

Procedure

Follow directions. Use this paper to answer questions. When finished, clean up according to teacher's instructions. Turn in completed paper.

1. Place several drops of water on a piece of aluminum foil. Observe and describe in detail the physical appearance of the water.
2. Draw an aerial view (looking down on it) of a drop of water.
3. Draw a cross section (side view) of a drop of water.
4. Carefully place your finger just above a drop and **OBSERVE** what happens. Moving your finger slowly down toward the drop of water will help this work. Carefully describe your observations of what happened as you did this.
5. Place several more drops of water next to the ones already on the foil and **OBSERVE** what happens as the drops approach one another. Write down your observations.
6. Place a small drop of detergent onto one of your big drops and compare the shape of the water with another drop of similar size which has no detergent on it. Draw what you see. What could account for this?
7. Carefully place a pinch of chalk dust in your cup of water. **DON'T** mix the chalk dust into the water. Put a small drop of detergent on the end of your toothpick and touch the toothpick to the center of the dust. Describe what happened.
8. Place a coin (dime or penny) on your table. Before doing anything else, estimate how many drops of water will stay on the coin before falling off the edge of it. Now, **CAREFULLY** add one drop of water at a time to the top of the coin and see how many drops will stay on the coin.

Estimation: _____

Actual: _____

9. Use the terms *adhesion* and *cohesion* to explain your results to step #8.