

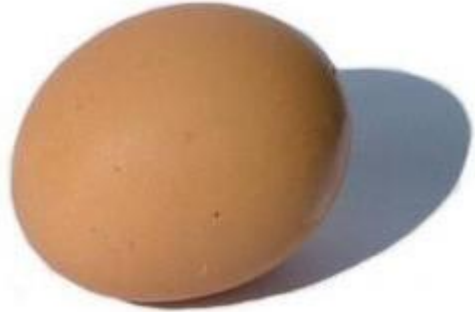
Praxis “Making Science Fun”

Salt Water Float

Will materials dissolved in water affect buoyancy?

Materials:

- One egg
- A clear container such as a jar or a tall glass
- salt
- 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. Pour water into the glass until it is half full.
2. Stir in lots of salt (about 6 tablespoons).
3. Carefully add more plain fresh water into the glass until it is nearly full. Try not to disturb or mix the salty water at the bottom and the fresh water.
4. Using a spoon gently lower the egg into the water and watch what happens.

What's happening?

Salt water is denser than ordinary tap water; the denser the liquid the easier it is for an object to float in it. Its higher density means that its buoyancy force is greater than that of normal water. When you lower the egg into the liquid it drops through the normal tap water until it reaches the salty water, at this point the water is dense enough for the egg to float. When you added the tap water to the salt water and were careful not to mix the two waters, the egg was buoyed up by the salt water and appeared to float in the middle of the glass.

Extension:

I remember a story of a person who learned to swim in Little Manitou Lake, Saskatchewan. It is a salty mineral water lake which is 5 times more concentrated than ocean water. He couldn’t understand why he had so much trouble floating in the fresh water lake? The water is so buoyant, it’s impossible to sink! You can float effortlessly all day long. See www.watrousmanitou.com for more information about this amazing little lake.

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 recently held Family Science Olympics which was on October 15. 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.