

Water Pollution



Suggested Grade Level: Kindergarten

Materials

- Pitcher of dirty water
- Pieces of trash
- Spoon
- Large dark color bed sheet
- Crayons
- 2 pictures of each water problem or solution for a matching memory game
- Plastic zipper bags
- Puppet of a fish
- Chart paper

MIG

Science: Develop an understanding that all living things require water for survival. Ask questions and make observations relating objects, organisms, and events in the environment.

Art: Movement

Math: Sort objects by size or other attributes.

Measurable Objective

Each student will verbalize to the teacher how he or she could personally help the water pollution problem.

Anticipatory Set

1. Take a big glass or pitcher of dirty water and hold it up in front of the students.
2. Say to the students, "I was going fishing the other day and got really thirsty so I got this pitcher of water. I thought you guys might want some so I brought some for you today."
3. Continue by saying, "As I was walking along the bank or side of the river, I saw this trash and thought to myself I'm pretty sure this belongs in the water."
4. Put some trash in the pitcher of dirty water and stir it with a spoon.
5. Ask them if they would like some and say, "It sure looks good."
6. Act like you are taking a drink and then act like it is awful. Say something like, "This is the sickest water I think I have ever tasted!"



7. Say to students, "Let's ask my friend Fred the Fish what he thinks about the water since it is his home." (Pull out a puppet of a fish).
8. Say, "Hey boys and girls, my name is Fred the Fish and quite frankly I am sick of my home. I have trouble seeing, breathing, and eating because the water I live in is getting polluted by all the chemicals and trash from people making it unclean or dirty. Just the other day I got caught in this (show a soda bottle plastic ring). Would you like to live in a place like this? Well, I have to go now. I hope you can help me solve this problem."
9. Get out the dark bed sheet and ask for eight volunteers. Have them hold the blanket, 2 on each side. The remainder of the class will get under the blanket. They will act like Fred the Fish and see what it is like to swim when it is hard to see because of the pollution. Turn off classroom lights also if it won't make the room too dark.
10. Rotate blanket holders and fish after a few minutes.
11. When done ask students if it was difficult to swim around.

Instructional Input

Prior Knowledge: Know and understand the word pollution.

Procedure:

1. Ask questions like: What caused this water pollution? How did it get this way? How are we going to solve this problem?
2. Chart student responses on paper along with their name.
3. What kinds of things do your parents put on your grass to make it grow and look nice?
4. Say, "If not used correctly, chemicals that help grass grow and kill bugs and weeds can be washed into streams when it rains. When this happens, Fred the Fish and his family and friends get really sad as well as the other fish, animals, and people like you and me."
5. Tell students they are going to play a memory matching game. Take pieces out of plastic zipper bags and show to class laying them out on the floor.
6. Two pictures will match, ex. chemicals with an X through the picture showing you shouldn't use too many chemicals that could pollute water. Show how the game is played by flipping all the matches over so you can't see them. Then you flip one card up, see what it is, flip up another and see if they match. If they do, pick up the match



and go again. If there isn't a match, flip it back over and try again.

7. Each student will receive their own bag of pictures. Have students go back to their desk and color the pictures so that they are the same. Reiterate that the pictures need to be the same. So if they color this piece of trash green, then the match needs to look the same way.

Modeling

- Model how to act like a fish.
- Model how to play the game and color.

Checking for Understanding

- Walk around the room and listen to students and see if they are doing what they are supposed to. Ask if they have any questions.

Guided Practice

- Assisting as needed with the cards.

Independent Practice

- Students playing their water pollution matching memory game.

Closure

- Are there any other solutions or ways we can help? Add to chart if there are.
- Reiterate why it is important to keep our water clean.

Evaluation

- Check to see that each child told the teacher how they could help solve the water pollution problem.

*Lesson plan compiled by Tiffany Terwelp, an Earth Team Volunteer and Early Childhood Education student at Missouri State University, Springfield, MO.
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