

# Whitney Water Center Learning from Home

## Episode 1: Cohesion & Surface Tension

### Introduction

Water molecules consist of one oxygen atom and two hydrogen atoms. They stick together with a very strong bond; that means they are really good at sticking together. *Cohesion* is when like molecules stick together. In this example, water sticking to water.

*Surface tension* is created when water molecules on the outside of a drop are attracted to the water molecules on the inside of the drop. You will see that in this experiment.

### Experiment 1: Water vs. Rubbing Alcohol

#### Materials

- Cup of cold water
- Cup of rubbing alcohol
- Food coloring (optional)
- Wax paper (or other non-permeable surface, like a plastic plate)
- Dropper or straw

### Experiment 2: The Amazing Water Race

#### Materials

- Cup of cold water
- Wax paper or sheet protector/clear sheet of plastic
- Dropper or straw
- The Amazing Water Race worksheet (<https://www.rwater.com/media/4605/the-amazing-water-race-video-1.pdf>)

#### Link to video

<https://www.youtube.com/watch?v=n41H3LtW4w4>