**Geometric 3D Shapes Mobile Project**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Supplies: Paper nets of geometric figures

Group Members \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tape, glue, markers, colored pencils,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ string, pipe cleaners

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

Directions:

* Each team member will find the surface area of **four**  3-dimensional figures
* Each team member will find the volume of four of the 3-dimensional figures
* Each team member will then decorate and construct **3** 3-dimensional figures
* When all of the figures are complete ALL of the members will assemble a mobile using pipe cleaners and string with all of the team members 3-dimensional figures
* ALL calculations must be shown in the following space provided

|  |  |
| --- | --- |
| Name of Solid 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Surface area** of **Solid 1** | Name of Solid 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Surface area** of **Solid 2** |
| Name of Solid 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Volume** of **Solid 1** | Name of Solid 2 \_\_\_\_\_\_\_\_\_\_\_\_\_  **Volume** of **Solid 2** |

|  |  |
| --- | --- |
| Name of Solid 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Surface area** of **Solid 3** | Name of Solid 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Surface area** of **Solid 4** |
| Name of Solid 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Volume** of **Solid 3** | Name of Solid 4 \_\_\_\_\_\_\_\_\_\_\_\_\_  **Volume** of **Solid 4** |

**RUBRIC**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **5** | **4** | **2** |
| **Participation** | **Student was actively engaged in the activity during the entire time to complete the mobile with their group.** | **Student was actively engaged in the activity to complete the mobile for part of the time.** | **Student was not actively engaged in the activity during the period.** |
| **Accuracy** | **Calculations were completed accurately for both surface area and volume.** | **Calculations were completed somewhat accurately, however, included 1 or 2 errors.** | **3-Dimensional figures were completed but few calculations were completed**  **OR**  **Only two 3-D solid was completed and calculated**  **OR**  **No constructions were made and only calculations were completed** |
| **Creativity** | **All of the 3-D figures are decorated and colorful** | **One of the figures is not decorated, or none of the figures are colorful** | **None of the figures are decorated** |
| **Deadline** | **Student handed in project on time.** | **Student handed in project 1 day late.** | **Student handed in project more than 1 day late** |