Water Properties Investigation Lab

**Station 1. WATER AS GLUE**

1. Put two wet slide together, and then try to pull them apart. What do you observe?
2. Give that glass has positive and negative charges on its surface, how would you explain your observations in terms of water chemistry? What specific properties of water is/are involved here?

**Station 2. PAPER CLIP FLOAT**

1. Fill a clean petri dish with water. Using a plastic fork, gently try to float a small paperclip on the surface of the water.
2. After floating your paper clip, add one drop of soap to the water. Record your observations of what happens to the paper clip.
3. What property of water allows the paperclip to float? Explain what happens to that property when you add the soap.

**Station 3. DROPS ON A PENNY**

1. Place a penny on a dry paper towel.
2. Using a dropper, place as many drops of water as you can on the penny before it spills over. Record you highest number of drops.
3. What properties allow for the water to “bubble up” on top of the penny?

**Station 4. DROPS ON GLASS AND WAX PAPER**

1. Place a drop of water on a glass slide and on a piece of wax paper. Draw and label both below.
2. What property of water is at play here?

**Station 5. CAN WATER AND OIL MIX?**

1. Add a small amount of oil to a glass of water. Describe what you see happening.
2. Explain what you saw using the terms “hydrophobic”, “polar”, and “nonpolar”

**Station 6. CLIMBING WATER**

1. Place a capillary tube in water. Gently lift upright without removing the tips of the tubes out of the water. What do you see?
2. What properties are responsible for this? What is this called?

**Station 7. ABILITY TO DISSOLVE SALT**

1. Add a small amount of salt to a glass of water and stir. What happens to the salt?
2. What property of water explains this?