# Matter

## States of Matter

* Solid
	+ Fixed shape and volume
* Liquid
	+ Fixed volume, variable shape
* Gas
	+ No fixed shape or volume
* Plasma
	+ High-energy state with ionized particles

## Properties of matter

* Physical Properties
	+ Mass
	+ Volume
* Chemical Properties
	+ Reactivity
	+ Flammability
* State Changes
	+ Melting
	+ Evaporation
	+ Condensation

## Atomic Structure

* Atoms
	+ Basic units of matter
* Molecules
	+ Two or more atoms bonded together
* Bonding
	+ Iconic, Covalent, Metallic bonds

## Phase Diagrams

* Definition
	+ Graphical representation of the states of matter at different conditions
* Key Factors
	+ Triple Point: Where solid, liquid, and gas coexist
	+ Critical Point: End point of the liquid-gas boundary
* Uses
	+ Understanding conditions under which matter changes state