your teacher |

**Part 2:** Determine the multiplication factor of the Monument compared to the original person/object. For this part, you will need to choose several measurements to compare. You may choose from the list below.

|  |  |  |
| --- | --- | --- |
| Height | Weight | Width |
| Hat size | Nose length | Arm length |
| Boot size | Hand span |  |

\*Any other measurement should be approved by your teacher. Students may use the measurements for “the average person” if you are unable to find the measurements.

**Part 3:** Build your own scale model of the monument. Be sure to include the multiplication factor you are using.

Rubric

|  |  |  |  |
| --- | --- | --- | --- |
|  | Stick figures | Cartoonist | True Artist |
| Part 1 | Overview present with 1 detail. | Overview is given with artist, reason why and location | Overview of monument is given. Including artist, reason why, location and 2 other facts are given |
| Part 2- # of measurement | Multiplication factor is identified for 1-2 measurements | Multiplication factor is identified for 3-4 measurements | Multiplication factor is identified for at least 5 measurements |
| Part 2- Math calculations | 1-2 multiplication factors are correct with work shown | 3-4 multiplication factors are correct with work shown | All multiplication factors are correct with work shown |
| Part 3- Model or Drawing |  |  |  |
| Part 3 Math Calculations |  |  |  |
| Overall Neatness | Information is not easy to understand and work appears messy | Part of work is neat, and parts are difficult to follow | All information is neatly displayed and easy to understand |