

1. A student looked up the naturally occurring isotopes of bromine and found the following information:

50.54% of the naturally occurring isotopes of bromine have an atomic mass of 78.92 u while 49.46% of the naturally occurring isotopes of bromine have an atomic mass of 80.92 u.

Calculate the average atomic mass of bromine, showing all work:

2. Using the following data, calculate the average atomic mass of magnesium (give your answer to the nearest .01 u) : Show all work!

Isotope: $^{24}_{12}\text{Mg}$ Percent abundance: 78.70%

Isotope: $^{25}_{12}\text{Mg}$ Percent abundance: 10.13%

Isotope: $^{26}_{12}\text{Mg}$ Percent abundance: 11.17%

3. Using the periodic table,

What is the average atomic mass of bromine? _____

What is the average atomic mass of magnesium? _____

How do your calculated answers in #1 and #2 compare to those on the periodic table
