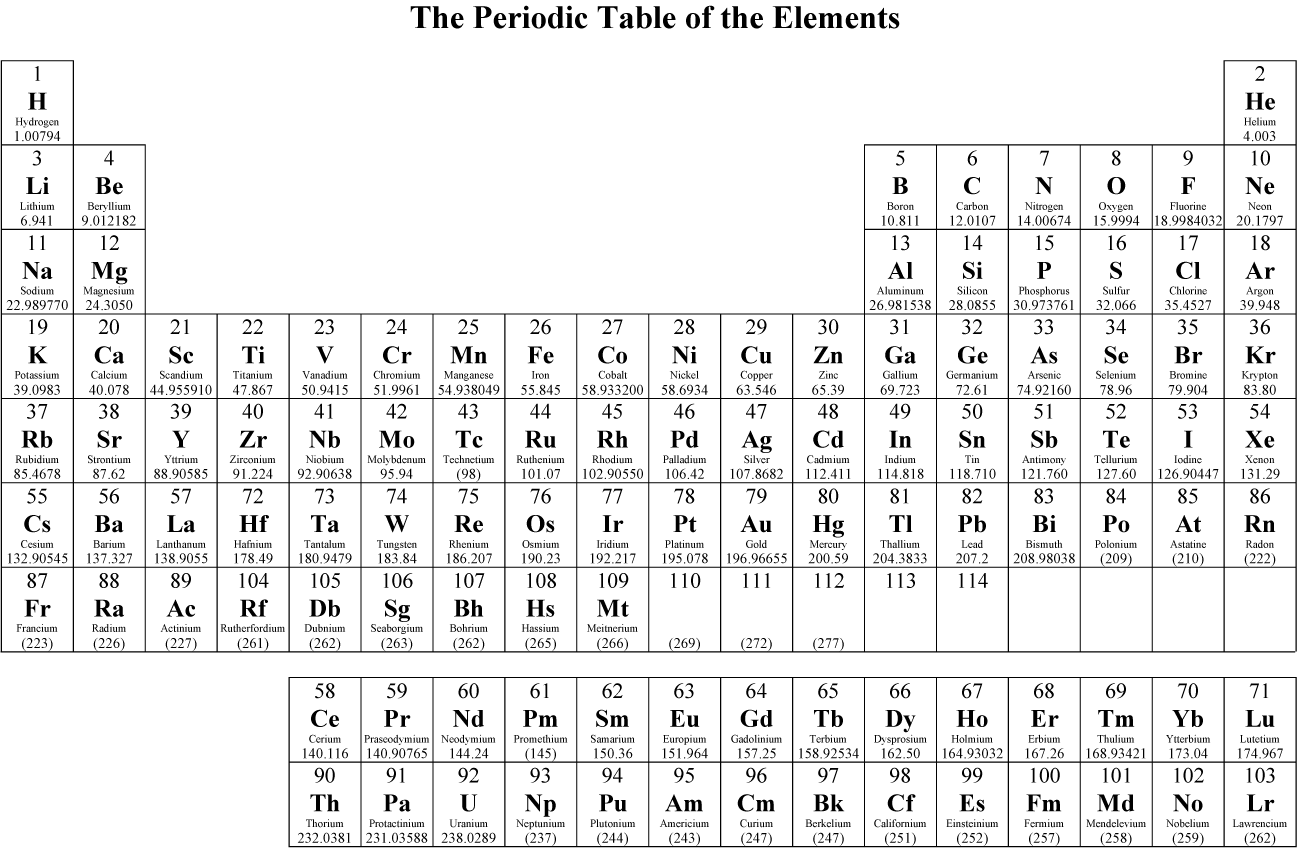
**Spring Final Formulas**



Unit 8 Stoichiometry

1 mol = 22.4 L

1 mol = 6.02 x 1023 particles

volume A volume B

Mole A Mole B

Mass A particles A mass B particle B

Unit 10 Gas Laws

Conversion given: 1 atm = 760 mmHg = 101.3 kPa K = 0C +273

Ptotal = Pa + Pb + Pc + ….. PV = nRT R = 0.0821 L atm/ K mol

Unit 11 Thermochemistry

*The following information is applicable for water:*

Hf = 334 J/g Csolid = 2.06 J/gºC

Hv = 2260 J/g Cliquid = 4.18 J/gºC

Cgas  = 2.02 J/gºC

1 atm = 101.3 kPa = 760 mmHg = 760 torr

Q = mCΔT Q=mHf Q=mHv

ΔH = Σ P- Σ R

Unit 12 Solutions

Molarity: Molality:

M1V1 = M2V2 Vwater = V2 – V1

% mass = gsolution =gsolute + gsolvent

Unit 13 Acids/ Bases

pH = -log [H+] [H+] = 10-pH (H+)MAVA = (OH-)MBVB

pOH = -log [OH-] [OH-] = 10-pOH

pH + pOH = 14 [H+][OH-] = 1 x 10-14