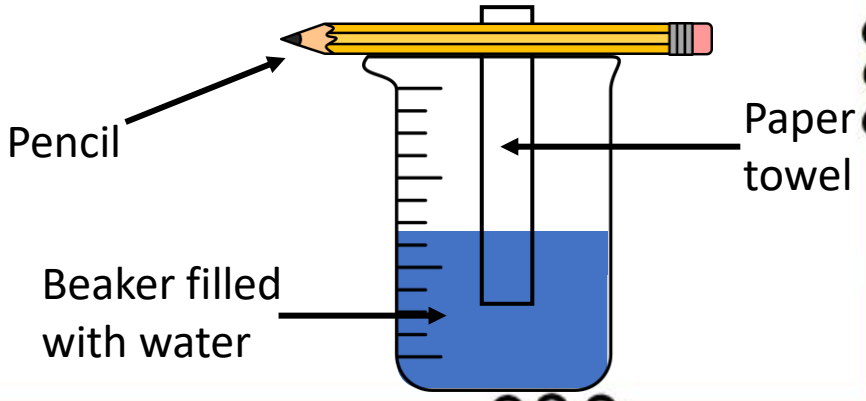
Investigating the Properties of Water

LAB STATION 1:

1. Cut a strip of paper towel.
2. Tape the strip of paper towel to a pencil so that the paper towel hangs down.
3. Fill a beaker with about 25 ml of water.
4. Place the pencil with the paper towel strip over the opening of the beaker so that the end of the paper towel strip touches the surface of the water.
5. Make observations.
6. Throw away the paper towel



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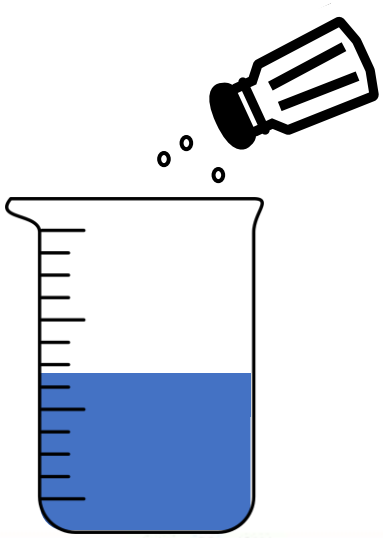
LAB STATION 2:

1. Fill a beaker with 150 ml of water.
2. Add a small amount of salt to the water and stir.
3. Make observations.
4. Pour out water down the sink.



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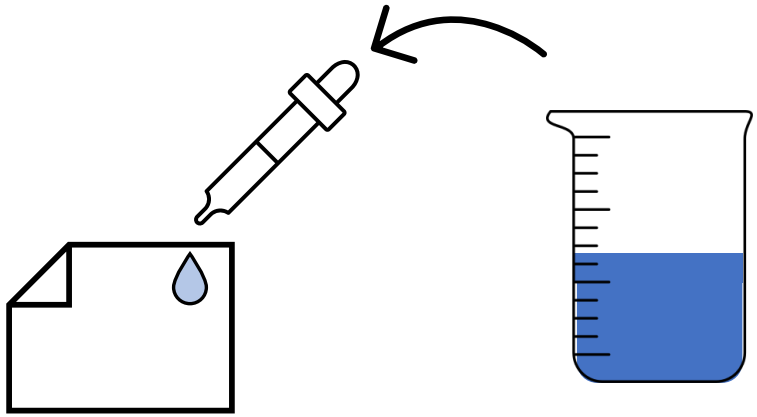
LAB STATION 3:

1. Using a pipette, place a small droplet of water onto the wax paper.
2. Carefully tilt your paper back and forth and observe the behavior of the water droplet.
3. Dry the wax paper and throw away paper towels.



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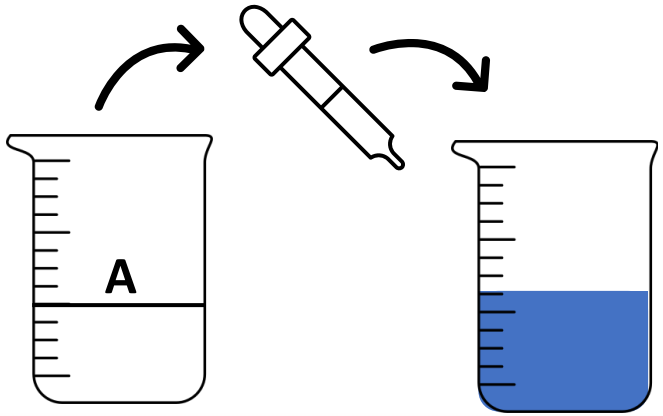
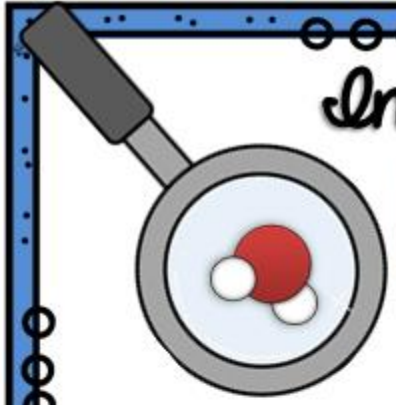
LAB STATION 4:

