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

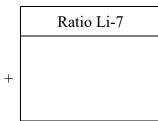
Isotope	Fractional Abundance
Li-6	0.0759
Li-7	0.9241

Isotope	Atomic Mass
Li-6	
Li-7	

	Frac. Abund.		Ratio
X			
X		=	

Calculate the Average Atomic Mass of Lithium

Ratio Li-6	



Avg Atomic Li

Antimony has the following isotopes

Isotope	Fractional Abundance
Sb-121	0.5721
Sb-123	0.4279

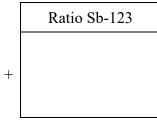
Isotope	Atomic Mass
Sb-121	
Sb-123	

	Frac. Abund.	
X		=
X		=

	Ratio
=	
=	

Calculate the Average Atomic Mass of Antimony

Ratio Sb-121	



	Avg Atomic Sb
=	

Neon has the following isotopes		Isotope	Atomic Mass			Frac. Abund.			Ratio
Isotope	Fractional Abundance	Ne-20			X			=	
Ne-20	0.9048	N. 01							
Ne-21	0.0038	Ne-21			X		=		
Ne-22	0.0925								
Calculate the Average Atomic Mass of Ne		Ne-22			X			=	
Ratio N	Ratio Ne-20			Ra	tio	Ne-22		A	vg Atomic Ne
	+		+						
Tungsten has the following isotopes		Isotope	pe Atomic Mass			Frac. Abund.			Ratio
Isotope	Fractional Abundance	W-182			X			=	
W-182 W-183	0.2650 0.3064	W-183			X			=	
W-184	0.4286	W-184			v				
Calculate the Average Atomic Mass of W		VV - 1 0 - 1			X				
Ratio W-182		Ratio W-183	3	Ratio		tio W-184		A	vg Atomic W
	+		+				=		