

Thinking Fountain

Liquid Layers

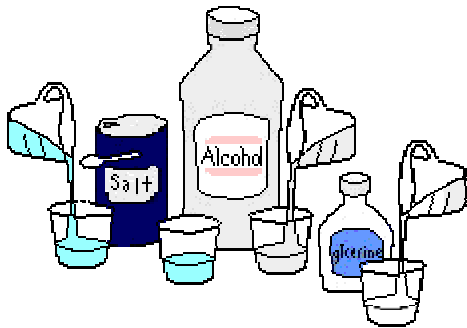
Q: Do oil and water mix?

Oil and water have different densities. Oil floats on water because it is less dense than water. A liquid that floats is lighter or less dense than a heavier or more dense liquid that sinks.

Try the experiment below and explore different densities.

Collect these materials:

- Plastic cups (4)
- Clear straw
- Plasticine clay
- Eye dropper
- Rubbing Alcohol
- Salt
- Glycerin
- Water
- Food Colouring (4 colours)
- Measuring cup
- Tablespoon

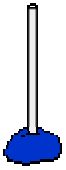


1. Put in cups:

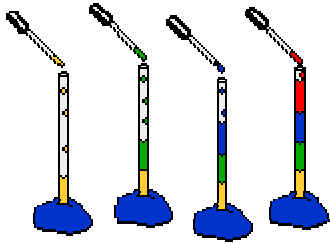
- 59 mL (1/4 cup) water
- 59 mL (1/4 cup) alcohol
- 59 mL (1/4 cup) glycerin
- 59 mL (1/4 cup) water and 30 mL (2 tbsp) salt



2. Make each cup a different colour.



3. Push straw into clay.



Experiment: Can you get the liquids to float on top of each other so that you see four different colours?

Hint: Each liquid has a different density.

that makes me think →

Why do you have to shake salad dressing? How can you make an ice cube sink? How does temperature affect a liquid's density?