



## **4-H Learn From Home Activity: Drops on a Penny**

### **Materials Needed:**

- Penny (or other coins)
- Cup of water
- Pipette or eye dropper
- Flat surface that can get wet
- Paper towels for clean up
- Dish soap (optional)
- Other liquids (optional)

### **Instructions:**

Provide each child with a penny, an eye dropper and cup of water. Fill the pipette with water. Hold the pipette just above the coin. Drop single drops of water onto the coin. How many drops can fit onto the penny before the water spills off?

### **Science Behind the Experiment:**

The many tiny molecules in water are all attracted to each other and is called cohesive force. The molecules in the center of a drop of water are being pulled evenly in all directions by neighboring molecules. Those at the top are pulled down by the molecules below. This creates surface tension and allows the water to bubble out over the penny's surface.

### **Reflective Questions:**

- What was your favorite part of this activity?
- What was challenging?
- What do you notice when you change the liquid you use? What does that tell you about the molecules in that liquid?
- What other types of surfaces could you conduct this experiment on?
- Give an example of when you have seen the effects of surface tension before?

### **Extensions**

- Use soapy water or other liquids
- Try different surfaces such as a lid of a jar.