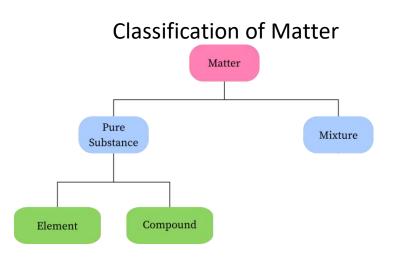
What is Chemistry?

Chemistry is the study of STUFF.

In science we call that *matter*, anything that has mass and takes up space. This summer we will be learning about the properties of matter, what happens when matter is exposed to different temperatures and pressures, and how matter changes when it interacts with other matter.



Everything is made of matter.

<u>Physical Property</u>: Any characteristic that you can observe without changing the substance that makes up the material. Examples: color, shape, size, density, melting point, odor. Today we will be using physical properties of matter to separate different mixtures.

Six Ways To Separate A Mixture

- 1. Hand separation (by color, size, shape)
- 2. Sieve (by size)
- 3. Magnetic

- 4. Density
- 5. Filtering
- 6. Evaporation

Mixture Separation Challenge

| Mixture #1: rocks, stones and sand | Mixture #3: cork, stones, and salt |
|------------------------------------|------------------------------------|
| Separate rocks by | Separate cork by |
| Separate stones by | Separate stones by |
| Separate sand by | Separate salt by |
| | |

Mixture #2: iron filings and sand

Separate iron filings by _____

Separate sand by _____