



#7: Water & Oil

Materials Needed*:

- One plate per child
- Thin layer of oil (baby or vegetable) that just covers the bottom of the plate
- Pipettes (Can be purchased here: <http://www6.discountsschoolsupply.com/Product/ProductDetail.aspx?product=00106&Category=#>)
- Cups with water (made different colors using food coloring)
- Food coloring

***This materials list has an external link, these materials are available from a variety of vendors, this is just one example**



“Ernie Earth—back again! It sure does make me sad when people don’t take care of the planet—I mean, don’t take care of ME! However, I do understand that unless you know how your actions are affecting the world around you, it’s hard to have the knowledge to do the right thing.”

In this experiment we’ll be seeing first hand how some choices can have a big negative impact on the earth (you know, ME!)

Our experiment today has to do with oil and water. Did you know that oil sometimes gets dumped into the water? What do you think happens when that occurs? Today we’re going to find out!”

Oil and Water Experiment:

- Start with a plate that has a bit of oil on the bottom
- Pick up a pipette and use it to suck up some water from one of the cups
- Practice carefully dripping the water back into the cup
- Are you comfortable with that? Time to put some into the oil!
- Carefully drip a few drops of water onto the plate of oil

- What happens?
- Do they want to mix?
- Keep dripping water into the oil! What kind of designs can you make?



Example of some oil with water drops

How does it work!?

Water and oil are immiscible which means that they never, ever want to mix. You can try mixing your water into your plate of oil, but it won't really dissolve—or completely disappear—it'll just become smaller and smaller bits of water within the oil.

How does this relate to the oil that gets dumped into rivers, oceans and other waterways?
How does that have a negative impact on the earth?



“I’m happy that we now have another group of educated young scientists that can help protect water and all the plants and animals that make that water their home!”

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