

# 3D Discovery

Eighth Grade integrated visit

Behavioral Objective:

Students attending the 3D Discovery show at the Lubeznik Center for the Arts will demonstrate a correlation of the visual arts to math, science and language arts.

Learning Objectives:

Students will:

- 1) Recall prior knowledge of shape and form.
- 2) Be given a tour of the exhibit
- 3) Discover how a sculptor uses the principles of math and science as well the principles and elements of art to create a sculpture
- 4) Compose a descriptive writing piece about their favorite sculpture in the show.

Vocabulary:

Sculpture	Geometric Shape	Museum
Sculptor	Complex geometric	Gallery
3 dimensional	Positive	Concrete
Shape	Negative	Steel
Form	Texture	Welding
Free form/organic		

Eighth Grade Standards:

Math:

8.4.3 Identify properties of three dimensional geometric objects.

8.5.4 Use formulas for finding the perimeter and area of basic two dimensional shapes

Science:

8.1.1 Recognize and describe how scientific knowledge is subject to modifications as new information challenges prevailing theories and as new theory leads to looking at old observations in a new way.

8.1.6 Identify the constraints that must be taken into account as a new design is developed, such as gravity and the properties of the materials to be used.

8.1.7 Explain that humans help shape the future by generating knowledge, developing new technologies and communicating ideas to others.

Language Arts:

8.5.5 Write technical documents that:

- Identify the sequence of activities needed to design a system, operate a tool, or explain the bylaws of and organization's constitution or guidelines.
- Include all the factors and variables that need to be considered.
- Use formatting techniques, including headings and changing the fonts to aid in comprehension.

8.5.6 Write using precise word choices to make writing interesting and exact.

Visual Arts:

8.3.3 Expand and use appropriate art vocabulary.

8.13.1 Analyze connections between the use of skills and processes in art (problem solving, critical thinking, observational skills) and other subject areas, and analyze how integration of disciplines enhances learning.

# 3-D Discovery

Eighth grade

Name \_\_\_\_\_

1) Find a sculpture that you like.

Title of the sculpture \_\_\_\_\_

Artist \_\_\_\_\_

Media \_\_\_\_\_

2) Name and tell how many forms are in the sculpture. (e.g. 3 circles, 2 triangles etc.)

\_\_\_\_\_

\_\_\_\_\_

3) Write a detailed description of the sculpture. (E.g. the large red pyramid, at the bottom of the sculpture is turned upside down so that the base is facing up. On the base of the pyramid, are 4 identical short cylinders. There is one of these cylinders at each one of the corners ....). After you have written your piece, give it to another person. From your description, that person should be able to draw the sculpture.