

Pollution Lab Experiment Outline:

Materials needed for set up:

- 1 tbsp. measuring spoon
- 6 glasses or cups
 - each filled with 5 tbsp. of clean water
- Food Coloring (try not to use yellow; it doesn't show up very well. Red/green are best)
- Paper Towels/rags

Goal:

To determine what happens when a liquid based pollutant (ex. Oil) enters a body of water.

The Activity:

-Take your tablespoon and fill it half way with clean water and add 3-4 drops of food coloring. This tablespoon is the concentrated oil spill. The first person will pour the contents of the graduated tablespoon into the first beaker.

-Make observations: what happened, what does it look like?

-The next person will pour 1.5 tbsp. of water from the now polluted first beaker into the second beaker.

-Make observations: What does it look like? Was there a color change? What does that mean for the cleanliness of the water?

-Repeat this process with the four remaining beakers, pausing after each beaker to reflect on what is happening.

-Reflection: What do you think the results indicate? Is the water clear? Does that mean it's clean? Do you think you'd be able to tell that this water is dirty if you didn't have the other beakers to compare it to/ if you didn't know it was being polluted?

-Critical Thinking: How might this apply to/affect a marine environment and marine life? How might this affect us? Who creates pollution, where does it come from? (Answer: People. That's good news because if we, as people, are the reason behind pollution, that means that it is something that we can work to fix and prevent. We are all responsible for doing our part. I'm asking all of you to do one thing. Go tell at least one person that didn't participate in this activity about what you learned today. You can tell your friend in another class, mom, dad, brother/sister, anyone! And after you teach them about what you've learned, encourage them to tell at least one other person about it too, and so on.)

How long 'till it's gone? Do you know how long it takes these items to break down in the environment?

1. Paper Towel

A. 2-4 weeks B. 2 Months C. 6 Weeks D. 50 years

2. Plastic Bottle

A. 450 years B. 1-20 years C. 2 Months D. 50 years

3. Apple Core

A. 3 months B. 2 months C. 50 years D. 200 years

4. Tin Can

A. 400 years B. 6 months C. 2-4 weeks D. 50 years

5. Fishing Line

A. 1-3 years B. 600 years C. 400 years D. 6 weeks

Conclusion:

We are all responsible for keeping our environment, especially the marine environment, clean. Thank you for taking the time to learn a little more about marine pollution and how you can be part of the solution!