

# Proportions of the Face

Fall, 2009



**Lesson Plan Title:** Proportions of the Face

**Grade Level:** 5<sup>th</sup> -6<sup>th</sup> Grade

**Your name:** Group 6: Alyssa Ball, Melissa Greenwell, Sarah Wheeler, Scarlett Zopfi

## Objectives:

### 1. Domain 1: Artistic perception

Students will learn the basic elements of art including line, texture, and form. Students will also learn the principles of design including proportion.

### 2. Domain 2: Creative Expression

Students will experience the realistic proportions of the face and then make a realistic self-portrait using cut pieces of assorted colored construction paper.

### 3. Domain 3: Historical and Cultural Context of the Visual Arts

Students will learn about the origins of the *Golden Section* in ancient Greece. Students will learn about Pythagoras and Euclid.

### 4. Domain 4: Aesthetic Valuing

Students will learn to critically evaluate the use of proportions in art, whether a piece has good proportion, and how proportion is used to portray an emotion or message.

## **5. Domain 5: Connections, Relationships, and Application**

Students will learn about the use of mathematics in art to create proportions. You could have the students measure the proportions of the face using the Golden Section ratio. They will also learn about the history and origins of Pythagoras and Euclid and the application of mathematics to art. Students will also learn about the physical proportions of the face.

### **Students Materials:**

1. Mirror
2. Dry erase marker
3. Assorted colored construction paper (including multicultural skin toned paper)
4. Scissors
5. Glue
6. 9"x12" piece of manila paper

### **Teacher Materials:**

1. Same as above
2. Example of project
3. PowerPoint of historical background

### **Vocabulary:**

1. Proportion
2. Pythagoras
3. Euclid
4. Golden Section
5. Balance
6. Sighting

### **Procedures:**

1. Introduction: Discuss the historical background of the use of proportion in art. Show PowerPoint describing the theories of Pythagoras and Euclid and the *Golden Section*. Show Youtube video.
2. Do demonstration of project.
3. Pass out mirrors and dry erase markers.
4. Have the students draw around the contour of their head on the mirror starting at the top of the head.
5. Have the students make a line across the center of their face through their eyes.
6. Have the students mark where the tip of their nose is and make a line between their lips.
7. The students should then place their thumb on the bridge of their nose and their third finger on the top of their head. Using this same measurement the students should examine that this is the same distance from the bridge of the nose to the chin. (For this examination of proportions you may choose to use a photograph or a picture from a magazine instead of the mirror.)
8. Next, using their fingers students should measure the width of one eye and the distance between eyes; they should be the same. Mark these proportions on the mirror.
9. The students should mark the corners of their mouths; this should be aligned with the center of the eye.
10. The students should then mark the tops and bottoms of their ears; this should be the same length as their nose.

11. Students will use these proportions to create their portrait.
12. Fold a 9"x12" piece of skin tone paper in half (hotdog style) and draw a half-oval shape about 7" high on the folded side. Cut it out.
13. Fold the oval in half again in the opposite direction. The small end of the oval will be the chin, and the larger part the top of the head. The line made by the second crease marks where the eyes are.
13. Next cut out a neck, more narrow than the head; and cut out shoulders.
14. Place these pieces on the manila paper, or the colored piece of paper of their choice. This is the foundation of the portrait.
15. Now, looking in their mirror, and using the proportions that they mapped out earlier, have the students cut two pieces of paper in the shape of eyes and place them on the face in the proper proportions.
16. The same technique that was used for the eyes should be used to make the eyebrows, nose, lips, and ears.
17. Next make the hair and clothes.
18. The pieces should be secured to the paper using glue.
19. Closure: Hang the students work in the wall and critique the proportions used.

**Visual Procedures:**

**Step 1**



Mark Proportions of face on mirror.

**Step 2**



Cut out the shapes and the facial features.

**Step 3**



Glue the shapes onto the manila paper with appropriate proportions.

**Step 4**



Hang finished pieces on wall for critique.

**Assessments, Suggestions and/or Comments:**

Students will be assessed based on how accurate their proportions are, or the use of proportion to portray and emotion. This project can be tied into a math lesson or a history lesson. It may be helpful to your students if you demonstrate how to create each part of the face, for example the nose, eyes and lips.

## 5<sup>th</sup> and 6<sup>th</sup> Grade Artistic Development:

### Realism:

- begins at eight or nine
- students want to draw more realistic figures with a greater sense of visual proportion and less exaggeration of body parts
- using geometric shapes to represent reality so longer suffices
- able to overlap objects and create new spatial effects such as profile view, and extending off the page
- when students become dissatisfied with the simpler techniques they are ready for instruction in realistic art
- 

### What should the teachers do:

- provide experiences that develop the children's perceptual skills
- provide opportunities for the student to draw from direct observation
- frequent practice in contour drawing
- help students perceive proportions and sizes, relationships, directional angles and three dimensional forms

### Historical Content:

In Ancient Greece they strived for “the perfect body, the perfect mind, and perfect artwork”. They wanted to apply this perfection to their architecture and sculptures. To do this they needed to discover a mathematical ratio of size comparisons which could create the perfection which they wanted. Pythagoras and Euclid were both great contributors in discovering an equation to finding the perfect proportions. Pythagoras was able to make the connection between mathematical equations to geometric shapes and music. Euclid discovered “he could divide a line in two parts so that the smaller line is to the larger as the larger is to the sum of the two, a ratio of 1 to 1.6”. Euclid's ratio was called the Golden Section. The Greeks were grateful for this ratio because it was the perfect proportion for their sculptures and architecture. Throughout the centuries many artists continued to use the Golden Section, however many also chose to not use it. The Golden Section's ratio is not the only thing which creates perfect proportions. Artists usually do not believe in just one correct rule in creating artwork.

Herberholz, D. & Herberholz, B. Artworks for Elementary Teachers: Developing Artistic and Perceptual Awareness(ninth edition). New York: NY. McGraw Hill (2002).

<http://www.youtube.com/watch?v=085KSyQVb-U>