Layered Liquids
Chemistry you can drink?

Materials:
a tall, clear glass
ice
Sprite, 7-Up, or other clear soda
chocolate syrup
grenadine (optional)
whipped cream
maraschino cherry
a straw

To do and notice:
1. Carefully add all the soda, syrup, grenadine and whipped cream to the glass. Let the glass stand a few moments.
   • Which layers rise to the top?
   • Which settle to the bottom?
2. Where do you think the cherry will float? Drop it in and see.
3. Draw a picture of the layers in the glass.
4. Stir the glass with the straw and let it stand for a few moments.
   • Do the layers mix?
   • Do they stay separate?
5. If you like, see what your experiment tastes like!

A closer look:
Density describes how tightly packed a substance is. The more material that is packed in a space, the more dense it is. If there is a lot of space between molecules, the substance is not as dense. The molecules of a denser liquid, like chocolate syrup, are arranged more compactly than are the molecules of a liquid with less density, like 7-Up. This is why the chocolate syrup sinks to the bottom and the 7-Up rises to the top.