Unit 4 - Chemical Bonding

Term	Definition
Binary compound	compound containing 2 ELEMENTS (example: CO)
Bond	forces of attraction that hold atoms together in a molecule or
	compound
Compound	a substance composed of two or more atoms from different
	elements CHEMICALLY bonded together
Covalent Bond	chemical bond involving the SHARING of electrons between two
	nonmetal atoms; electronegativity difference between elements
	typically LESS than 1.7
Dipole	a difference in charge between 2 atoms in a bond
Dissociate	a process in which molecules separate or split into smaller
	particles such as ions, usually in a reversible manner.
Endothermic	energy is CONSUMED as a product of a chemical reaction
Exothermic	energy is RELEASED as a product of a chemical reaction
Intermolecular forces	weak forces between molecules that hold the molecules to one
(IMF's)	another; not actually chemical bonds
Ionic Bond	chemical bond involving the TRANSFER of electrons between a
	metal and nonmetal atom (metals lose, nonmetals gain);
	electronegativity difference between elements typically GREATER
	than 1.7
Molecule	a COVALENTLY bonded substance; can be atoms of the same
	element
Nonpolar molecules	a molecule with equal sharing of electrons; a symmetrical covalent
	molecule
Octet Rule	atoms bond together in order to have 8 electrons in their valence
	shell
Oxidation number	the "charge" an element has within a compound
Polar molecule	a covalent molecule with an unequal sharing of electrons; an
	asymmetrical covalent molecule
Polyatomic ions	atoms of two or more elements chemically bonded together and
	having a NET CHARGE
Stock system	system using Roman numerals (appearing in parentheses) after
	the element symbol to indicate the oxidation number of a
	TRANSITION METAL
Ternary compound	compound containing 3 ELEMENTS (example: C6H12O6)