

# Chem 1A, Unit 1 Study Guide

## Mr. Jones

Topics covered in Chapters 1-5:

- Defining matter
- Measuring matter—mass, volume and density
- Chemical symbols
- Conservation of matter
- Organization of the periodic table
- Atomic structure
- Isotopes
- Nuclear changes
- Properties of substances—conductivity and solubility
- Chemical bonds—ionic, metallic, molecular covalent, network covalent

Know all vocabulary listed below:

(You should define all words that you could not explain if asked.)

Hypothesis	Group	Radioactive decay
Property	Alkali metal alkaline earth	Alpha decay
Chemistry	metal	Alpha particle
Matter	Halogen	Beta decay
Mass	Noble gas	Beta particle
Volume	Period	Half-life
Meniscus	Main group elements	Radiation
Water displacement	Transition elements	Gamma ray
Density	Lanthanides	Fission
Intensive property	Actinides	Fusion
Extensive property	Metal	Nuclear equation
Element	Nonmetal	Parent isotope
Chemical symbol	Metalloid	Daughter isotope
Compound	Average atomic mass	Chain reaction
Chemical formula	Atom	Flame test
Phase	Atomic theory	Valence shell
Aqueous	Model	Valence electron
Chemical change (chemical reaction)	Nucleus	Core electron
Law of conservation of mass	Proton	Ion
Reactivity	Neutron	Cation
Atomic mass	Electron	Anion
Atomic mass units, amu	Atomic number	Ionic compound
Periodic table of the elements	Isotope	Rule of zero charge
Atomic number	Mass number	Polyatomic ion
	Average atomic mass	Monatomic ion
	Radioactive isotope	Electron configuration
	Nuclear reaction	

**Answer questions on pg 141 #1-12 and pgs 141-144, #1-22**