

**DESCRIPTION:** Find connections between science, technology, engineering, art, and math on this interactive tour, while practicing observation and critical thinking.

**OBJECTIVES:**

- (1) Students will view and discuss artworks that depict space in 2 and 3 dimensions.
- (2) Students will define and identify foreground, middle ground, and background in one or more artworks.
- (3) Students will recognize and describe connections between science, technology, engineering, art, and math.
- (4) Students will write or draw in response to one or more artworks.

**INTRODUCTORY QUESTIONS, ACTIVITY, OR REMARKS:** Let's discuss STEAM. Who can tell me what each element of STEAM is? You are visiting the Art museum today to find connections between Art and the other parts of STEAM. What do you think you might find? Can you think of any way someone might use science, technology, engineering, or math to make art?

We're going to look more closely at dimension, or what in art is called "space." Not like outer space, but space like this room we're in. How would we measure (math) this room if we wanted to know how much space we have? (length, width, height) So we have how many dimensions? (3) A building, or architecture, has 3 dimensions that it has to hold in order to be a safe place (engineering). Think about a painting or drawing, how many dimensions does it have? (2 - length and width) But sometimes artists add the third dimension to create depth! So we're going to look at some artwork to learn more about how they do that (technology - materials; and science - the study of something).

**GALLERY ACTIVITIES & ARTWORKS (Artworks may change):**

(1) Liz Lemon, *Geese*, n.d. Oil on canvas.

(1a) Activity: Discussion – vocabulary terms dealing with foreground, middle ground, and background.

(1b) Activity: Pose – Create a small group of volunteers who would like to pose as birds in this painting. Have them arrange themselves so that they create foreground, middle ground, and background. Discuss position and size of objects as they relate to the picture (high vs low, small vs large, overlapping).

(2) Glenn Wolff, *Midwest Twilight #3*, 2002. Acrylic, pastel, and paper on linen.

(2a) Activity: Discussion – review foreground, middle ground, and background. How has the artist created depth in this painting? How is it different from the geese?

(2b) Activity: Discuss with a partner – What one object in the painting would you change if you could? How would you change it (size, shape, color, etc.)? How would that change impact the painting?

(3) Dewey Blocksma, *Portage*, 1993. Mixed media.

(5a) Activity: Discussion – Review 3-dimensional sculpture vs 2-dimensional painting. How is this work different? What do you see? What do you think?

(5b) Activity: Drawing – on a small sheet, each student will make a drawing of the sculpture and add a background or other elements. Note that they are making something 3D into a 2D drawing. Discuss the results.

**CONCLUSION REMARKS/ACTIVITY:**

Today we looked at works that were 2-dimensional and 3-dimensional, and we used science, technology, engineering, arts, and math to do so. Which work was your favorite? If you had to teach a 1st grader about 3-D art, which artwork would you choose, and why?

As you leave today, think about other places you see 3-dimensional space in a 2-dimensional picture. Like billboards, signs, movie posters, what else? See how many you can find on the way back to school! Thanks!