Floating Paper Clip

Lesson: Surface Tension

Materials Needed:

- Paper clips
- Toilet paper
- Cups*
- Liquid soap*

*Teacher provides these items or student brings from home.

Steps:

- Fill a cup with water. Be sure there is no soap residue in the cup.
- Place a piece of tissue or toilet paper, big enough to support the paper clip, on the water.
- Gently place the paper clip horizontally on top of the tissue so that the tissue supports the paper clip.
- Gently submerge the tissue by pushing down on the tissue from its edges. Do not touch the paper clip; observe what happens.
- If the paper clip remains on the surface of the water, add one drop of soap to the water where the paper clip is suspended. Observe what happens.
- Repeat steps 1–4, but this time, add one drop of soap to the water before adding the tissue and paper clip. Observe.

Discuss:

- What happens when you first place the tissue on the water?
- What happens when you place the paper clip horizontally on the tissue?
- When the tissue is submerged, does the paper clip remain on top of the water? Why or why not?
- What happens when you add soap to the water?