

A TREASURE IN THE SEA EDUCATION GUIDE

"Artists can translate the science so that everyone can understand it." —Joan Takayama-Ogawa

LESSON OVERVIEW

In this lesson, students are introduced to artist Joan Takayama-Ogawa, whose recent ceramic sculptures highlight the effects of climate change on nature. Students learn about coral reefs, and how the reefs are affected by warming oceans and climate change. While constructing creative representations of coral through sketching and from clay, students learn how coral is formed and how it can become bleached by warming oceans and thus be in danger of dying. Students create representations of coral, choosing between a realistic or an exaggerated style, collaborate to arrange a "reef" of the finished pieces, and add infographics about coral reefs and their survival. The reef is displayed in school, serving as a model to teach others about the value of coral reefs and the effects of climate change on the reefs.

Grade Level: 1-5

Estimated Time: four to five class periods

Craft In America Theme/Episode: SCIENCE

Background Information

Artist Joan Takayama-Ogawa is an accomplished sansei, or third-generation Japanese American. Building on her family's rich creative history, she studied under the renowned Ralph Bacerra and went on to develop work that used ancient Japanese ceramic forms as a guide in creating contemporary pieces that utilize decoration and imagery of an American lifestyle. She continues to push the boundaries of ceramics by integrating clay with digital and rapid prototyping technologies. She served as a Pasadena Design Commissioner and on the Board of Directors, American Museum of Ceramic Art. Takayama-Ogawa has published over 30 books and magazines, and in 2004 she was Otis Teacher of the Year and Commencement Speaker.



Key Concepts

- Artists can make artworks that are designed to teach.
- Artists can create art about nature that is realistic or fanciful and exaggerated.
- Artists can experiment with clay to model textures found in nature.

Objectives

Students will:

- understand that artists can make artworks that are designed to teach.
- create a realistic or fanciful/exaggerated representation of coral that is designed to teach about coral reefs.
- experiment with clay to sculpt and add texture to a model coral colony.



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National Standards for Visual Arts Education

This lesson addresses the following standards. The performance standards listed here are directly related to the lesson's goals.

• Creating:

Anchor standard 1: Generate and conceptualize artistic ideas and work.

VA: Cr1.1.1a

Engage collaboratively in exploration and imaginative play with materials.

• Presenting:

Anchor standard 5: Develop and refine artistic techniques and works for presentation.

VA:Pr5.1.3a

Identify exhibit space and prepare works of art including artists' statements, for presentation.

• Responding:

Anchor standard 7: Perceive and analyze artistic work.

VA:Re.7.2.2a

Categorize images based on expressive properties.

• Connecting:

Anchor standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.

VA: Cn11.1.1a

Understand that people from different places and times have made art for a variety of reasons.

Worksheets

- Worksheet 1: A Treasure in the Sea
- Worksheet 2: Corals and Zooxanthellae Are Friends
- Worksheet 3: Our Coral Reef is Sick!

Materials

- Sketchbooks
- Pencils, markers, crayons
- Paper punches
- Scissors
- White clay (*Note: If clay and kiln are not available, other options are air-dry clay, oil-based clay, which remains pliable and is not fired, or a salt dough recipe that can be baked in an oven.)
- Slip (equal parts clay and water, used to glue clay pieces together while building.)
- Clay tools
- Kiln
- White glue
- Paintbrushes
- Watercolor paints, Tempera paints
- 8 ½ by 11-inch paper for making signs
- Colorful papers for creating algae/zooxanthellae, fish, turtles, seaweed, etc.
- Sets of alphabet stamps, up to about 3/8 inch in height, are useful for marking student names or initials on the base of the clay sculptures.