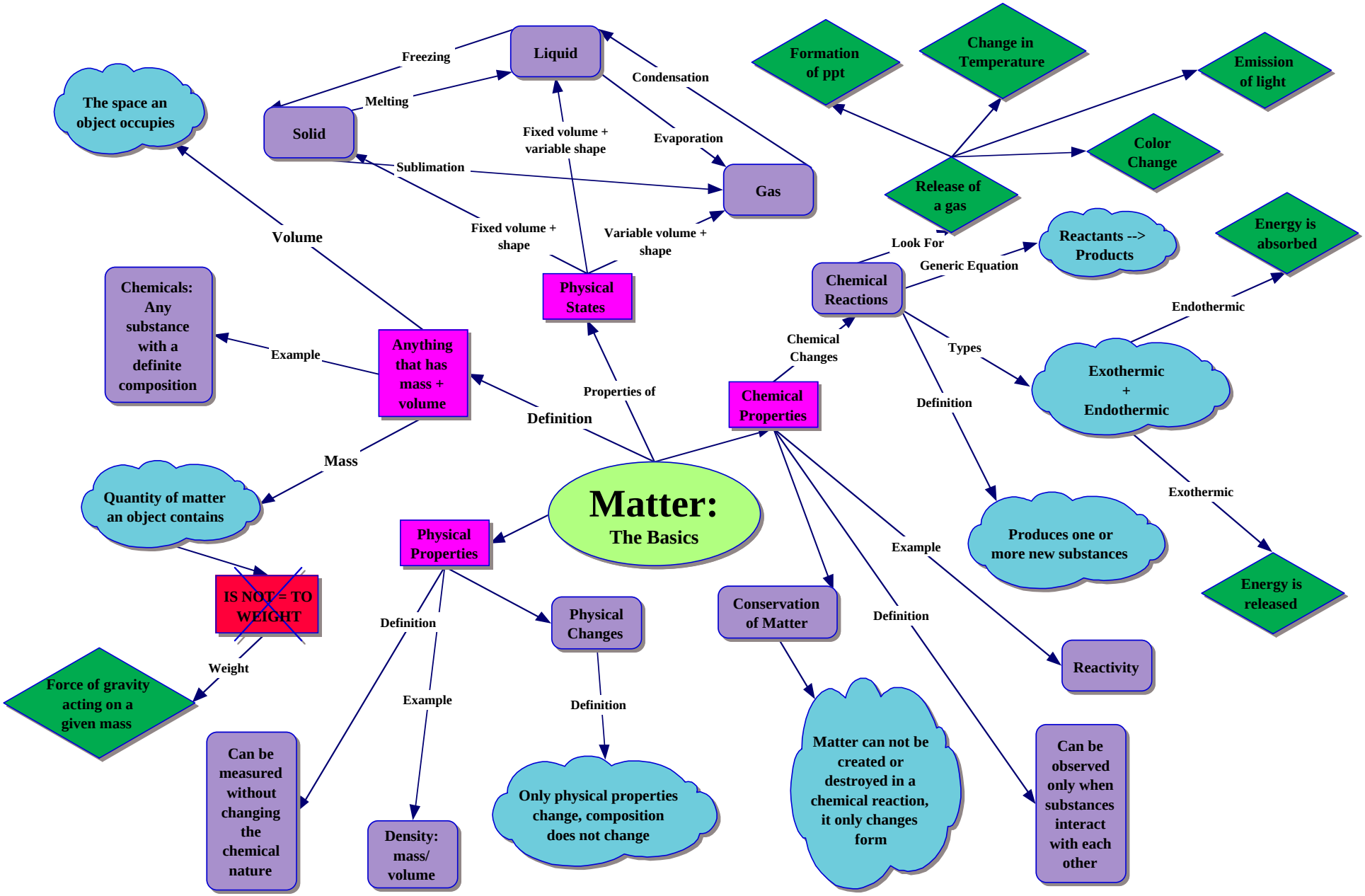
Matter:
The Basics
Physical States
Fixed volume + variable shape
Solid
Liquid
Gas
Freezing
Melting
Condensation
Evaporation
Sublimation
Fixed volume + shape
Variable volume + shape
Anything that has mass + volume
Definition
Volume
The space an object occupies
Mass
Quantity of matter an object contains
Example
Chemicals: Any substance with a definite composition
IS NOT = TO WEIGHT
Weight
Force of gravity acting on a given mass
Physical Properties
Definition
Can be measured without changing the chemical nature
Example
Density: mass/ volume
Physical Changes
Definition
Only physical properties change, composition does not change
Chemical Properties
Chemical Changes
Conservation of Matter
Matter can not be created or destroyed in a chemical reaction, it only changes form
Definition
Can be observed only when substances interact with each other
Example
Reactivity
Chemical Reactions
Look For
Formation of ppt
Change in Temperature
Release of a gas
Emission of light
Color Change
Generic Equation
Reactants --> Products
Types
Exothermic + Endothermic
Endothermic
Energy is absorbed
Exothermic
Energy is released
Definition
Produces one or more new substances