**Creature Contest**

**Your task is to create a toy creature that will be a character in a video game. Your creature must be designed within the following parameters:**

* Use at least ten 3-dimensional shapes. You will be representing 3-dimensional shapes on a 2-dimensional poster board.
* Use at least 3 polyhedra and 3 non-polyhedra.
* Create 2-dimensional drawing of assembled creature. Each shape must be labeled with its name (rectangular prism, cone, etc.)
* Each shape must be completely independent, as your creature must be able to be assembled, disassembled, and reassembled. It will become part of a set (like Legos!)
* Blueprint drawn on poster board: The nets (patterns) for your shapes must fit on the poster board you are given.
* All shapes must be drawn on the poster board and labeled 1,2,3, etc..
* Table must be completed for each shape used in the design. Label shapes 1, 2, 3,…
* Total surface area must be calculated to the nearest tenth of a cm and represented as a percentage of the total surface area of the poster board.
* No weapons or inappropriate language are allowed!

**The group that follows all the parameters and has the least amount of waste is the winner!**

**You will hand in the following items:**

**1. 2-dimensional drawing of assembled creature with each shape labeled.**

**2. Poster board with the net of each shape drawn and labeled.**

**3. Table Completed with all information entered.**

Sample of one net on poster board with completed table entry.



1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Shape | Shape Name | Polyhedra or Non-Polyhedra | Dimensions | Surface Area |
| 1 | Cylinder | Non-Polyhedra | r=2.5cm; h=10cm | 314.2 sq. cm |

**Creature Contest Table**

Group Members:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Shape | Shape Name | Polyhedra or Non-Polyhedra | Dimensions | Surface Area |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Total

Surface Area:

Percentage of

Poster Board Used:

**Creature Contest Project Rubric**

Group Members:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CATEGORY | 9-10 Points: Exemplary | 7-8 Points: Proficient | 4-6 Points: Fair | 1-3 Points: Below Expectations |
| Shapes | Appropriate number of 3-dimensional shapes were selected (at least 10 total; at least 3 polyhedra and 3 non-polyhedra) | Only 8 or 9 3-dimensional shapes or incorrect number of polyhedra and non-polyhedra | Less than 8 3-dimensional shapes and incorrect number of polyhedra and non-polyhedra | Less than 6 3-dimensional shapes and incorrect number of polyhedra and non-polyhedra |
| Blueprint on Poster Board | Blueprint is neat and each net is drawn correctly. The net of each shape is labeled correctly (1,2,3,…) | Blueprint is neat and most nets are drawn correctly. Most nets are labeled correctly. | Blueprint is not neat and/or some nets are drawn and/or labeled incorrectly. | Blueprint is not neat and the majority of the nets are drawn and/or labeled incorrectly. |
| 2-Dimensional Drawing  | Drawing is neat and all shapes labeled correctly.  | Drawing is neat and most shapes are labeled correctly. | Drawing is not neat and/or some shapes are labeled incorrectly or not labeled. | Several shapes are not labeled correctly. |
| Table and Calculations | Table is complete and descriptions, dimensions, and calculations are correct. | Table is complete, but has 3 or less errors. | Table is incomplete and/or has more than 3 errors. | Table is incomplete or missing and/or has more than 5 errors. |

\*Up to 5 additional points can be earned by providing a name for your creature and a description of the character.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Character Description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_