Name _____ Period _____

College Prep Chemistry of the Earth System

Assignment 1J – Average Atomic Mass (*Part 2*) 20 Points

Complete the following Chart to find the average atomic mass

Silicon has the following isotopes

Isotope	Fractional Abundance
Li-6	0.0759
Li-7	0.9241

Isotope	Atomic Mass		Frac. Abund.		Ratio
Li-6		X		=	
Li-7		X		=	

Calculate the Average Atomic Mass of Lithium

Ratio Li-6		Ratio Li-7		Avg Atomic Li
	+		=	

Antimony has the following isotopes

Isotope	Fractional Abundance
Sb-121	0.5721
Sb-123	0.4279

Isotope	Atomic Mass		Frac. Abund.		Ratio
Sb-121		X		=	
Sb-123		X		=	

Calculate the Average Atomic Mass of Antimony

Ratio Sb-121		Ratio Sb-123		Avg Atomic Sb
	+		=	

Neon has the following isotopes

Isotope	Fractional Abundance
Ne-20	0.9048
Ne-21	0.0038
Ne-22	0.0925

Calculate the Average Atomic Mass of Ne

Isotope	Atomic Mass		Frac. Abund.		Ratio
Ne-20		x		=	
Ne-21		x		=	
Ne-22		x		=	

Ratio Ne-20		Ratio Ne-21		Ratio Ne-22		Avg Atomic Ne
	+		+		=	

Tungsten has the following isotopes

Isotope	Fractional Abundance
W-182	0.2650
W-183	0.3064
W-184	0.4286

Calculate the Average Atomic Mass of W

Isotope	Atomic Mass		Frac. Abund.		Ratio
W-182		x		=	
W-183		x		=	
W-184		x		=	

Ratio W-182		Ratio W-183		Ratio W-184		Avg Atomic W
	+		+		=	