



Oil Spill Cleanup

Activity adapted from: <https://learning-center.homesciencetools.com/article/water-pollution-demonstration/>

Materials:

- Empty cardboard egg carton;
- Water;
- Food coloring;
- Flaxseed meal or another powdery substance;
- Paper towels;
- Tray to place under the egg carton

Instructions:

1. Fold several pieces of paper towel and place them on a tray. Place a cardboard egg carton on top.
2. Pour water into one of the cups at the end of the carton and watch as the water moves through the cups. Stop pouring once all egg cups are full.
3. Pour one teaspoon of flax meal or ground cinnamon into one of the end cups. Observe where it moves.
4. At the opposite end of the carton, add 10 drops of dark food colouring (red, blue, or green). Give the cup a stir and observe where the colour moves.
5. Add three tablespoons into a middle cup and stir. See how long it take for the salt to dissolve completely.
6. At the end, get students to try to remove the contaminants from the water. The egg cups represent bodies of water, like rivers, lakes and oceans and how they are connected to each other. Reflect on the difficulties between removing larger objects from the water vs. substances that are dissolved (like the food colouring) and how easily the contaminants moved between cups or “water bodies”.
7. Remove the tray and look at the paper towel beneath. This represents the groundwater. What contaminants were able to seep through the “soil” and into the “groundwater”. How could those contaminants be removed? Talk about the implications of contaminants getting into the groundwater.
8. Watch “The Great Picnic Mix Up: Crash Course Kids” to learn more about what processes are going on in this experiment and the difference between a solution and a mixture.
<https://www.youtube.com/watch?v=jA0PzbiYPUM>