

# Whitney Water Center Learning from Home

## Episode 2: Surface Tension in Action

### Introduction

How do we know surface tension is real? In these two experiments, you'll demonstrate the existence of surface tension by first breaking the surface tension of a water drop, then see how breaking water tension can create movement.

*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.

### Experiment 1: Break the Bubble

#### Materials

- Small cup of cold water
- Wax paper (or other waterproof surface)
- Dropper or a straw
- Toothpick
- A few drops of dish liquid

### Experiment 2: Soap Powered Boat

#### Materials

- Large clean container filled with cold water or your sink (make sure the sink is clean and there isn't any remaining soap before you fill it with water)
- Piece of thick paper cut into a boat shape (see the video)
- Toothpick
- A few drops of dish liquid
- Pepper

#### Link to video

<https://youtu.be/KJxmb5oIxmU>