

Name: _____

Block: _____

Average Atomic Mass

Calculate the average atomic mass of each of the following elements, based on the percent abundance of their isotopes. For each element, your answers should agree with the atomic mass listed on the periodic table.

Because you can look up the answers, you *must* show how to set up the calculations in order to receive credit.

1. bromine

isotope	atomic mass	abundance
${}^{79}_{35}\text{Br}$	78.9184 amu	50.69%
${}^{81}_{35}\text{Br}$	80.9163 amu	49.31%

2. boron

isotope	atomic mass	abundance
${}^{10}_5\text{B}$	10.0129 amu	19.9%
${}^{11}_5\text{B}$	11.0093 amu	80.1%

3. chlorine

isotope	atomic mass	abundance
${}^{35}_{17}\text{Cl}$	34.9689 amu	75.78%
${}^{37}_{17}\text{Cl}$	36.9659 amu	24.22%

4. magnesium

isotope	atomic mass	abundance
${}^{24}_{12}\text{Mg}$	23.9850 amu	78.99%
${}^{25}_{12}\text{Mg}$	24.9858 amu	10.00%
${}^{26}_{12}\text{Mg}$	25.9826 amu	11.01%