

Whitney Water Center Learning from Home

Episode 16: Diffusion

Introduction

Even though it is not visible, water molecules are always in motion. Hot water has fast moving molecules and cold water has slower moving molecules. If the water gets too cold, the water molecules stop moving altogether and form ice. When food coloring is added to water, it is easier to see the movement of the molecules due to diffusion. *Diffusion* is the mixing of two substances through the natural movement of the molecules. It's the reason why the food coloring will mix with the water and the smell of flowers moves through the air.

Experiment 1: What diffuses food coloring more quickly, hot water or cold water?

Materials

- Hot water
- Ice water
- Food coloring

Link to video

Facebook: <https://www.facebook.com/scctrwa/videos/179476149939355/>

YouTube: <https://youtu.be/ADssW3fhpQQ>