



Try making a **Lava Lamp** *with optional eruption*

The experience:

This is a fun experiment that you'll enjoy. It could get messy, so you will want to be sure to use a table or counter that you can clean up easily.

It's fun to watch the water sink below the oil, because oil and water don't mix -- but it's really fun to see what happens when you add color and fizz!

Materials:

- Baby oil or vegetable oil (veg oil has color, baby oil is clear, otherwise, no difference)
- Water
- Food coloring
- Bottle or tall jar
- Alka-Seltzer or effervescent antacid tablet



Directions:

1. Add oil to clean bottle or tall jar. Fill the jar at least half full with oil.
2. Add $\frac{1}{2}$ cup of water to the bottle or jar which will now have two liquids. Leave some space at the top. The water will go to the bottom.
3. Add food coloring to the bottle or jar. The food coloring will pass through the oil and change the color of the water not the oil because food coloring is water soluble. Oil and water do not mix. Put the lid on, shake it up, and watch the colored water go back to the bottom.
4. Create a chemical reaction (eruption) by adding an antacid tablet. If you use a bottle, the tablet may have to be broken to fit in the opening. If the bottle or jar is full, it may overflow during eruption. Among other things, Alka-Seltzer has sodium bicarbonate (NaHCO_3 or baking soda). The Alka-Seltzer releases carbon dioxide (CO_2) into the water. Those little bubbles are carbon dioxide just like in soda.