1. Fill a beaker with 200 ml of water.
2. Place three drops of food coloring into the water and stir to combine.
3. Using a pipette, add 10 drops of substance A into the beaker of water.
4. Observe what happens.
5. Pour water mixture down the drain and rinse the beaker.





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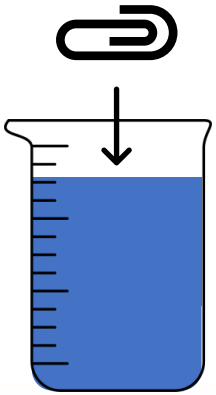
LAB STATION 5:

You should have a beaker filled with water and a paperclip.

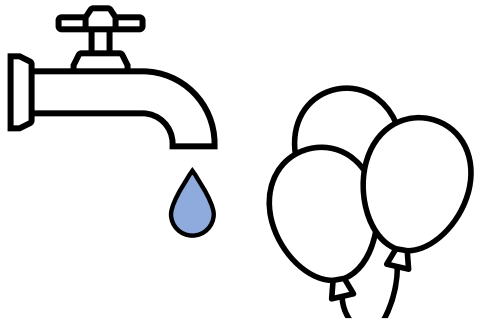
1. Carefully place the paperclip on the surface of the water.
2. The paperclip should stay on the surface.
3. Try until you succeed.
4. Take out paper clip and dry any water.
5. Throw away any paper towels.



Investigating the Properties of Water

LAB STATION 6:

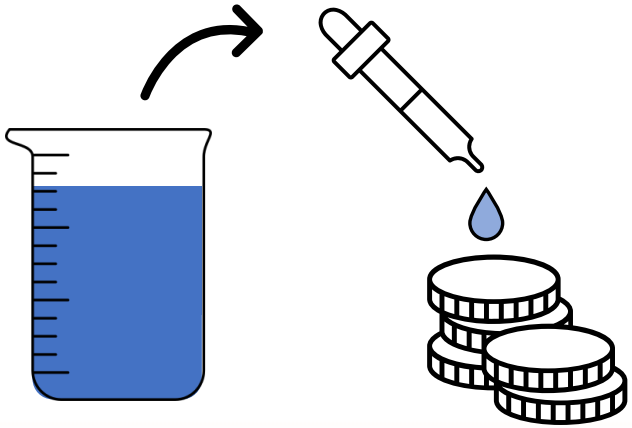
1. Take 1 balloon and inflate it (if it isn't already).
2. Gently rub the balloon against your clothing to create static electricity.
3. Using the faucet at a sink, turn on the water so that a SLOWLY running stream of water exits the faucet.
4. Bring the balloon close to the stream of water but **do not allow the balloon to touch the water.**
5. Make observations.
6. Dry off balloon if it got wet.



Investigating the Properties of Water

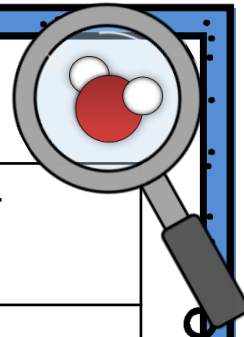
LAB STATION 7:

1. How many drops of water do you think can fit onto a penny?
2. Use the pipette to carefully drop as many drops of water as possible onto the penny being sure to count as you go.
3. Stop when the water spills over the side of the penny.
4. What property of water makes this possible?



Water Vocabulary:

Use this sheet to help you answer your lab questions.



Properties of Water Vocab

Cohesion	The tendency of water molecules to stick together because of hydrogen bonding.
Adhesion	Water molecules sticking to something other than water due to attraction of charges
Capillary Action	The tendency of water to move along the surface of a substance due to adhesion. Water molecules "pull" each other up.
Surface Tension	A special form of cohesion that causes the surface of water to resist rupture. (The reason why certain insects can walk on water)
Universal Solvent	Water can dissolve many substances due to the partial charges within the water molecule.

Polarity	Water has partial positive and negative charges due to unequal sharing of electrons
Hydrophilic	Substances that dissolve in water (water loving)
Hydrophobic	Substances that do not dissolve in water (water fearing)