

You will have questions/problems regarding each category below. Each asterisked item indicates that it will involve a calculation of some type. What you make out of the possible 78 total pts. will be translated into 15% of your semester grade.

#### MATTER

Matter  
Mixtures  
Elements  
Compounds  
separation techniques  
Temperature conversions (C and K)\*  
Metric conversions\*  
Density\*  
Significant figures\*

#### ATOMIC STRUCTURE

protons  
electrons  
neutrons  
atomic number  
mass number  
isotopes\*

#### IONS & NOMENCLATURE

Charge  
EF\*  
Formulas  
Names

#### PERIODICITY

elemental positions on the periodic table  
electron configuration  
orbital diagram  
Mendeleev  
Meyer  
Moseley  
atomic radius  
ionization energy  
electronegativity  
electron affinity

#### LEWIS & VSEPR

Lone (nonbonding) pairs  
Octet rule  
Duet rule  
Shape name  
Bond angle

#### CHEMICAL EQUATIONS

balance reactions

#### STOICHIOMETRY

stoichiometry\*  
% yield\*