Purpose

To discover how the viscosity of a liquid affects the rate of fall of a marble through the liquid?

Hypothesis

A marble should fall slower through a liquid that is more viscous.

The website <u>http://www.cscscientific.com/viscosity</u> defines viscosity as *"the measure of a substance's resistance to motion under an applied force."* In this experiment, the applied force is gravity.

Abstract

How the Viscosity of a Liquid Affects the Rate of a Marble's Fall

Through the Liquid

Graph

Photos



Materials

Liquids

- Water
- Olive Oil
- Cooking Oil
- Liquid dish detergent

4 marbles of equal size and mass.

4 test tubes

Procedure

- 1. Fill each tube with one of the four liquids.
- 2. Drop the marble into the test tube
- 3. With a stop watch, measure the time it takes to reach the bottom of the test tube.

Conclusion