

Real World Collage

Standards

Content

Students will be able to...

- Apply mathematical knowledge to real world situations
- Demonstrate relationships among geometrical concepts
- Create models of geometrical concepts
- Identify and explain relationships between points, lines, and planes
- Identify and explain relationships among angles

Process

Students will be able to...

- Explain their reasoning
- Demonstrate effective writing skills
- Organize their work

Task Description and Criteria

You are an artist and you have been asked to create a collage of "Geometry in the Real World." You must construct this collage using real world examples of the geometrical concepts of points, lines, planes, and angle relationships. You must use pictures from ONLY magazines or the internet. You must have a real world example of every vocabulary word in the list below. It is also very important that you label each of your examples so that those admiring your work will understand what you are showing them.

Once you have created your collage, you must write a paper about it. In the paper, you must include a description of all of your examples and which vocabulary word it applies to and why.

Remember, this is a piece of art that will be displayed. Make sure it is constructed neatly and it is appealing to the eye. The more presentable your collage, the more likely someone might want to buy it for an art gallery.

Vocabulary Words you must include:

1 Point

2 Line

3 Plane

4 Intersection of Point and Line

5 Intersection of Point and Plane

6 Intersection of Line and Plane

7 Intersection of Planes

8 Acute Angle

9 Obtuse Angle

10 Straight Angle

11 Vertical Angles

12 Linear Pair

Your grade will be based on the following criteria:

- ❖ Collage made neatly
- ❖ All vocabulary words must be labeled accurately
- ❖ All vocabulary words represented with a real world example
- ❖ All real world examples are taken from a magazine or internet
- ❖ Paper has clear explanations of words and examples

Rubric

Criteria	Poor (0 pts)	Fair (2 pts)	Good (4 pts)	Excellent (6 pts)
Collage	No collage created	Collage created but is not neatly constructed	Collage created and is somewhat neatly constructed	Collage created and is very neatly constructed and creative
Vocab Words Labeled Accurately	No			Yes
Real World Examples of Vocabulary Words	0-3 of the vocabulary words represented by real world examples	4-7 of the vocabulary words represented by real world examples	8-11 of the vocabulary words represented by real world examples	All of the vocabulary words represented by real world examples
Real World Example Resources	Real world examples not taken from a magazine or internet			Real world examples taken from a magazine or internet
Paper Explanation	No paper written	Paper does not explain all real world examples	Paper is written with an unclear explanation of real world examples	Paper is written well with clear explanations of real world examples

Total: / 28 points