

JR-SCIENTISTS

LAVA LAMP

Combine two fun science concepts for a cool lava lamp experiment the kids will love to do over and over again!

INSTRUCTIONS:

STEP 1: Gather your ingredients! We started with one cup, and then we decided to make a rainbow of lava lamps.

STEP 2: Fill your cup or jar(s) about 2/3 of the way with oil. You can experiment with more and less and see which one gives the best results.

STEP 3: Next, you want to fill your jar(s) the rest of the way with water.

STEP 4: Add drops of food coloring to your oil and water and watch what happens. Be sure not to mix the colors into the liquids.

STEP 5: Now it's time for the grand finale of this lava lamp experiment! It's time to drop in a tablet of antacid and watch closely as the magic starts to happen!

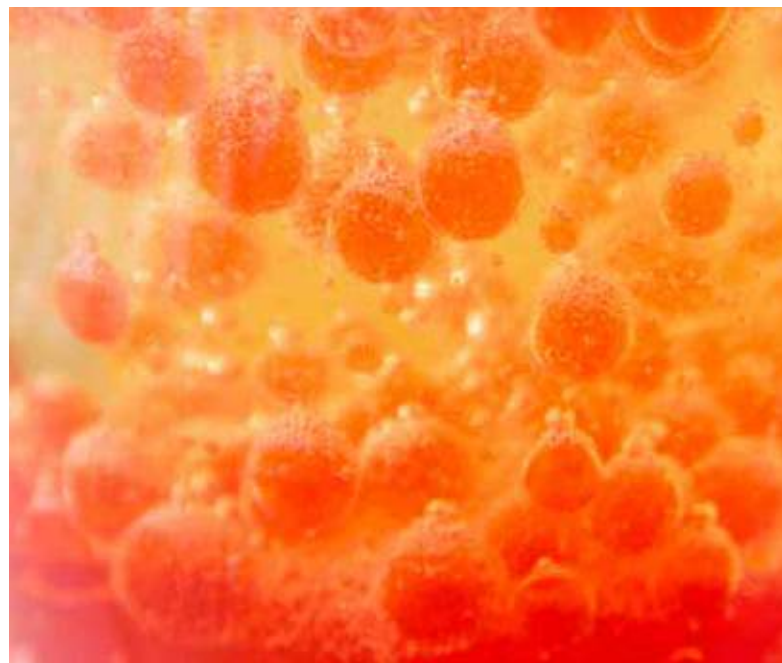
SUPPLIES

**Water Bottles,
Mason Jars, or
Plastic Cups
Food Coloring
Baby Oil or
Cooking Oil
Water
Antacid Tablets**

THE SCIENCE

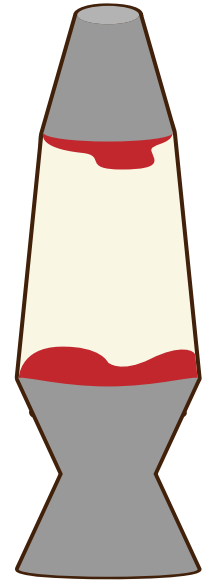
There are a few things going on here with both physics and chemistry! Liquids have different viscosity or thicknesses. Does the oil pour differently than the water? What do you notice about the food coloring drops you added to the oil/water? Think about the viscosity of other liquids you use.

When the two substances combine (tablet and water) they create a gas called carbon dioxide which is all the bubbling you see. These bubbles carry the colored water to the top of the oil where they pop and the water falls back down.



Lava Lamp Observations

Use this worksheet to process and evaluate your work.



What do you predict will happen in the jar?

What did you see?

How else can you change up this lava lamp science experiment?
What if you didn't add oil at all?

What if you change the temperature of the water? What would happen?

How is the colored water moving up through the oil?
