Title/Description of Lesson
2D grid to a 3D Sculpture: Students use tools (straight edge or ruler), coloring medium and design principles to grid paper and build an abstract sculpture.

Grade Level:
Grades 4-5
Also recommended for upper grade SDC groups to practice the use of a ruler & measurement.

Lesson Links
Objectives/Outcomes
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California Standards in Visual & Performing Arts
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Objectives/Outcomes (Return to Links)
Students will grid paper and create 3D paper shapes (cylinders, cubes, tubes, etc.) and utilize other paper manipulation (folding, rolling, crimping, etc.) to build an abstract paper sculpture.

Materials and Resources (Return to Links)
12” x 18” lighter weight drawing paper (60# color and/or white)
miscellaneous coloring medium (pencils, crayons, markers, texture boards, etc.)
9” x 12” construction paper and circle templates for the base
glue
rulers, pencils, scissors
**Vocabulary** *(Return to Links)*

- **Composition:** The organization of the elements of art and principles of design.
- **Form:** A three-dimensional volume on the illusion of three dimensions (related to shape, which is two-dimensional); the particular characteristic of the visual elements of a work of art (as distinguished from its subject matter or content)
- **Texture:** The surface quality of materials, either actual (tactile) or implied (visual). Texture is one of the elements of art.

**Procedures** *(Return to Links)*

1. Have students add lines, colors and textures to one side of the paper using a variety of coloring mediums.
2. Students may apply texture using texture boards and paperless crayons over the lines.
3. On the back side of the paper, have students “grid’ the paper, using a ruler and a pencil to measure and connect marks. Students cut on the lines to create twelve 3” x 6” rectangles.
4. Demonstrate how to create some 3-d shapes such as cylinders, tubes, cubes, etc., and how to manipulate paper in different ways to create other shapes by rolling on the diagonal, crimping, folding to create a 3-d star, etc. Students will be encouraged to do something different each piece, and check that students create shapes with the decorated surface on the outside.
5. Student trace a circular template on a piece of construction paper and cut out & label.
6. Students start building a sculpture utilizing the pieces they have created. Through problem solving, students will create an abstract piece that has balance and unity. Pieces can be held together with drops of glue and also to the base.

**Criteria for Assessing Student Learning** *(Return to Links)*

Did students create compositions that utilized different types of medium, textures, forms, shapes? Does the final sculpture show balance and unity? Student are may be graded on rubric scale:  

- **4=Outstanding work**: exceeds grade level expectations. Sculpture workmanship is neat, shows a variety of forms, shapes, textures. Piece achieved height. Grid lines were accurate, clean, consistent.
- **3=Good work**: meets grade level expectations. Sculpture workmanship is neat, less variety of forms, texture, etc. Sculpture is of average height. Consistency is most grid lines.
- **2=Developing skill level is indicated**: Workmanship is less refined than those of good or outstanding work. Less color & texture visible; forms may not have color on the exterior, overall height is low. Student had some difficulty in gridding the paper.
- **1=Needs improvement**: Final piece looks unfinished; little/no height achieved in overall piece, little or not color & texture added. Student had much difficulty gridding the paper.
California Standards in Visual & Performing Arts  (Return to Links)

Component #1: Artistic Perception
Grade 4:
Standard 1.5  Describe and analyze the elements of art (color, shape/form, line, texture, space, value), emphasizing form, as they are used in works of art and found in the environment.
Grade 5:
Standard 1.1  Identify and describe the principles of design in visual compositions, emphasizing unity and harmony.

California Standards in Math  (Return to Links)
Measurement & Geometry
Grade 4:
Standard 2.0  Students use two-dimensional coordinate grids to represent points and graph lines and simple figures.
Grade 5:
Standard 2.1  Measure, identify and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools (e.g. straightedge, ruler, compass, protractor, drawing software)

Other Resources  (Return to Links)

Sculptures can be created utilizing one shape (i.e. tubes only). Try investing and using some different materials (metallic color pencils, crayons, paintsticks, etc.), brightly colored paper such as astrobright, gel pens, stamping, etc.

Variation on the pieces