1. The element indium exists naturally as two isotopes. 113In has a mass of 112.9043 amu, and 115In has a mass of 114.9041 amu. The average atomic mass of indium is 114.82 amu. Calculate the %relative abundance of the two isotopes.
2. Naturally occurring sulfur consists of four isotopes, 32S (95.0%), 33S (0.76%), 34S (4.22%), and 36S (0.014%). Using the data below, calculate the atomic mass of the naturally occurring Sulfur.

 Isotope: Atomic Mass (amu):

 32S 31.97

33S 32.97

34S 33.97

36S 35.97

1. Given the information below for the fictional element Laurium (L), calculate the relative atomic mass of Laurium, and report your answer with correct units and the correct number of significant figures.

|  |  |  |
| --- | --- | --- |
| Isotope  | Mass (amu)  | Natural Abundance (%)  |
| 54L  | 53.992                | 26.46  |
| 56L  | 55.989                | 73.54  |

1. Bromine has two naturally occurring isotopes. Bromine-79 has a mass of 78.918 amu and is 50.69% abundant. Using the atomic mass reported in the periodic table, determine the mass of bromine-81, the other isotope of bromine.

