

Name _____ Period _____

College Prep Chemistry of the Earth System

Noteset 1C (Part 2) – In Class Example

20 Points

Complete the following Chart to find the average atomic mass

Carbon

~~Neon~~ has the following isotopes

Isotope	Fractional Abundance
C-12	0.9899
C-13	0.0100
C-14	0.0001

Calculate the Average Atomic Mass of C

Isotope	Atomic Mass
<u>C-12</u>	12 amu
C-13	13 amu
C-14	14 amu

Carbon - 12 ← Mass #

Frac. Abund.	Ratio
0.9899	11.8788 amu
0.0100	0.13 amu
0.0001	0.0014 amu

Ratio C-12
11.8788 amu

Ratio C-13
0.13 amu

Ratio C-14
0.0014 amu

Avg Atomic C
12.0102 amu

Average Atomic Mass

3
Li
Lithium
6.94

Avg. Atomic Mass

Closest to

Highest % abund. Iso.

Isotopes of Li	% abund.
${}^6_3\text{Li}$ 6 amu	7.59%
${}^7_3\text{Li}$ 7 amu	92.41%
* % of an isotope in the total atoms in element	

Avg. Atomic Mass
17
Cl
35.45

Between 35-36
2 common iso.

${}^{35}_{17}\text{Cl}$	75.75%
${}^{37}_{17}\text{Cl}$	24.22%