Study Guide 2k16 Part II

**Vocabulary**

Fundamental theorem or assumption of science

Chemical bond

Ionic bond

Covalent bond

Ionic compound

polar covalent bond

dipole moment

molecule v compound

Bond energy

Exothermic

Endothermic

**Items related to the unfinished lab**

Solve density problems

acid v base

 viscosity

solution v mixture

molarity

molality

amphoteric verse buffer

Methods of separation of a mixture (decant, filtering, magnetism, boiling, distillation)

Does water conduct electricity?

Percent error and absolute error

 “Flavors of an atom”

allotrope

isotopes

ions

alloy

law of conservation of mass and energy

 reactivity rates and what affects them

activation energy

equilibrium

**Things to Know**

Classify the periodic table

 Period v group

Types of atoms

Metals

Alkali

Alkali or Rare Earth

Transition

Metalloids

Non-metals

 Nobel gases v diatomic gases

 Other Non-metals

Groups that have names

Electron configurations

Seating chart for electrons

Rule of “Octet”

Electronegativity

Example questions: How can CO2 exist when Carbon has four valence electrons and a need for sharing 4 pairs not two?

Using charges to determine products by charge example (examples: Fe+2 + O2-2 🡪 Fe+2O-2 or Fe3+ + O2-2 🡪 Fe2+3O3-2)

Ionization energy

Balance chemical equations

Atomic theory

Bohr-ring atom model

 Line spectrum

 Absorption and emission.

Rutherford

 How do we know if the nucleus is solid?

Lewis Structure v other model with lines