



This watercolor and oil activity is simple and fun! The results are a beautiful way to introduce science concepts such as density and viscosity. This project can serve to introduce your children to why oil and water don't mix. Show your child that no matter how hard you try these two liquids will avoid each other at all costs!

For young children, there is no need to fully explain the concept behind it, but it is a great start to simply explore the two liquids and see how they behave when mixed together.

For kids in early elementary you can explain that oil molecules are only attracted to other oil molecules and water molecules are attracted to water molecules. So they don't mix together. For molecules, the oil and water are so different that they will never completely mix. The reason the oil floats on top is because the oil is less dense than water, meaning it weighs less than water while still taking up the same amount of space. Because oil is less dense, or has less mass, it will float above the water.

ACTIVITY

MATERIALS:

WASHABLE LIQUID WATERCOLORS/FOOD COLORING, COOKING OIL, WHITE CARDSTOCK PAPER, PIPETTE/STRAW, LARGE BROWN PAPER

DIFFICULTY LEVEL:

SIMPLE
NEEDS A GROWNUP

DIRECTIONS

1. Place your large brown paper on your working space to catch splashes of color.
2. Take a white piece of paper and lay on top of working space.
3. Put water in a cup and add food coloring or liquid watercolors to the water, then stir to combine.
4. Fill another cup about half way with oil.
5. Using the pipette or straw, drop the watercolor on the paper.
6. Using a different pipette or straw, drop some oil on the paper and watercolor.
7. Repeat these steps as desired! Before the art turns into a mess of brown you can limit the number of times repeated. If your child/ren are excited to do this, have another piece of paper ready!
8. Lay flat to dry for several hours or overnight.

STANDARDS:

VA.K.S.1.1
SC.4.P.8.2
SC.8.P.8.2