

DIY LAVA LAMP

HOW DO I MAKE IT?

Ingredients:

- Oil (vegetable, olive, etc.)
- Water
- Food coloring
- Alka-Seltzer tablets

Pour oil into clear glass or empty bottle (3/4 of the way full).

Pour water (the remaining 1/4 of the glass/bottle) on top.

Add a few drops of food coloring.

Now, drop in 1/2 of an Alka-Seltzer tablet, and watch the 'lava' come to life!

HOW DOES IT WORK?

The oil floats on top of the water because it is less dense (lighter than) water.

The food coloring has the same density as the water, so it mixes in with it.

When you add the Alka-Seltzer tablet, it is more dense than the oil and water, so it sinks to the bottom. Since it gets wet, it begins to dissolve and releases air (gas).

Air is lightest of all the materials, so it floats up to the top (carrying the colored water with it).

The bubble of air and water 'pops' at the top, and when the air is released, the water gets heavy again and sinks back down.

When the air comes out of the colored water blob, the water gets heavy again and sinks. It does this over and over again until the tablet is completely dissolved.

WHAT CAN I DO TO MAXIMIZE THE PLAY EXPERIENCE?

Allow your child(ren) to help you measure and pour lava lamp ingredients into the bottle. ***This not only strengthens their self-care skills, but is great early math practice.***

Turn out the lights and shine a flashlight through the 'lava lamp.' Talk about what looks different and the same with your child(ren).

How does the result change when you use a full tablet of Alka-Seltzer versus just a half?

How does the result change when you use a bottle with a cap you can screw on after dropping the Alka-Seltzer tablet?

As you explore the DIY lava lamp, ask open-ended questions to guide your child(ren)'s observations and help them use their language skills to describe what they're seeing and make predictions.

