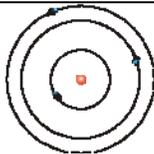
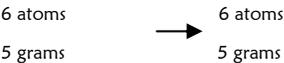
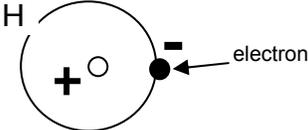
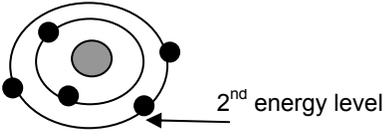
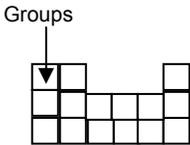
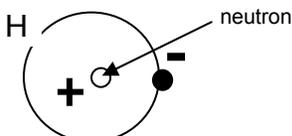
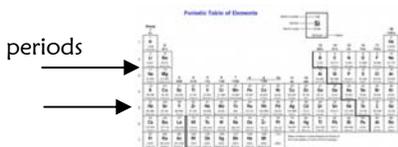
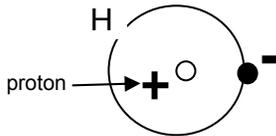
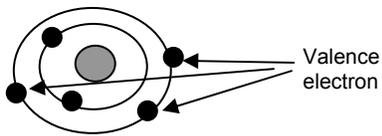
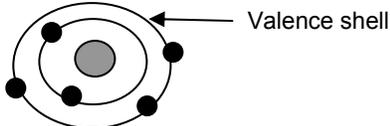


CHEMISTRY UNIT VOCABULARY

<i>Term</i>	<i>Definition</i>	<i>Example</i>
atom	The smallest particle of an element that cannot be broken down without losing its properties; basic unit that makes up all matter.	
atomic mass	The average mass of an atom. (protons + neutrons)	
atomic number	The number of protons found in the nucleus of an atom.	Oxygen = 8; Carbon = 6.
Bohr model	Simple model of an atom that shows the distribution of protons and neutrons in the nucleus and the distribution of electrons in orbiting energy levels.	
chemical bond	The force that holds the atoms of molecules and compounds together.	
chemical change	Change in a substance through chemical reactions to form new substances with different properties.	Bubbling/ gas production, color change, formation of a precipitate, temperature change.
chemical equation	A short simple way to describe a chemical reaction using symbols.	$2\text{Na} + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2$
chemical reaction	When chemical bonds are broken and atoms rearrange, a chemical reaction occurs.	$2\text{Na} + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2$
coefficient	The number of each molecule in a chemical formula.	$2\text{Na} + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2$ 
compound	A substance made up of two or more different types of atoms (elements).	NaCl H ₂ O
conductor	Materials that readily conduct an electric current.	
conservation of mass	States that mass cannot be lost or gained. Therefore, the number of atoms and mass at the beginning of a reaction must equal the number or atoms and mass at the end of a reaction.	$2\text{Na} + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2$ 
electron	A subatomic particle, with a negative charge, found outside the nucleus of an atom.	

<i>Term</i>	<i>Definition</i>	<i>Example</i>
element	The simplest form of a molecule made of only one type of atom with a certain number of protons and properties unique to that element.	Hydrogen, oxygen, carbon, nitrogen, lead, gold, etc...
energy level	Refers to the electron configuration outside the nucleus of an atom.	
group number	Numbered columns of the periodic table. Numbers correlate with the number of valence electrons for a neutral atom.	
halogen	Highly reactive elements found in group 17 of the periodic table with 7 valence electrons.	Chlorine, Fluorine, Iodine, Bromine, etc...
malleable	Physical property of metals and metalloids. Malleable metals can easily be deformed, especially by hammering or rolling, without cracking.	
metal	Elements located to the left of the zigzag line on the periodic table. Generally, these are good conductors, reactive and have shiny luster.	Al, Zn, Ag, Au, Cu, Fe
metalloid	Elements found along the zig-zag of the periodic table that share properties of both metals and non-metals.	Boron, Silicon, Germanium, Arsenic, Antimony, etc...
molecule	Two or more atoms of same or different kinds chemically bonded together.	NaCl or Cl ₂
MSDS	Material Safety Data Sheet => form containing data regarding the properties of a particular substance with procedures for handling or working with that substance in a safe manner; includes information such as melting point, boiling point, flash point, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, spill handling procedures and first aid.	
noble gas	Elements found in group 18 of the periodic table. These elements generally do not form compounds with other elements because their outer energy level is full.	Helium, Neon, Argon, Krypton, Xenon, etc...
non-metal	Elements located to the right of the zigzag line on the periodic table. These are generally poor conductors.	Cl, Ne, O, N

<i>Term</i>	<i>Definition</i>	<i>Example</i>
nucleus	The dense center of an atom containing the protons and neutrons.	
neutron	A subatomic particle with no charge (neutral) found in the nucleus of an atom.	
periods	The numbered rows of the periodic table. Numbers indicate the number energy levels (shells) for an atom.	
physical change	A change in a substance that does not involve a chemical reaction, so no new substance is formed.	Dissolving, melting, freezing, cutting, chopping, color change due to addition of dye, etc...
precipitate	The formation of a solid in a solution during a chemical reaction.	
product	The resulting substances in a chemical reaction found to the right of the yield sign.	$2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$ products
proton	A positively charged subatomic particle that determines an element's identity.	
reactant	Any substance present initially in a chemical reaction found to the left of the yield sign.	$2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$ reactants
subatomic particle	Particles smaller than an atom that combine to form an atom.	protons, neutrons, electrons
subscript	The number of atoms of an element in a molecule.	$2\text{Na} + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2$ subscript
valence electron	Electrons in the outermost energy level of an atom.	
valence shell	The outermost shell of an atom that contains electrons.	
yield sign	The symbol in a chemical equation that indicates the direction of the reaction. Shown with an arrow.	$\text{Na} + \text{Cl} \longrightarrow \text{NaCl}$