



Twelve Gardens of Stewardship

Online Curriculum Example from 'Learning to Give'

Garden of Creation

Lesson: 'What's In the Water?'

(Grade levels K-2)

Purpose:

The purpose of this lesson is to motivate children to think about the ocean, it's animals, pollution, and how to be environmental stewards by taking care of the habitat where these plants and animals live. Children will have a hands-on experience to help them understand how pollution and waste affect the ocean environment.

Duration:

Two Days - Thirty to Forty-five Minute Class Periods

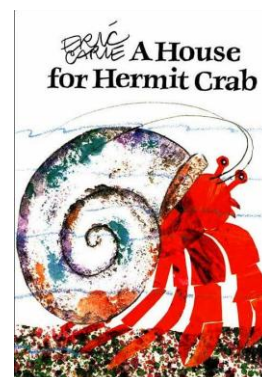
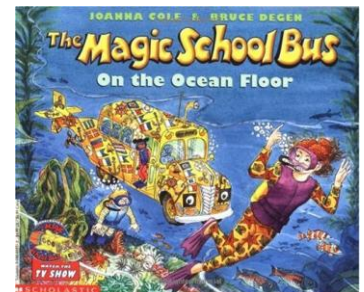
Objectives:

The learner will:

- classify living and non-living things.
- define stewardship as the careful and responsible management of something entrusted to a person's care.
- understand that the way people live affects the environment.
- define pollution as causing harm to an area of the natural environment.
- understand some types of pollution.
- understand that all living things have life requirements.

Materials:

- *The Magic School Bus on the Ocean Floor* by Joanna Cole and Bruce Degen (1992)
- Video: *The Magic School Bus On the Ocean Floor* (Optional)
- *A House for a Hermit Crab* by Eric Carle (1987)
- Chart paper
- Drawing paper
- Markers, crayons, colored pencils
- Large Plastic Tub
- Oil (Vegetable or Canola)
- Bits of scrap paper
- Fishing line



- Dirt and/or sand
- Paper products
- Plastic eating utensils
- Cotton balls

Instructional Procedure(s):

Day One:

Anticipatory Set:

*To begin this unit read the book *The Magic School Bus on the Ocean Floor*, discuss the facts the children learn about the ocean. Use a KWL Chart to document what the children know, what they want to know and what they have learned. Keep this chart posted on the wall during the course of this unit. Encourage the children to think about what would happen to the plants and animals if the ocean became dirty or polluted. Tell the children that taking care of something that belongs to everyone is called stewardship. It is everyone's responsibility to help take care of the oceans.*

- Define pollution as dirt or waste that causes harm to the natural environment. Ask the students to brainstorm pollution they might see around their school or home.
- Tell the children that you are going to demonstrate how pollution affects the ocean and things that live in it. Fill a large container with water. Talk with the children about the clean water and ask them what they know about clean water. Relate it to the ocean.
- Begin pouring oil (vegetable, canola, whatever oil you have on hand) into the water, talk about pollution of the oceans. Ask the children what would happen to the plants and animals that live in the ocean if things that did not belong there were put into the ocean?
- Add other "pollutants" (e.g., paper, fishing line, dirt, paper products, plastic eating utensils, whatever you have on hand) and mix the water so that it becomes somewhat murky.
- Give each child a cotton ball, and ask them to pretend the cotton ball is a seal, turtle, fish or dolphin. Have the children run a cotton ball through the water.
- Ask them what happened to their "ocean animal" (The oil and some of the debris stayed on the cotton ball). Have the children discuss what might happen to the animal. (It might not be able to breath or swim.)
- Help the children define stewardship. (the careful and responsible management of something entrusted to a person's care) Explain that by helping take care of the oceans and other waterways they are acting for the common good and are demonstrating good stewardship of the Earth.
- Discuss ways in which the children can take care of the ocean. (By not littering, picking up things that don't belong on the beach, using products that have less packaging materials, etc.)

Day Two:

Anticipatory Set:

Review the information that was discussed during Day One. Be sure to recall the definitions of stewardship and pollution. Tell the students that today you are going to read another story. This story is about a Hermit Crab who needs a new home and some of the problems he has with change.

- Discuss the story with the students. The teacher will ask the children what ocean animals need to survive. The children may or may not know that ocean animals need many of the same things that people need to survive. (food, water, shelter)
- Make a chart to compare and contrast what people need to survive and what ocean animals need to survive. Discuss the results of the chart, and why it is important for the ocean animals to have these necessities. Ask children what would happen if they didn't have the necessities they needed to stay alive.
- Give the students a piece of drawing paper. Tell them that you want them to create a picture to put in a class book that explains how people can keep the ocean clean, or what pollutants do to the ocean animals.
- Children should write or dictate at least one sentence explaining their art work.
- Collect the children's art work and create a class book. Ask each child to share their page of the book with the whole class.

Assessment:

The teacher will evaluate this project by using a rubric to grade each child's page in the ocean book. (See **Attachment One: Rubric For Assessing Ocean Book**)

Bibliographical References:

1. Cole, Joanna and Bruce Degen. *The Magic School Bus on the Ocean Floor*. Scholastic Press (1994). ISBN: 0590414313
2. Carle, Eric. *A House for a Hermit Crab*. Aladdin (2005). ISBN: 1416903097

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The Stewardship website, Learning to Give, offers a wide variety of lesson plans which may be used to incorporate the Twelve Gardens of Stewardship into your curriculum. Though philanthropy is the filter for many of these lesson plans, you will find a large number of appropriate choices and useful ideas to adapt to your needs. Visit LearningToGive.org.

Attachment Follows: *Rubric For Assessing Ocean Book*

Learning To Give Lesson: 'What's in the Water?'

Rubric for Assessing Ocean Book

| | All three are present | Two of the three present | One of the three present | None Present |
|---|-----------------------|--------------------------|--------------------------|--------------|
| Picture is clear and age appropriately developed depicting how people can keep the ocean clean or what pollutants do to the ocean animals | | | | |
| Written or dictated description of ocean pollution or stewardship | | | | |
| Picture uses color | | | | |
| Student verbally shares and explains their artwork to classmates | | | | |
| Total Score | 4 | 3 | 2 | 0 |