

Optional Geometry Polyhedron Project



Reflect on this year. Use a variety of polyhedron to construct a model with a theme on something from this past year that you want to share with your class. You will use nets of the polyhedron and cut these from paper, then use glue to build the shape. I want you to be creative in using different shapes and color to create a scene/model that goes with the theme you select. This could be a flat model (as shown above), a mobile, or a sculpture.

Directions:

Read and complete the rubric. Hand in a completed rubric with your project. A project without a self assessment will not be accepted.

Each project should include **at least four (4) different** polyhedrons. I encourage you to make additional polyhedrons as necessary and to try some of the more difficult shapes. You may also decide to develop your own patterns to create a certain effect. Your project **must have a theme** in which you integrate your models into various combinations to produce a unique result.

Some helpful tips in constructing your polyhedrons:

- Use stiff paper
- Glue flaps rather than tape
- Crease the edges carefully
- Make each face fit tightly to the adjacent face
- Paint or color your shapes according to the theme
- Nets for polyhedrons can be found with a search, or on the following website:
 - <http://www.korthalsaltes.com/>

Grading:

This project is worth 50/50 points. Your grade will be based on:

- Number of models made
- Degree of difficulty of polyhedrons
- Creativity
- Construction technique
- Integration of polyhedrons into a theme

DUE DATE: Tuesday, May 17, 2016.

AMDG

NAME _____ TITLE OF PROJECT/THEME _____

OPTIONAL POLYHEDRON PROJECT SCORING RUBRIC

DUE DATE: Tuesday, May 17, 2016.

Date submitted _____

	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts
DIRECTIONS/EFFORT	Excellent Followed directions outlined step by step. Gave 100% effort and went above and beyond in completing the project.	Good Followed directions outlined but not step by step. Gave 75% effort in completing the project.	Fair Followed directions outlined at a minimum. Gave 50% effort in completing the design.	Poor Minimal effort. Appears to have been done in a hurry.
NUMBER OF POLYHERDA MADE	Excellent More than 4 different polyhedra	Good 4 different polyhedra	Fair 3 different polyhedra	Poor 2 different polyhedra
DEGREE OF DIFFICULTY	Excellent Includes more complicated polyhedra, appropriately scaled	Good Appropriately scaled prisms and pyramids.	Fair Simple prisms and pyramids	Poor Simple prisms
CREATIVITY/ORIGINALITY	Excellent Printed and used all the nets provided in three or more colors to enhance construction	Good Printed and used all the nets provided in 2 or colors to enhance construction	Fair Printed and used all the nets provided in 1 or color to enhance construction	POOR Gave no effort and/or did not complete project. Seemed to have been done in a hurry
THEME INTEGRATION	Excellent Polyhedra are skillfully integrated into an original, creative, and unique theme	Good Polyhedra are integrated into a creative and unique theme	Fair Polyhedra are integrated into a creative theme	POOR Polyhedra are included into a theme
THEME DESCRIPTION	Excellent A single spaced word processed description that describes the theme and how each polyhedron is used. No spelling or grammar errors.	Good A single spaced word processed paragraph that describes the theme and use polyhedra. No spelling or grammar errors.	Fair A single spaced word processed paragraph that describes the theme and use polyhedra. Minor spelling or grammar error.	Poor A description of the theme, or spelling or grammar errors.
NEATNESS	Excellent Folds are neat and well put together. Has no smears or creases. Great care was taken with design	Good Folds are neat and well put together. Has little smears or creases. Good care was taken with design	Fair Folds are fairly neat and put together. Has some smears or creases. Little care was taken with design	POOR Gave no effort and/or did not complete project. Seemed to have been done in a hurry
SHAPE(S)	Excellent Shapes are in excellent form and resemble the polyhedra.	Good Shapes are in good form and resemble the polyhedra.	Fair Shapes are in fair form and resemble the polyhedra a little.	POOR Gave no effort and/or did not complete project. Seemed to have been done in a hurry.
MET DEADLINE (Late projects will NOT be accepted.)	Excellent Submitted before deadline	Good On time	Fair	Poor
SELF ASSESSMENT	Excellent Accurately self-assessed	Good Slightly (1-2 points) inaccurate self-assessment	Fair Inaccurate self-assessment	Poor Incomplete self-assessment

Total points: