



RIVER RANGERS: **Detecting Water Contaminants**

The tub represents a clean, crystal clear lake. The fish that live in the lake are happy, humans can swim in it, and mammals can drink from it. However, people keep coming to the lake and polluting it!

Let's learn about the ways people are polluting our lake.

Vegetable oil: (Cub Scout's name who chose this) works as a mechanic in a car repair shop. He/she spends a lot of time changing the oil in cars, so there is a lot of used engine oil. It costs a lot of money to properly dispose of the oil, so he/she dumps it in the lake instead. Is this good for the lake?

Salt: (Cub Scout's name who chose this) works at a golf course. The salt represents fertilizers that are used on golf courses, lawns, and farm fields. They are important for helping grasses grow, but they sometimes can travel down through the soil and end up in water, like our lake.



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Food coloring: (Cub Scout's name who chose this) works at a chemical plant. Chemicals are used a lot in America. We use them to do many things, but often need them to keep insects and weeds off of our lawns, golf courses, and farm fields. Just like fertilizers, these chemicals can travel through the soil and get into our water, like the lake.

Laundry soap: (Cub Scout's name who chose this) owns a laundromat next to the lake. Sometimes, soap and suds leftover from his/her washing machines drain into the lake.

Trash: (Cub Scout's name who chose this) and his/her family comes to the lakeshore to have a picnic, but it is a blustery day. The trash from their picnic flies away in the wind and ends up in the water.



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Paper: While driving by the lake, (Cub Scout's name who chose this) had his/her windows down. A gust of wind blows several receipts from stores and a letter into the lake.

Soil and rocks: The biggest pollutant of our water is soil! (Cub Scout's name who chose this) lives close to the lake. He/she recently removed the trees and shrubs bordering the lake, so now when it rains, the exposed soil runs into the lake! This can clog fish gills, stop underwater plants from photosynthesizing, and smother smaller water-dwelling creatures.