Pepper on Parade

Send some pepper scurrying with a drop of soap!

What You Need:

- Bowl
- Water
- Pepper
- Dish soap

Instructions:

1. Sprinkle a dash of pepper in a dish of water.
2. Add a drop of liquid dish soap and watch what happens.
3. The pepper scurries away from the soap. Maybe it just doesn't like baths!

Actually, the soap breaks the surface tension of the water and the tension on the rest of the water pulls the floating pepper away from the soap. Neat!

As my children worked on adding drops of water to their pennies, I **explained** to them what **surface tension** is. The water molecules hold on tightly to each other. They don't want to separate. They especially cling to each other at the **surface** because there is no water molecule on the other side of them to grab on to.May 11, 2012

My children were absolutely amazed with the dome of water they created on their pennies. However, they repeated the demonstration over and over again not to see the dome but to see which one of them would make the water spill on to the table first. What fun we had!

he soap didn't change the pepper. The soap changed the water's surface tension. This is why soap works! Soap causes the water molecules to relax and not hold on to each other so tightly. That is why soap cleans you and can get stains out of your

clothes. 

Lift an Ice Cube with a Piece of String!

What You Need:

- Glass of water
- Ice cube
- Piece of string
- Salt shaker

Instructions:

1. Hand your friend a glass of water with an ice cube floating in it, a piece of string, and a salt shaker, and ask him to lift the ice out of the glass without touching it. Sound impossible? It's not, here's how you do it.
2. When your friend gives up, take the string and lay it across the ice cube. Sprinkle a dash of salt onto the ice and wait for about a minute. Now, pull the string, and out comes the ice cube!

Why?

Salt lowers the freezing point of the ice, making it melt. At the same time, the ice tries to take heat away from the string which causes it to freeze to the ice cube. This is why people put salt on icy sidewalks and roads– it melts the ice.