

Lava Lamp

What it's about:

- **Density** - *Density* is how much of something you have in a given space. For example, a brick weighs much more than a piece of foam that is the same exact size. We say that a brick is more *dense*. Even air has *density*! If you fill up a balloon with air and place it on a very sensitive scale, you will see that it will weigh more than an empty balloon on the same scale. Of course, air is much less *dense* than most substances that we usually encounter; water is more than 800 times more *dense* than it. That means that if you take a balloon of water and place it on a balance scale, it will take a balloon of air that is **800** times its size to balance it. That's a lot of air!!
- **Buoyancy** (*boy-un-see*) – *Buoyancy* means that less *dense* objects float in fluids that are more *dense*. Water tubes float on water because they are less *dense* than water; they are *buoyant* (*boy-int*) in water. A brick will sink when placed in water, because it is more *dense* than water. Oil is only 90% as *dense* as water. This means that 9 cups of water weigh as much as 10 cups of oil. This is why oil floats on top of water! Helium is less *dense* than air, so when it is placed in air, it has *buoyancy*. That's why helium balloons can float in air! This is also why fizz rises to the top of soda.

