

Solution and Suspension

Try It Out

1. Shake up the bottle with blue liquid. What happens?
2. Now shake up the muddy bottle. How is this different?

What's Going On?

The blue liquid is called a **solution**. A solution is a homogenous (same throughout) mixture of two or more substances. Particles of the substance are not visible to the naked eye.

The muddy liquid is called a **suspension**. This is a different kind of mixture where the particles can be *suspended* in liquid when shaken or stirred. But the particles will settle to the bottom over time. Light generally doesn't pass through a solution very well, because the particles are too big.



Orange juice is a suspension.

Why Does It Matter?

The biggest solution in the world, the ocean, accounts for an estimated 50-80% of all life on this planet. These species have evolved to thrive in a salt water solution and now provide us with food, pleasure, and insights into early life on earth. Other solutions, like the cough syrup example above, have been created by scientists and engineers to help make our lives healthier and better.



Cough syrup is an example of a solution.

Wonder While You Walk...

Is this the whole story? What makes particles settle to the bottom of a suspension? Why don't particles in a solution settle?



What will you discover *tomorrow*?

littlefreemuseum.org

We host rotating exhibits on science and technology.
Ideas or suggestions? Let us know.

facebook.com/littlefreemuseum
[@LFMuseum](https://twitter.com/LFMuseum)
info@littlefreemuseum.org

Like us on Facebook
Follow us on Twitter
Send us an email