Geometry in Art

Geometry is in the artwork of many cultures. Typically this type of art was created two to four thousand years ago (depending on the culture).

Homework 7.1 Due 4/4:

Your goal is to find a piece of artwork from your own culture, religion, or interests where geometry was used to form some type of symmetry, or other geometric relationship. Once you find an example of this type of artwork that you appreciate, find out as much as you can about its background. For instance, the date it was created, the artist who created it, who or what it was created for, and any other information you think might be interesting or pertinent.

G7: Geometric Constructions Unit Overview

Over the next couple of weeks we will be learning how to construct geometric relationships and figures using a compass and a straightedge. You will need to be able to locate the relationships in the artwork you have chosen and show how to reconstruct it using the appropriate tools. Many of these constructions we will learn in class, those that we do not I can help you with, or you can find online.

When you choose a piece of art, you will also decide which part of it you want to reconstruct. Some parts will be harder than others to construct using only a compass and straightedge. Please see me if you need help identifying which parts of the artwork you can reconstruct using a compass and straightedge.

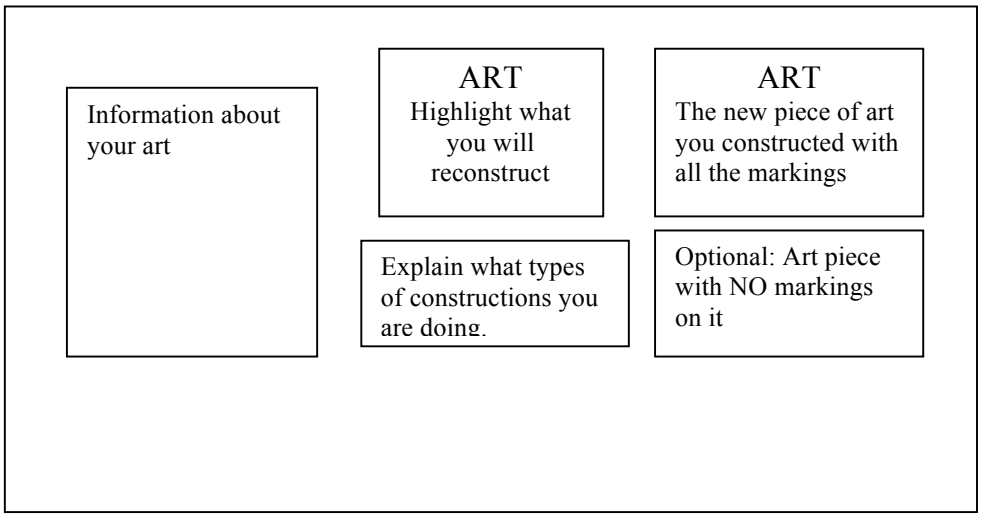
Outline of unit:

Stage	Due date
Have an example of artwork that has geometry relationships in it. **Three copies.** • One copy will have the part you want to construct highlighted. • One copy will have the constructions you made on it.	April 4th
Find the geometric relationships in your example and learn how they were constructed. • Pick one section of the art you found and try to reconstruct it. • Make sure you have all the "marks" on your paper showing the constructions.	April 11th
Have a poster completed so the class may view your example, what you found out about the piece of art, and how the art was reconstructed.	April 14th

Any student who does NOT bring 2 copies of their art by the deadline will opt out of the art project and may take a G7: Geometric Constructions proficiency test for this unit.

Geometry in Art

We will create posters that display the artwork you have found and examples of how the geometric relationships were constructed. The poster should also have interesting information about the origin of the artwork you are displaying (see part 1). Keep this in mind when picking artwork for this project.



Rubric for Geometric Constructions Project

Grade	Your project must demonstrate that you can …
C	• Construct a perpendicular bisector to a given line • Bisect an angle
B	• Complete the C level and at least **one** of the following • Construct a line parallel to a given line • Copy an angle
A	• Complete the B level and at least **one** of the following • Construct an equilateral triangle • Construct a square • Construct a regular hexagon inscribed in a circle