Chapter 4 **Handout 4.A** ***In-Class Worksheet.*** ***Calculating the atomic mass from the Relative Abundance of Isotopes.***

1. **Boron has two naturally occurring isotopes with masses of 10.0129 amu which occupies 19.91 percent and another isotope of 11.0093 amu and occupying 80.09 percent. Calculate the average atomic mass of Boron (The number listed on the periodic table)**

2. **Bromine has two isotopes with the first having a mass of 78.918336 amu and occupying 50.69% and the second isotope having a mass of 80.916289 amu and occupying 49.31%. What is the average atomic mass of bromine?**

3. **Verify the atomic mass of Chlorine as 35.45 amu knowing that chlorine has two isotopes of the following data:**

^{35}Cl = 34.96885 amu and percent abundance of 75.77%
^{37}Cl = 36.96590 amu and percent abundance of 24.23%

4. **Verify the atomic mass of Magnesium as 24.31 amu knowing the following information:**

^{24}Mg = 23.985042 amu and percent abundance of 78.99%
^{25}Mg = 24.985837 amu and percent abundance of 10.00%
^{26}Mg = 25.982593 amu and percent abundance of 11.01%