

Shape Sculpture

Pre-K + Math and Visual Arts

Adapted by Shea Trash

CORE SUBJECT AREA

Math

ART FORM + ELEMENTS

Visual Art

Shapes

Form

Color

OBJECTIVES

I can describe similarities of various 2- and 3-dimensional shapes. I can identify 2-dimensional and 3-dimensional shapes. I can identify primary and secondary colors. I can identify and arrange geometric shapes to create a pattern

MATERIALS NEEDED

Poster and/or examples of real world items with different 3-dimensional shapes
Drawing paper, pencils, crayons
Craft dough or air-dry clay If using air-dry clay, you will also need markers (or paint) and magnetic strips.

NOTE: Air-dry clay allows for more design possibilities and makes a more permanent art project, but craft dough can be used if your budget does not allow for air-dry clay. Air-dry clay is available from school art suppliers or craft stores.

RECOMMENDED RESOURCES

Refer to the following YouTube Resources: Everyday Math: Shape House

Everyday Math: Shapes All Around Me

Peg + Cat: Wizard Ramone's Sphere

LESSON SEQUENCE

Ask, "What are shapes?" Name 2-dimensional shapes (triangle, circle, square, rectangle, hexagon) and introduce 3-dimensional shapes (cube, box, cone, and sphere) using actual objects or using a poster to show the difference between 2D and 3D shapes. Talk about the differences between them. Then, ask students to identify different real world objects that are 2 dimensional or 3-dimensional. (For example, circle: pepperoni pizza; sphere: globe or

MSCCR STANDARDS

PK.G.1 With guidance and support, correctly name shapes

PK.G.3 With guidance and support, explore the differences between two-dimensional and three-dimensional shapes.

PK.G.4 With guidance and support, create and represent shapes using developmentally appropriate pre-kindergarten materials (e.g., popsicle sticks, play dough, blocks, pipe cleaners, pattern blocks)

MSCCR CREATIVE ARTS STANDARDS

VA:Cr2.1.PK Organize and develop artistic ideas and work. a) Use a variety of art-making tools.

VA:Cr2.2.PK Organize and develop artistic ideas and work. a) Share materials with others.

VA:Re7.1.PK Perceive and analyze artistic work. a) Recognize art in one's environment.

DURATION

2; 35 minute sessions

VOCABULARY

Pattern, Shapes, Sculpture, Primary

ball.) Have a scavenger hunt in the classroom for shapes.

Ask students how they use math in their everyday lives. Guide them to think about counting, sharing things with friends in even amounts, or deciding how many cookies they would like to eat. Ask them how they think artists might use math when they create art.

Display a poster of 3-dimensional shapes and talk about each one and/or show real world examples. Explain that the next day they will do an art project using these shapes. Have them describe the attributes of each of the shapes. How many faces, corners and sides do they have? Once they understand the shapes, have students do a scavenger hunt around the room to find these shapes. They may work independently or in pairs. View and discuss the Looking at Art PowerPoint, asking students questions about the shapes, forms, and colors they see. Ask students to find primary and secondary colors in the classroom

Step One: Remind students of the shapes they found the day before. Draw a circle, square, rectangle, and triangle on the board. Ask students to imagine what different things they could represent using a circle (such as a face, a pizza, a soccer ball, a ladybug, or the moon). Then talk about 3-dimensional figures such as cubes, boxes, spheres, and cones. Draw some of these on the board. Ask them what they might represent with a cube, box, sphere, cube, or cone.

Step Two: Tell students that they are going to form 3-dimensional shapes (known as forms in art) from craft dough or air-dry clay just like the artist in the video cut shapes for her mural. They can even combine forms if they want. Guide students to create forms from craft dough or air-dry clay. Have students first form a sphere by rolling the clay/dough on the table. Talk about the sphere being round with no sides or faces.

Have the students make another sphere and press with their finger/thumbs with both hands to form a cube. Then, have the students count the sides, faces, etc. Have them make a box that is not a cube.

Guide students to form a cone. Again begin by rolling dough or clay into a ball. Then, have the students flatten two sides with their fingers. Then, have them roll the dough or clay, putting pressure on the bottom half of the dough or clay to form a cone. Ask students how many faces, sides, etc., that the cone has.

Last, allow students to make several small forms. If they want, they can combine the forms by pressing them together to make a composite form. Set the forms aside to dry overnight on a piece of paper with their name on it so that you can keep up with each child's work.

Step Three: Have students add primary and/or secondary colors with markers or paint. They can try to make their 3-dimensional shapes look like something, e.g., a basketball or ice cream cone, or they can then decorate their shapes using solid colors or patterns (like stripes). When the decorations are complete, adhere magnetic strips to the back of the shapes. If you have a magnetic board in your classroom, you can allow the students to place their shapes into a pleasing arrangement. Be sure and have students put their initials on the back of their shapes. Ask each student to identify the form, attributes, and color of their piece. Ask them if they used primary or secondary colors or a combination. Ask if they made their form resemble something or used colors or a pattern.

SOURCES

<https://www.pbslearningmedia.org/resource/95a17733-f131-4dcf-858e04067e0da063/shapes-into-sculptures/?#.W1u5e9JKjIV>

EDITED by: Shea Thrash