Title of Lesson: Freddy the Fish - Water Pollution

Theme: Life Science

Unit Number: Unit Title: Pollution and Conservation

Performance Standard(s) Covered (enter code):

S3L2. Students will recognize the effects of pollution and humans on the environment.

a. Explain the effects of pollution (such as littering) to the habitats of plants and animals.

Enduring Standards (objectives of activity):

Habits of Mind

☐ Asks questions
☐ Uses numbers to quantify
☑ Works in a group

☐ Uses tools to measure and view
☐ Looks at how parts of things are needed
☐ Describes and compares using physical attributes
☐ Observes using senses
☐ Draws and describes observations

Content (key terms and topics covered):

Pollution

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Students will learn about the effects of water pollution through the tale of Freddy the Fish.

Details:

Before class, cut a fish shapes out of a sponges. Tie each "Freddy the Fish" to a pencil using string and a small weight to him so he will be able to sink. Bring all the materials to class and place only the one galloon glass jar with Freddy the Fish hanging in the middle on the activity tables. Keep all other materials with you and pass them out as you read the story.

Divide the children into groups of 4-5 students. At each table place a gallon glass jar with Freddy the Fish hanging in the middle. Have the students observe how clear the water is and the physical appearance of Freddy the Fish. Then have a student from the first table read the first part of the Freddy the Fish story. After the first part of the story has been read, give each table the pollutant material and have the students add the material to the jar. Ask the students to pull Freddy the Fish out of the jar in order to observe and describe his appearance. Continue this procedure until all parts of the story have been read.

Have students observe, discuss, and record their observations. What can we do to help keep Freddy the Fish happy and healthy?
Materials Needed (Type and Quantity):
- The story of "Freddy the Fish" by Cyndi Barr
- Sponges (better results if the sponge color is white or a light color) - 1 per group
- Fishing line or string
- Light weights (washers, coins, rocks, etc.) - 1 per group
- Soil
- Syrup
- Paper dots
- Salt
- Brown sugar
- Soapy water
- Red and green food coloring
- One gallon glass jar (or other clear container) - 1 per group

Notes and Tips (suggested changes, alternative methods, cautions):
- Tip: If you can't find Cyndi Barr's book, make up your own Freddy the Fish story!

Sources/References:
1) "Freddy the Fish" by Cyndi Barr
3)