# 3-D Discovery

Fifth Grade Integrated visit

Behavioral Objective:

Students attending the 3D Discovery Show at the Lubeznik Center for the Arts will recognize how a sculptor uses simple geometric and complex geometric shapes and forms as well as freeform (organic) shapes and forms to create works of art.

Learning Objectives:

Students will:

1. Recall knowledge of shapes and forms
2. Observe how forms are shapes with other names
3. Look for and identify geometric, complex geometric and organic shapes and forms as well as polygons within sculptures.
4. Learn about the art form of sculpture and how math and science play an important part in the construction of sculpture pieces.
5. Use a sculpture as a setting for a story.

Teacher Background:

Sculpture speaks powerfully to the culture in a language that we all can understand. Welding, fabricating, carving, transporting, rigging and assembly are all labors that are part of the fabric of Northwest Indiana. The great range of materials (steel, stainless, concrete, bronze, glass, light, wood, stone and hardware) used to create the pieces engage the viewers and speak clearly to the people of LaPorte County and all who visit the show.

Vocabulary:

| | | |
|---|---|---|
| Sculpture | Shape | Geometric |
| Sculptor | Form | Complex geometric |
| Positive | Organic/Freeform | Steel |
| Negative | Texture | Concrete |
| Subtractive | Maquette | Wood |
| Assembledge | Polygon | Stone |
| Space | | |

# Fifth Grade Indiana State Standards

Language Arts:
Standard 4: Writing: Process
5.4.2 Write stories with multiple paragraphs that develop a situation or plot, describe the setting and include an ending. (see student worksheet)

Standard 5: Writing: Applications (different types of writing and their characteristics)
5.5.1 Write narratives (stories) that:
- establish a plot, point of view, setting and conflict
- show, rather than tell, the events of the story

5.5.6 Write for different purposes and to a specific audience or person, adjusting tone and style as appropriate.

Math:
Standard 4: Students learn about geometric shapes and develop a sense of space.
5.4.2 Identify, describe, draw, and classify triangles as equilateral, isosceles, scalene, right, acute, obtuse and equiangular.
5.4.3 Identify, describe, draw and classify polygons, such as pentagons and hexagons

Science
Standard 1: The Nature of Science and Technology
5.1.7 Give examples of materials not present in nature, such as cloth, plastic, and concrete that have become available because of science and technology.
Standard 5:The Mathematical World: Shapes and symbolic relationships
5.5.3 Classify objects in terms of simple figures and solids
5.5.4 Compare shapes in terms of concepts, such as parallel and perpendicular, congruence and symmetry.
5.5.5 Demonstrate that areas of irregular shapes can be found by dividing them into squares and triangles.
Standard 6: Common Themes
5.6.3 Recognize and describe that almost anything has limits on how big or small it can be.

Visual Arts:
Standard 3:Criticism
5.3.1 Analyze the artist's use of sensory, formal, technical and expressive properties in a work of art.
5.3.2 Construct meaning in the work based on personal response, properties found in the work and background information on the context of the work.
5.3.3 Use appropriate art vocabulary.

Standard 6: Responding to Art: Aestheics
5.6.2 Understand that personal preference is one of many criteria used in making judgments about art.

Standard 7: Production

5.7.1 Demonstrate refined observational skills through accurate rendering of representational objects and subject matter from life.

Standard 8: Production

5.8.1 Apply elements (line, shape, form, texture, color, value and space) and principles (repetition, variety, rhythm, proportion, movement, balance, emphasis and unity) in work that effectively communicates their ideas.

5.8.2 Identify and discriminate between types of shape (geometric and organic), colors, lines, textures (tactile and visual) and space (background, middleground, foreground, placement, perspective, overlap, negative, converging lines, positive, size and color, balance (symmetrical, asymmetrical, radial) and the use of proportion, rhythm, variety, repetition, and movement in their work and the works of others.

Standard 9: Production

5.9.2 Identify and control different media, techniques, and processes to effectively communicate ideas, experiences and stories including (but not limited to …. )

Drawing:

Media: pencils, colored pencils, markers, chalks, crayons, oil pastels, charcoals

Processes: contour line, rendering, sketching, value, shading, crosshatching, stippling.

Sculpture/Architecture/Jewelry

Media: paper, papier-mache, clay, plaster, fiber cardboard, wood paper, foil. found objects, beads, sand, balsa, wire, foam

Processes: carving, additive, subtractive, modeling, constructing, casting

Standard 12: Careers and Community

5.12.1 Identify individual art experiences and how these affect daily life

5.12.2 Visit, analyze, and respond to art at local museums, exhibitions, performances.

Standard 13: Integrated Studies

5.13.2 Create product or performance that communicates in-depth knowledge gained through integrated study of a theme, historical period or event.

3D Discovery
Fifth Grade Integrated Visit

Name _____

Draw your favorite sculpture in the box below.

Using your drawing of the sculpture as a setting, create characters, plot, and an ending and write a story that is at least 3 paragraphs long.