



## Layer the Liquids



Gather about a half cup of each of the following liquids:

- Water
- Oil—use food coloring to make it darker
- Syrup
- Milk

You will also need the following items:

- One clear glass to hold the liquids
- 1 tablespoon measuring spoon

**Make a prediction....**



What will happen when the three liquids are combined?

### **Procedures:**

1. Put the liquids in a row from lightest weight to heaviest weight.
2. Measure out 3 tablespoons of the lightest liquid and put it in the clear glass.
3. Measure out 3 tablespoons of the next lightest liquid and put it in the clear glass with the other liquid. Do not stir.
4. Measure out 3 tablespoons of the next weight liquid and put it in the clear glass.
5. Measure out 3 tablespoons of the heaviest liquid and put it in the clear glass. Do not stir.

The heavier liquid is denser so goes to the bottom of the cup and the lighter is less dense so it goes to the top.

### Science Connection:

*Cold water is denser so in lakes it is at the bottom of the lake and the warmer water is at the top. Metropolitan Water District uses that concept to help decide which water to pump out of the lake or reservoir.*