

# MATTER AND MOLECULES

Atoms are made of subatomic particles			The Periodic Table
<b>Protons</b>	<b>Neutrons</b>	<b>Electrons</b>	The modern table was invented by a Russian scientist. The elements are arranged in columns called groups based upon chemical properties due in part to the number of outer electrons. Atoms in group 1 will have 1 outer e-. Elements in group 8 have 8 outer e-.
	Have no charge found in nucleus		
<b>Atomic Number</b>	<b>Electron Orbitals</b>	<b>Octet Rule</b>	
	Path where e- are found. First orbital holds two e- and the second and third orbital each hold 8		
<b>Covalent Bond</b>	<b>Ionic Bond</b>	<b>Hydrogen Bond</b>	
	A bond where one atom gains and the other loses electrons Example: Na-CL	Created when H forms a second bond with another atom. Most often found in water (a polar molecule)	
<b>Element</b>	<b>Atom</b>	<b>Compound</b>	
<b>Elements you need to know</b>			
<b>Hydrogen</b>	<b>Helium</b>	<b>Carbon</b>	<b>Oxygen</b>
Has 1 Proton and 1 electron will form a single covalent bond			
<b>Sodium</b>	<b>Chlorine</b>	<b>Nitrogen</b>	<b>Organic Molecules</b>
<b>Polymers</b>	<b>Monomers</b>	<b>Dehydration Synthesis</b>	<b>Hydrolysis</b>
		Chemical process used to join two monomers by remove the water molecule between them	