Two Practice Problems on Percent Abundance

1. There are three naturally occurring isotopes of neon:

neon-20 mass 19.9924 amu abundance 90.84%

neon-21 mass 20.9940 amu abundance 0.260%

neon-22 mass 21.9914 amu abundance 8.90%

a. Without calculation, what is the approximate atomic mass of neon?

b. Calculate the actual atomic mass.

1. Uranium has an atomic mass equal to 238.0289. It consists of two isotopes: uranium-235 with an isotopic mass of 235.044 amu and uranium-238 with an isotopic mass of 238.051. Calculate the % abundance of the uranium-235 isotope.