



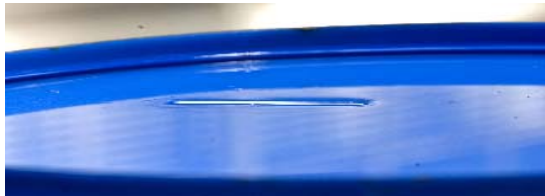
Hey Kids!
Here's some cool stuff to help you learn about one of Earth's most precious resources -- **WATER!**

Here's another experiment you can do at home in the kitchen sink!

FLOATING A NEEDLE...

Here's what you need.

- a small to medium-sized needle.
- a bowl or plate or container into which you can pour clean room temperature water at least 2 inches deep.



TRY THIS:

Pick the needle up by both ends -- gently place it on the surface of the water. No success? Tear a piece of tissue paper a bit larger than the needle and gently place it on the surface. Put the needle on the floating tissue and pull the paper away from beneath the needle.

And the explanation is...

Water molecules like each other -- the atoms are joined in a special way. They're like you and your friends -- they stick together. They have what is called cohesion -- a force that holds the hydrogen and oxygen atoms of the water molecule together.

This force between/among water molecules on the surface is very strong because the water molecules are next to air which is made up of different atoms. You can think of it this way -- if you and your friend go to a picnic where there are lots of strangers, you're most likely to stick together than jump into the middle of the group and make new friends. So, even though you are all human beings, you prefer to stick with each other in a crowd of others. Water molecules do the same thing. On the surface, they stick together very closely as you've seen and proven with this experiment.

We call this property of water **SURFACE TENSION**, and next month we'll learn about another way water behaves that demonstrates this incredible property of water.

Look carefully at this picture of a needle floating on water (left). Notice the shadow and the indentation of the water's surface showing the curvature of the water. Now look carefully at the Water Strider (below). Do you see the curvature on the water's surface that the four feet create? Could what is happening to the water's surface in both pictures be explained by the same property of water?



**I turn on a 3-minute song...
I stand in the shower and sing along.
I know the words by heart...
So I know when it's time to start..
As the song ends, rinse -- then
turn off the tap...
That's a rap!!**