**N.Y.S. VISUAL ARTS STANDARDS:**

N.Y.S. Standard #1: (Creating and Performing in the Arts):

Students will actively engage in the processes that constitute creation and performance in the arts and participate in various roles in the arts.

N.Y.S Standard #2: (Knowing and Using Arts Materials and Resources):

Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.

N.Y.S. Standard #3: (Responding To and Analyzing Works of Art):

Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.

N.Y.S. Standard #4: (Understanding The Cultural Dimensions and Contributions of The Arts):

Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of the past and present society.

**AIM:** How can we create a robot collage out of geometric shapes that uses STEAM?

**OBJECTIVE:**

Students will know how to identify and cut geometric shapes out of paper

Students will learn that any type of robot can be made out of geometric shapes

Students will learn how to use STEAM to enhance their robots

Students will understand how to create a watercolor resist painting for their background

**MATERIALS:**

Robot by Jon Scieszka and David Shannon Book

9”x12” White drawing paper

Crayons

Watercolor Paints

Paint brushes

Water Containers

Mixed Papers for collage

Scissors

Glue Sticks

Copper Tape

LED Lights

3V Coin Cell Batteries

<https://www.brainpop.com/technology/computerscience/robots/>

<https://makercamp.com/project-paths/light-it-up/>

**VOCABULARY:**

Geometric Shapes: Square, Rectangle, Triangle, Circle

STEAM-is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.

**PROCEDURE:**

**Step One: Geometric Robot Introduction, resist painted background**

Motivation: I will read the book, Robot to the class. We will discuss what shapes and colors robots can come in.

Anticipatory Set: I will introduce the class to the lesson by showing them my example of the project. I will ask the class to identify geometric shapes in my robot collage.

Guided Practice: I will demonstrate to the class how to create a crayon resist background for our collages. I will draw a pattern in crayon and then paint over it using watercolor paint.

I will discuss how to properly use watercolor paint. This will include proper behavior procedures, how to clean brushes, and how to blending colors.

Independent Practice: The students will create their own pattern backgrounds using crayons to draw patterns and then watercolor paint on top.

Clean Up: I will call students up one table at a time to put their wet artwork on the drying rack. The students must then immediately sit down and wait for further instructions.

Closure: What colors did you find blended well together? What types of shapes and patterns did you create?

**Step Two: Geometric Robot Collage**

Motivation: I will review geometric shapes with the class.

Anticipatory Set: I will introduce the class to the lesson by showing them my example of the project. I will ask the class to identify geometric shapes in my robot collage.

Guided Practice: I will demonstrate to the class how to cut geometric shapes out of different colored papers and how to arrange them into a robot design. I will demonstrate how to cut smaller papers to add layers and details.

Independent Practice: The students will create their robots collages out of cut paper. They must carefully arrange their shapes on top of their paper and glue them in place.

Clean Up: I will call students up one table at a time to put their artwork on the drying rack. The students must then immediately sit down and wait for further instructions.

Closure: What shapes did you cut and use to create your robot? What could you add next time to make your robot collage complete?

**Step Three: Geometric Robot Collage**

Motivation: What materials are robots really made out of? How could we recreate that in the art room?

Anticipatory Set: I will introduce the class to the lesson by reviewing collage techniques and discussing what finishing touches they can add to their robots.

Guided Practice: I will demonstrate to the class how to use tin foil, sharpies, and crayons to add details and finishing touches to my geometric robot.

Independent Practice: The students will use tin foil, sharpies, and crayons to add finishing touches to their robots.

Clean Up: I will call students up one table at a time to put their artwork on the drying rack. The students must then immediately sit down and wait for further instructions.

Closure: What interesting details did you add to your robot?

**Step Four: LED Light Circuits**

Motivation: How can we add lights to our robots?

Anticipatory Set: I will introduce the class to the lesson by showing videos and examples of LED technology added to drawings.

Guided Practice: I will demonstrate to the class how to use copper tape, 3V coin cell battery, and the LED to create a circuit and light up my robot. The students should choose anywhere they would like to add an LED to their work- for example an antennae, eyes, buttons, etc.

Independent Practice: The students will use the provided materials to add LED circuits to their robots.

Clean Up: I will call students up one table at a time to put their artwork on the drying rack. The students must then immediately sit down and wait for further instructions.

Closure: How did you use STEAM to enhance your robot collage?

**ASSESSMENT:**

Informal Assessment:

I will evaluate the students’ comprehension of the assignment by gauging their in class participation in group discussions, brainstorming, sketches, as well as following the proper behavioral procedures in the classroom.

Formal Assessment:

I will evaluate the students’ understanding of the assignment by checking to ensure that all components of the assignment are completed accurately, and with care.

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_**

**Geometric Robots Evaluation 2nd Grade Art/ Ms. Broder**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Excellent** | **Very Good** | **Good** | **Fair** | **Poor** |
| How is the overall Quality of the project? |  |  |  |  |  |
| Is the work carefully and neatly executed? |  |  |  |  |  |
| Is the project using a dot in a creative manner? |  |  |  |  |  |
| Did the student the recommended materials in their artwork? |  |  |  |  |  |
| Did the student use details to convey their personality and interests in their designs? |  |  |  |  |  |
| Did the student stay on task throughout the duration of the project? |  |  |  |  |  |
| Did the student follow instructions and consider teacher directives? |  |  |  |  |  |
| Did the student have a cooperative and positive attitude? |  |  |  |  |  |
| Did the student put in consistent effort? |  |  |  |  |  |
| Did the student pay attention during demonstrations? |  |  |  |  |  |

**TOTAL**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TEACHER COMMENTS: