



Lava Lamps

Description:

Create your own lava lamp by using vegetable oil, water, Alka-Seltzer, and food coloring. Oil has a lower density than water. The water and oil will separate from each other with oil on top. The food coloring will fall through the oil and mix with the water. The Alka-Seltzer tablet you drop in releases gas bubbles that will rise while mixing with the food coloring and then the colored water will fall back down.

Ingredients:

16oz plastic bottle

Vegetable oil

Water

1 tablet of Alka-Seltzer

Food coloring

Directions:

Fill the water bottle $\frac{3}{4}$ with vegetable oil. Fill the remainder of the bottle with water. Add 10 drops of food coloring (any color). Break 1 tablet of Alka-Seltzer into 4 pieces. Place one piece of Alka-Seltzer in the bottle. Watch as the bubbles come to life. Continue adding the remainder of the Alka-Seltzer pieces one at a time. Adding more Alka-Seltzer keeps the reaction going.

National Standards for Science

Grades K-4 Standard E - Oil is less dense than water and so it rises to the top of an oil and water mixture. This can be used if speaking about why the liquids separate inside a lava lamp.

Grades 5-8 Standard E - Specific acids and bases combined will cause a reaction creating carbon dioxide gas. This can be used if speaking about acid and base reactions occurring that will cause a bubbling effect to take place.