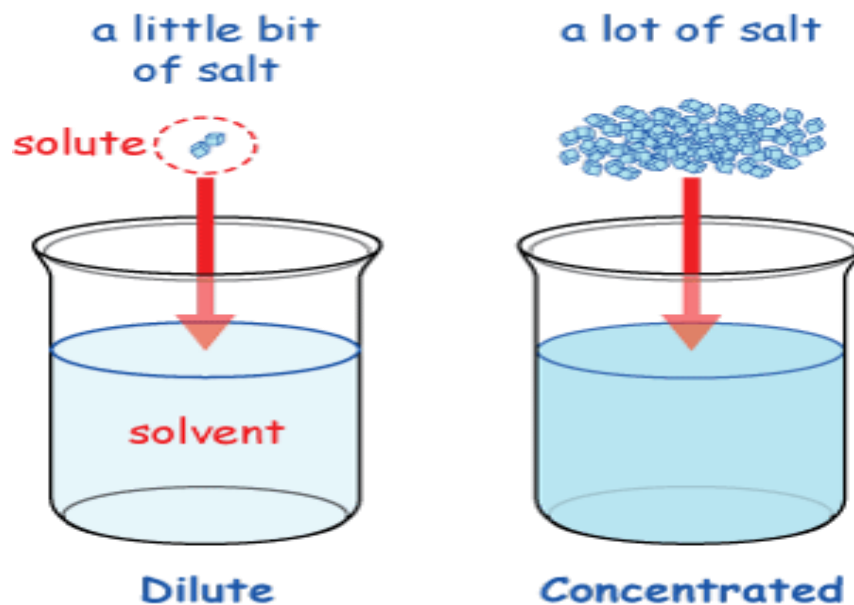


# CONCENTRATION

**We need a way to represent the relative amount of solute dissolved in a solvent.**

It makes sense that some solutions are stronger than others: adding a tiny bit of acid to a gallon of water, for example, might not even be detectable. But add a *lot* of acid and you have a dangerous solution that needs to be handled carefully. We need a way to represent the relative strength of a solution. We'll call it **concentration**.

There are several methods of concentration measurement, each used in different kinds of situations.



## Concentration

If we dissolved just a couple of crystals of table salt (NaCl) in water, we might not even be able to taste it. But if we dissolved a bunch of NaCl in the *same* amount of water (and you might be surprised how much will dissolve), it would taste very salty.

On a relative scale, one solution is **dilute** and the other is **concentrated**. We'd like to be able to put this on some sort of numerical scale so that we could say just exactly how dilute or concentrated a solution is.

Remember that the **solute** (usually a solid) is what's being dissolved in a **solvent** (usually a liquid)

All of the concentration measurement methods covered below consist of some measure of the amount of solute (in grams, moles or atoms/molecules) divided by the amount of solvent (in units of mass, volume, moles or number of atoms/molecules).

Source: <http://www.drcruzan.com/Concentration.html>