

Physical & Chemical Properties

#	TERM	DEFINITION
1	MATTER	Anything that has mass and takes up space
2	PHYSICAL PROPERTY	A characteristic of a substance that you can observe without changing the substance into a different one
3	DENSITY	The mass of an object divided by its volume ($M \div V = D$)
4	MASS	The amount of matter that makes up an object
5	VOLUME	The amount of space an object takes up
6	TEXTURE	The way a surface feels, such as rough or smooth
7	CONDUCTIVITY	The ability of an object to allow electricity or heat pass through it
8	STATE OF MATTER	One of the forms that matter takes, such as solid, liquid, or gas
9	CHEMICAL PROPERTY	A characteristic that determines how a substance will react with other substances

PHYSICAL PROPERTIES

■ Texture/Temperature	■ Color	■ Mass
■ Volume	■ State of Matter	■ Solubility
■ Density	■ Shape/Size	■ Conductivity

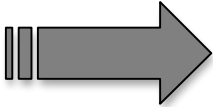






Property of Matter	Descriptors	Examples
Texture	Gritty, rough, greasy, glassy	The jar felt smooth and glassy
Conductivity	Flow, energy, heat...	The pan conduct heat to the food
Density	Packed – loose/tight	A golf ball is denser than a balloon
Mass	Grams, “stuff” in an object	The mass of the ball is 45 grams
Volume	Space, big or small	The volume of the basketball is more than that of the tennis ball
State of Matter	Solid, liquid, melt, boil, evaporate, condense, freeze	Ice is a solid; Water is a liquid
Solubility	Dissolve, solid in a liquid	Sugar is soluble, iron is not

CHEMICAL PROPERTIES

Words associated with chemical reactions:

- a NEW substance
- Change if color/ rust/ tarnish
- Formation of a gas/ Presence of bubbles/ new smell
- Presence of light or heat

EXAMPLES OF CHEMICAL REACTIONS:

BEFORE		AFTER
Liquid, slimy, clear egg	cook 	White, fluffy, solid egg (New substance, change in color)
Bicycle	Left out/ weather 	Rust (Change in color)
Mentos	Drop in Coke 	Explosion (formation of bubbles)
Silver Penny	Exposed to air 	Tarnish (Change in color) Darken
Cake batter (flour, sugar, eggs, oil, water, etc.)	Bake 	Cake (new substance)
Wood	burn 	Ash (New substance/ change in color/ Presence of light & heat))
Apple core	Leave out 	Turns brown (Change in color)