# Whitney Water Center Learning from Home

# Episode 25: Cartesian Diver

#### Introduction

Liquids cannot be compressed, no matter how much pressure is applied, the liquid will take up the same amount of space. Air can be compressed, when pressure is applied, the air takes up less space; when the pressure is reduced, the air expands and takes up more space. The Cartesian diver, named after the 17<sup>th</sup> century French philosopher, mathematician, and scientist Rene Descartes, clearly demonstrates this principle.

## **Experiment 1:**

#### **Materials**

- Clear, one or two-liter soda bottle with the label removed
- Straw
- · Large paper clip
- Small paper clip
- Water

## Link to video

Facebook: <a href="https://www.facebook.com/watch/?v=252618062733713">https://www.facebook.com/watch/?v=252618062733713</a>

YouTube: <a href="https://youtu.be/4Zc-lOcgKEE">https://youtu.be/4Zc-lOcgKEE</a>