

UNIT 17

WATER: WYLAND STYLE!
(ECOSYSTEM MURAL)

OBJECTIVES

- Students will be able to describe the diversity and uniqueness of a specific water ecosystem.
- Students will be able to describe at least one animal from this ecosystem in detail.
- Students will share their knowledge of this ecosystem through creating and completing a large mural.

SUMMARY

Students will work individually and in groups to research a water ecosystem. They will research one organism from this ecosystem in detail and depict this animal in a large group mural.

TIME NEEDED

1–5 sessions

MATERIALS

SCIENCE MATERIALS:

- Student activity sheets (SB pages 87–88)
- Students' field notebooks
- Eco Guides: What Is a ____, What Kind of Water
- Access to additional reference materials such as field guides, books, magazines, and the Internet

ART MATERIALS:

Supplies may vary depending on the age of the students and the type of material the mural will be painted on. If the mural is to be permanent (on a wall, for example), acrylic paint may be considered. However, tempera paint will work on a wall, but should be covered with an acrylic clear sealant upon completion.

- Variety of washable tempera paint or acrylic paint
- Variety of paintbrushes (sponge and bristle)
- Butcher paper, canvas, plastic banner material, or wall to paint on. (Butcher paper should be 36" wide and 15–20' long. Ideally the butcher paper, canvas, or banner should be hung on the wall, but it can also be placed on the floor or across several tables together. If canvas or banner is used, it can be mounted to a large wooden board for display. You can purchase blank banner material with grommets for hanging from a company that makes signs and banners.)
- Butcher paper for the floor, or a drop cloth (old sheet, etc.)
- Containers for the paint: egg cartons, ice cube trays, small cups, etc.
- Containers with water for washing brushes
- Paper towels
- White glue or cornstarch for thickening paint (if desired)

ACTIVITY INTRODUCTION

1. Ask students what they know about the particular ecosystem that they will be painting.
Have students read the “What Is a ____” and “What Kind of Water” sections of their Eco Guides. Tell students to write down a few interesting facts as they read. These should be things that are new to them or things they find interesting about that particular habitat.
2. Have students share their notes with a partner, and then lead students in a discussion about what they found interesting or surprising in the reading.
3. Tell students that they will be creating a mural that represents this ecosystem. They will each have a role in painting the background and the plants and animals that live there.
4. Read the art background information about painting and creating a group mural on pages 39–42 and 52–54.

EXPLORATION

1. Explain to the class that each student (or pair of students) will be responsible for researching an animal and adding that animal to the mural. See Wyland’s Tips for Drawing and Painting Animals on page 52. (They can either choose their animal from a class-created list or pick one out of a hat from a list created by the teacher.) Some students will also be needed to design the background/ layout of the mural. Don’t forget to assign some students to learn about the environment and plants in and around the ecosystem, as this mural should be a split image of both the above and below views of the ecosystem. See Wyland’s habitat images in the Eco Guides as examples.
2. Students should spend a few class periods researching their animals, completing the Animal Research student activity sheets (SB pages 87–88), and putting their research into a paragraph or essay. They also need to make contour drawings (outline and major features) of their animals.
3. Transparencies of the animal drawings can be made and used to project the images onto the mural background. They can first be drawn in pencil or marker and then be painted over with color. If using a projector is not feasible, students may draw their animals by looking at their sketches.
4. The mural can be created in many different ways, and this is the opportunity for students to apply the art techniques that they learned in previous activities.

Some suggestions for the mural project include the following:

- Have a few students design a basic background, and a rough sketch can be drawn on a piece of large construction paper. The animal drawings created by other students can then be photocopied to the appropriate relative sizes and placed on the background to create the composition of the mural. This mini-mural design can then be used to create the large mural.
- Create the mural more organically, where students design a background and compose the mural as they go along.
- If the mural is to be painted on a wall or canvas, it should be primed first. You may wish to use a light blue paint as a primer, but white or off-white will work as well.
- Students should review Units 5A and 5B “The Color of Water” before painting the background. The varying blue bands will make it look much more realistic!

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COMMUNICATION/ASSESSMENT

1. Have each student (or pair of students, depending on how it was organized) share their research and contributions to the mural with the class.
2. Students should respond to the following in their field notebooks:
 - a. Describe two interesting facts about two animals from the ecosystem mural.
 - b. Why is the ecosystem that we painted important?
 - c. How do humans impact the ecosystem that we painted?
 - d. How might the same type of ecosystem be different in another part of the world? Give three examples.
3. Student research paragraphs can be laminated, hole punched, and placed in a metal ring to be displayed with the mural. A contour drawing can be made of the mural and all animals numbered. The informational paragraphs can then be numbered accordingly. Student representatives from the class can do short presentations about the mural to other classes.

EXTENSION ACTIVITY

Students can do more detailed research on the particular ecosystem that you are studying. They can compare/contrast the same type of ecosystem in different locales around the world. Students can work in groups to develop a presentation in the style of a TV report, explaining the uniqueness of the area, including any human impact issues. Students can also paint a “transition” mural that shows the same type of ecosystem in different parts of the world. The mural would blend from one locale to the other, showing how the flora and fauna differ.

NAME:

DATE:

1. What is the name of the animal that you will be painting on the mural?

2. Describe what your animal looks like.

3. What size is your animal? (How long is it? How much does it weigh?)

4. Do males and females of this species look different? If so, describe these differences.

5. What does your animal eat? (What is its prey?)

6. What animals eat your animal? (What are its predators?)
