

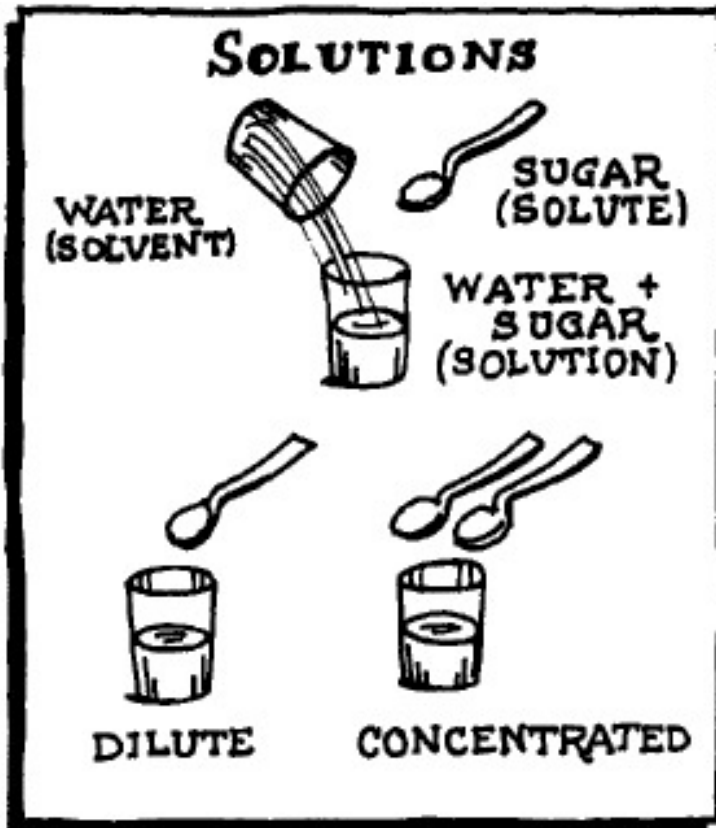
Solubility and Concentration

What are Solutions?

- Solutions are made up of a **solute** (_____) and a **solvent** (_____)
- They can be liquid or gas

The Solvent

- The solvent is always found in the _____ amount
- The solvent can be liquid or gas
- Not all solutes are dissolvable in all solvents
- _____ is often called the **universal solvent** because many different solutes dissolve into it



Solubility

- _____ is the relevant ability of a solute to form a solution when added to a certain solvent
- For example, sugar is soluble in water because the sugar particles are attracted to the water particles, creating a solution
- Oil is insoluble in water because the oil particles are not attracted to the water, creating a mechanical mixture

Concentration

- _____ is the amount of solute dissolved in a specific amount of solvent (e.g. 1 package of Kool Aid into 500 mL of water)
- **Concentrated:** solution contains a _____ amount of the dissolved solute and _____ of the solvent (e.g. frozen juice concentrate)
- **Dilute:** solution contains a _____ amount of the solute and a _____ amount of the solvent (e.g. when you add water to the frozen juice concentrate)

Saturation

- **Saturation:** is the _____ amount of solute that can be dissolved in an amount of solvent (at a given temperature)
- **Saturation point** is when no more of the solute can be dissolved in the solvent at that temperature
- _____ solutions means that more solute could be dissolved
- _____ solutions means that there is too much solute to be dissolved

Saturated Solutions

