

Praxis “Making Science Fun”

Ice and Oil

You’ve heard that oil and water don’t mix and you know ice floats on water but will ice float on oil?



Materials:

- A small plastic yogurt container or ice cube tray
- A clear container such as a jar or large glass
- Food colouring
- Cooking oil
- water

Procedure: (Remember to be sure to have your parent’s permission and they have the time to watch and help as you do your experiment.)

1. Using some food colouring, dye the water and then put it in the yogurt container or ice cube tray. Put this in the freezer overnight.
2. Fill the clear container $\frac{3}{4}$ full with cooking oil.
3. Take the coloured ice and carefully add it to the oil (you don’t want to splash the oil onto the counter.)
4. Watch what happens as the ice melts.

What's happening?

Ice floats on oil but oil floats on ice. As the ice melts the coloured water sinks below the oil. The ability of one substance to float on another is called its density (grams per cubic centimeter) and lower density things will float on higher density liquids.

Extension:

The ice floating on water is necessary for life to exist. If ice didn’t float it would sink to the bottom of our rivers, streams, ponds and lakes which would then freeze solid. The floating ice allows the life underneath to survive.

This experimental activity was one of many based on our “Boats and Buoyancy” grade 2 Learning Kit. Our teaching kits are loaned out for FREE to help give classroom teachers and parents of home schooled children an opportunity to explore Science in interesting ways. Please consider volunteering to speak to a class about any one of our Science learning kits described on our website. Or consider volunteering to help out at one of our community events such as the Family Science Olympics on October 15, 10:00 am – 3:00 pm in the Taylor Science Wing of MHHS (5th Street entrance). We would be most appreciative to hear from you.

Lorne Cooper, Regional Executive Director

PRAXIS, “Making Science Fun”. Contact Praxis at praxis@praxismh.ca, www.praxismh.ca, Tweet or follow us @ PraxisMedHat, or friend us at Praxismh on Facebook. Address: c/o 200 7th Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.