



Presented by



## WHAT YOU WILL NEED:

- Clear jar with a lid
- Spoon
- Water
- Food coloring
- Dishwashing soap
- Vegetable oil
- Safety goggles
- Safety gloves
- Adult supervision

# HOW TO MAKE AN EMULSION

## Overview and objective:

Students will discover how to **demonstrate an emulsion** in this experiment using oil, water and soap.

**Emulsions** are created when a compound called an emulsifier is added to substances that normally don't mix. Oil and water can be combined to create an emulsion when soap is added. Soap acts as an emulsifier because it has both hydrophobic (water-fearing) and hydrophilic (water-loving) ends.

## Procedure:

1. Fill clear jar with 1 cup of water.
2. Add a few drops of food coloring and stir until combined.
3. Add 1 cup of oil, securely tighten the lid and shake it for 20 seconds.
4. Set the jar down and observe the liquid for one minute.
5. Take the lid off and squirt in 2 teaspoons of dish soap. Tighten the lid and shake again for another 20 seconds.
6. Set the jar down and watch for a minute. Observe what happens to the oil and the water now that the dish soap has been added to the mixture.



Visit us on [www.Facebook.com/abc11scienceclub](http://www.Facebook.com/abc11scienceclub) and share the video or picture of your REGROWN VEGGIES!

[www.abc11.com/scienceclub](http://www.abc11.com/scienceclub)

