



Sun Valley Museum of Art

A River Runs Through It-Watershed Art Installation

Subject: Science / Hydrology

Grade Level: 8

Lesson Plan: Six 50-minute classes



Students work together to create an art installation of a watershed. Recycled plastic serves multiple purposes in this project: it is reusable, economical material; it reflects the plastic waste that is in our water; and it shows students how much plastic we consume. Students create part of a waterfall, a fish, and a plant while learning about the different components of a watershed, including human impact on a watershed.

Objectives:

- Students will create elements of a watershed using recycled plastics
- Students will identify elements of human impact on a watershed
- Students will create an art installation representing a watershed

Basic Outline of the Lesson:

- Introduce the project – slide show
- Students create a waterfall, plants, and fish
- The watershed is assembled in the installation location

Art Supplies:

- Watercolor paints
- Acrylic paints
- Modge podge
- Paint brushes

- Water cups for brushes
- Scissors
- Plastic bottles
- Caps
- Tissue paper
- Glitter paint
- Colored masking tape
- Stapler
- Glue guns
- Hot glue
- Plastic film / plastic bags
- Hemp line / fishing line
- Thumb tacks
- Dowel or rod to hang the bottles
- Wire
- Wire cutters
- Eye screws
- Rope
- Colored pencils
- Drawing paper

Other Resources:

- Visual examples of fish and plants created from plastic
- Slide show to introduce project and related artwork (see outline at the end of the lesson plan)

Idaho State Learning Standards:

- Arts and Humanities: Anchor Standard 4: Convey meaning through the presentation/performance/production of an original work or unique interpretation of a work
 - Objective PR1.1 Combine knowledge and understanding from two or more disciplines to present/perform their original or interpreted works for an audience
 - Objective PR1.2 Convey meaning through their presentation/performance
- LS2-MS Ecosystems: Interactions, Energy, and Dynamics
 - LS2-MS-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
 - Further Explanation: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources
 - LS2-MS-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
 - Further Explanation: Emphasis is on describing the conservation of matter and flow of energy into and out of various ecosystems, and on defining the boundaries of the system
 - LS2-MS-6. Evaluate competing design solutions for maintaining biodiversity and ecosystem services

- Further Explanation: Examples of ecosystem services could include water purification, nutrient recycling, and prevention of soil erosion. Examples of design solution constraints could include scientific, economic, and social considerations.

Academic Language:

- Subject area language: watershed
- Art language: art installation

Student Use of Vocabulary:

Students will use the words when creating their projects

Student Grouping:

Students will work individually or in small groups

Instruction:

Day 1 – Introduction

- Introduce the project with a slide show (see additional resources)
 - Questions to ask:
 - What do you see here?
 - How do you think the artist created their work?
 - Why do you think the artist made this piece?
- Students can use the paper and pencils to sketch ideas for fish and plants

Day 2 – Artmaking

- Discuss the significance of using the water bottles: their symbolism, recycling, the damage of plastic waste
- Demonstrate how to string the water bottles together (follow printed instructions included below)
- Working in small groups, students should string together their water bottles to create a waterfall

Day 3 – Artmaking

- Demonstrate plant creation with the class. Show the students examples of plastic plants.
- Students start creating their plants. Encourage the students to employ the three art techniques: cutting, gluing and embellishment.
- When students have finished their plants, decide how they will install them in the installation location

Day 4 – Artmaking

- Go over the fish creation with the class, showing the students examples of plastic fish
- Students begin creating their own fish
 - Encourage the students to employ the three art techniques: cutting, gluing and embellishment
- When students have finished their fish, hang them up in the installation location

Day 5 – Artmaking

- Students should use this period to finish any uncompleted work.

Day 6 – Presentation

- Finish installation of student fish and plants in the installation location
- When the watershed is complete, the class should go into the hallway to look at and discuss their work
 - Questions to ask:
 - What did we create?
 - What did you learn?
 - What is a watershed? What is your role in a watershed?
 - How did you like doing an art project to learn about science?

Additional Resources:

Instructional video at svmoa.org

Slide Show Outline:

Slide examples:

- We will think about:
 - What is a watershed?
 - Why are watersheds important?
 - What is our responsibility to a watershed?
- Our art is inspired by plastics and other pollutants and their effects on a watershed
 - Video: What really happens to the plastic you throw away? by Emma Bryce
- What is an art installation?
 - A 3D, sculptural piece of art that is designed for a specific space
 - The art is usually temporary and changes how people view the space
 - Examples: “Paper Planes” by Dawn Ng and “Melting Man” by Nele Azevedo
- Photo of recycled bottle waterfall by Chinese artist Wang Zhiyuan
 - Questions to ask:
 - What do you see here?
 - What is this made out of?
 - Where do you think this is?
 - What is the artist telling his audience?
 - How is this art related to water?
 - Why and how is this an art installation?
- Photo of plastic plants by Veronika Richterova
 - Questions to ask:
 - What do you see here?
 - What materials did the artist use?
 - How many bottles did she use?
- Photo of plastic leaves by Veronika Richterova
 - Questions to ask:
 - What do you see here?
 - What materials did the artist use?
 - How many bottles did she use?
 - How did she get the leaves to take their shape?

- Three ways of manipulating plastic
 - Cutting
 - Gluing
 - Embellishment
- Cutting
 - Takes away material
 - Creates details
 - Changes surface
- Examples of cut plastic
 - “Green Plant” by Artist Gulnuroz Daglar
 - Questions to ask:
 - What material is used here?
 - How does cutting change the material?
 - How much of the material has been taken away?
- Cut plastic art by Eduard Aldrovandi
 - Questions to ask:
 - What material is used here?
 - How many bottles do you see?
 - How do you think he did this?
- Gluing
 - We will be using modge podge and hot glue
 - What does gluing allow us to do?
 - Enables layering and embellishment
- Examples of Layering
 - Artists David Edgar and Jen Stark
 - Questions to ask:
 - What materials did the artists use?
 - How many layers can you see?
 - How does layering change the appearance of the materials?
- More examples of layering
 - Artists Aurora Robson and Michelle Reader
 - Questions to ask:
 - What do you see here?
 - How are they similar and how are they different?
- Embellishment
 - What is embellishment?
 - Decoration
 - Adding to
 - How can we embellish our plastic creations?
 - Paint
 - Add more plastic
 - Add other materials
- Examples of embellishment

- “Wreath” by Leanne Stock
- Questions to ask:
 - What do you see here?
 - How is this embellished?

Installation Directions:

Stringing together water bottles to create a waterfall:

- 1) Poke a hole in the plastic (nail or poking tool)
- 2) Run the string through the bottle
- 3) Make sure the beginning and end of the string are secure
- 4) Attach more water bottles
- 5) Attach your string of water bottles to a classmate’s string of water bottles

Creating a plastic fish:

- 1) Choose a water bottle as the foundation for the fish
- 2) Cut the water bottle in different ways to change the shape
- 3) Take the cut pieces or other pieces of plastic and hot glue them onto the fish
- 4) Embellish fish using paint, tissue paper, modge podge, glitter glue, and colorful tape
- 5) Run a string through the fish so we can hang it in the hall

Creating a plastic plant:

- 1) Choose a water bottle as the foundation for the plant
- 2) Cut the water bottle in different ways to change the shape
- 3) Take the cut pieces or other pieces of plastic and hot glue them onto the plant
- 4) Embellish plant using paint, tissue paper, modge podge, glitter glue, and colorful tape
- 5) Run a string through the plant so we can hang it in the hall

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