Water Pollution!

Lesson Plan Created by Janie Anderson



Overview: The student will be able to understand the harmful effects of water pollution and what they can do to prevent it.

Subject: Environmental/health science

Grade levels: 6th grade and above

Suggested Time: 1-2 hours (depending)

Objectives:

- 1. Types of water pollution.
- 2. What causes water pollution?
- 3. What are the dangers of water pollution?
- 4. How to prevent water pollution.

Materials:

- Clear container
- ➤ Modeling clay
- ➤ White sand
- > Small rocks
- > Straw
- > Spray bottle
- > Green felt
- Cocoa
- ➤ Food coloring
- > Pipette

- Water bucket and cup
- Scotch tape

Note: If you view the link for the in-class activity there will be more specific measurements of how much of each for the materials listed above.

Online Resources:

- http://www.water-pollution.org.uk/: This website is essentially what I used to compose the fact sheet for the lesson plan. There is plenty more information on the site if you wish to use it more and explore all the options!
- http://www.chewonki.org/cleanwater/water pollution.asp
 Has compiled some great websites for more information on water pollution as well as sites specifically for teachers to use!
- http://www.bouldercolorado.gov/files/Utilities/WatershED/POLLUTION.pdf :This is a little activity guide that give a brief overview of water pollution and the two types: point source and non-point source pollution.
- http://www.education.com/activity/article/observe_water_pollution_first/ :Great class activity if you wish to use for water pollution, and is a great source for any future ideas you may want to explore for future lesson plans!
- http://water.epa.gov/learn/kids/drinkingwater/waterfactsoflife.cfm :This is included on the facts sheet, and is a great little list of facts that the students will hopefully enjoy and be able to impress their family and friends with all their knowledge!

Book Resources:

"Water Pollution" by Mary Ellen Snodgrass

In-Class Activity:

Build Your Own Aquifer! http://www.epa.gov/safewater/kids/flash/flash aquifer.html

This is the website that provides an interactive step by step instruction to create an aquifer. It also provides questions at the end for the class to ponder after completing the in class activity. It encourages the students to possibly explore the processing of water and the other things that may pollute ground water, as well as encourages students to get out into the community.

Homework: Ask your students to travel to a local stream and clean up any trash along the banks. Ask them to take pictures before and after (if possible), or even if they can draw what they saw before and after and have them give their feelings about the experience by having a class discussion. This can be made into a bigger project or it can be an informal thing for the students to participate in.