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## Density Bottle Recipe

### Ingredients:

- Empty Water Bottle With Lid
- Water
- Food Color
- Vegetable Oil
- Alka Seltzer

### Directions:

1. Fill the bottle 1/4<sup>th</sup> full with water; then add the food color of your choice.
2. Add the vegetable oil to fill the remainder of the bottle; however, leave approximately 1/2 inch of empty space at the top.
3. Drop 1/2 of an Alka Seltzer tablet into the bottle and secure the lid on top.
4. Observe the results!

Optional: You may add a light under the bottle for more fun!

### The Science Behind It:

Because oil is less dense than water, it floats on top of the water. Once the Alka Seltzer tablet starts to dissolve in the water, it releases air bubbles into the water making it less dense than the oil. The air bubbles float to the top of the oil bringing colored water with it. Once the air bubbles escape at the top of the bottle, the water then becomes dense again and sinks back down to the bottom of the density bottle.