



Teacher Resource:

Egyptian Pyramids

Sponsored by the Martha Holden Jennings Foundation

Egyptian Pyramids

This lesson was developed by Ms. Tammy Hutchinson, a Math and Science teacher at Garfield Elementary, as a part of a collaboration project between the Toledo Museum of Art and area educators. It is intended for 6th grade students.

Goals: Understand the language of Speaking Visual by using Elements of Art and Principles of Design vocabulary. Understand the challenges of the Ancient Egyptians in architecture and relating it to personal challenges.

Objectives: Students will work together to build a pyramid using specific materials.
Students will explain the Elements of Art in the construction of the pyramids.

Ohio's New Learning Standards: *Grade 6, Science Inquiry and Application*

Develop descriptions, models, explanations, and predictions.

Think critically and logically to connect evidence and explanations.

Visual Literacy Skills: Close Looking, Description

Materials: Resources on Ancient Egyptian Pyramids, building supplies for each group (colored toothpicks, blocks, tiles, popsicle sticks, Dixie cups, Lego blocks, puzzle pieces, etc.)

Length: 60–90 minutes

Step 1: Brainstorm with the students about Ancient Egyptians and discuss the knowledge they would have needed to build the pyramids.

Step 2: Have students research Egyptian pyramids using books or the internet for ideas about the experience of building the pyramids. Tell students that they will be designing and building their own pyramids, and should consider the obstacles and difficulties. Discuss within groups.

Step 3: Tell students that they are Egyptian architects. They will need to work together to design a pyramid using the designated supplies. They will also need to take into account the materials they use. Tell students they will have twenty minutes to build.

Step 4: Ask students to present their pyramid in detail (dimensions, area, perimeter, color, etc). When all students have presented, ask if there were any challenges to building the pyramid. Discuss how their challenges may relate to the challenges of the Ancient Egyptians.

Extensions:

Science Connection:

Have students discuss the materials they used and how that impacted the construction of the materials. What materials did the Egyptians use? Why did the Egyptians choose these materials?

Math Connection:

Have students create a chart using an element of art (a color, type of line, space, or texture) and compare the ratio of that element to the whole in fraction or ratio form.

THE LANGUAGE OF ART:

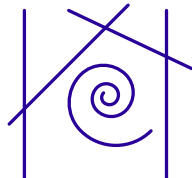
ELEMENTS OF ART AND PRINCIPLES OF DESIGN

ELEMENTS OF ART

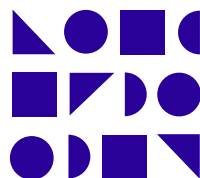
COLOR



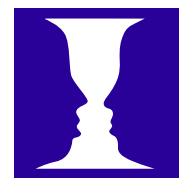
LINE



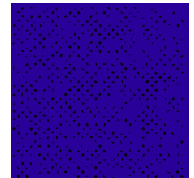
SHAPE



SPACE

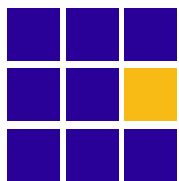


TEXTURE

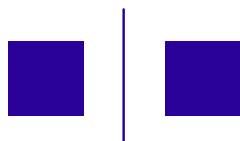


PRINCIPLES OF DESIGN

EMPHASIS



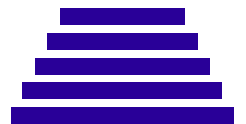
BALANCE



PROPORTION



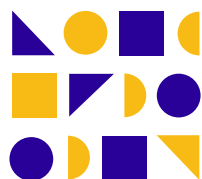
RHYTHM



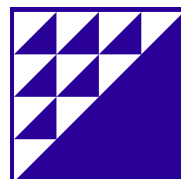
MOVEMENT



VARIETY



UNITY



HARMONY

