Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_

***Revisiting Numbers* Culminating activity:**

Students will create an exhibit of the base-ten number system. (After taking a virtual field trip of museum <http://www.mnh.si.edu/vtp/1-desktop/>)

In the future, computers and technology will take over and replace classroom learning. To prepare, the building of Gunning Bedford is going to be turned into a museum. Museums are broken up into exhibits that have artifacts grouped together in a logical way and include descriptions of them as well as their importance.

You are responsible for creating exhibits based on the structure of the base-ten number system. From the list of artifacts attached, group all of the items together in a way that makes the most sense. Write a title for each group created and include a thorough description. Descriptions should include why all of the artifacts you chose go together, be sure to make your exhibit informative and interesting.

No exhibit should be too small or too big, each should have between 3-6 artifacts. Furthermore, each exhibit you make should have title that is short yet summarizes how the group is related. In addition to the title, a detailed description will be used to explain how all of your artifacts go together. The description should be specific, accurate, clear and complete.

There are many ways for these artifacts to be grouped together. Think of the way that makes the most sense to you. Be sure to look at the rubric in order to earn full credit.

|  |  |  |
| --- | --- | --- |
| Powers of 10 | Zero | -6 x 9 |
| Data Transfer Rate | Speed of light is 1.08 x 109 km/hr | Rational Numbers |
| Scientific Notation | 2.5 E-05 | -6 x -5 |
| Area Model | 0.00261 | Distributive Property |
| 3 ÷ -6 | Commutative Property | 10-5 x 10-3 |
| 6 ⅔ = 20/3 | 2 ½ ÷ 1/6 | Real Numbers |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Natural Numbers | 45,000,000 |

|  |  |
| --- | --- |
| feet | 10,000 |
| sec | 120 |

 |
| 3 ¼ ÷ ⅔ | “heart beats per minute” | √36 |
| 0÷9 | 104+104+104+104+104+104+104+104+104+104=105 | Irrational Numbers |
| 105 ÷ 102 | √¼ | √100 |
|  9x4 = 36 9x20= 180 40x4= 16040x20= 800 1,176 | Whole Numbers | 10-5 ÷ 10-3 |
| 105 x 102 | 2 + 8 = 8 + 2 | √30 |

|  |  |  |
| --- | --- | --- |
| 1.8 x 10-5 | Associative Property | “miles per hour” |
| Rate | 8 ÷ 2 | 9÷0 |
|

|  |  |
| --- | --- |
| Miles |  |
| hour |  |

 | 24 x 49 216 9601176 | 5 x 4½ + 3 x 4½ = 8 x 4½ |
| 6 ÷ 2/3  = 18/3 ÷ 2/3 = 18 ÷ 2 = 9 | 10,000 🡪 1,000 🡪 100 🡪 10 | (10 x 5) x 3 10 x (5 x 3) 50 x 3 10 x 15 150 150 |
|

|  |  |  |
| --- | --- | --- |
|  | 40 | 9 |
| 20 | 800 | 180 |
| 4 | 160 | 36 |

 | Integers | Algorithm |

Revisiting Numbers Culminating Activity Rubric

|  |  |  |  |
| --- | --- | --- | --- |
|   | Expert | Average | Novice |
| Groups  | Artifacts are grouped together in a logical way.  There are between 3-6 artifacts in each group | Artifacts are grouped together in a logical way.  However, some groups are slightly too large or too small | Groups do not make sense or are too big/small |
| Title | Each title is short accurately and describes the groups | Titles are a bit wordy but accurately describe the groups | Titles do not accurately describe the groups |
| Description X2 | Descriptions are specific, accurate, clear, and complete | Some descriptions are only three of the following: specific, accurate, clear, and complete | Some description is only one or two of the following: accurate, clear, and complete |

Final Score:\_\_\_\_\_\_\_\_\_\_\_\_

**\*\*If you receive a “Novice” score for any part, you will be required to fix this activity\*\***