Float a Paperclip on Water







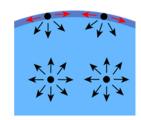
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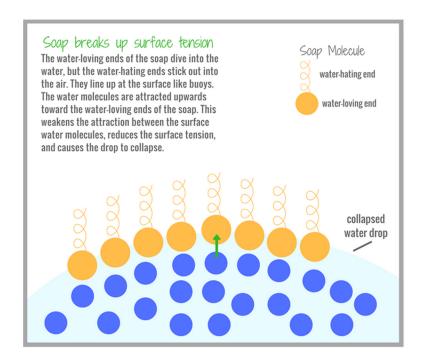
Materials:

- 1 Paperclip
- 1 Cup of Water
- Liquid Soap



Instructions:

- 1. Give each group 1 paperclip and 1 cup of water
- 2. Have them try to float the paperclip on top of the water
- 3. After the paperclip is floating have them gently add some liquid soap and see what happens.



Potential Variations:

Might need to use some tissue paper to help gently lower the paperclip onto the water surface.

The Science:

Due to the cohesive forces, a molecule located away from the surface is pulled equally in every direction by neighboring liquid molecules, resulting in a net force of zero. The molecules at the surface do not have the same molecules on all sides of them and therefore are pulled inward. This creates some internal pressure and forces liquid surfaces to contract to the minimum area.



