

Name: _____

The boron-10 isotope has a mass of 10.0129 amu and boron-11 has a mass of 11.00931 amu. The atomic mass of a sample of boron is 10.811 amu.

Without using a calculator, circle the best estimate among the following for the percentage abundance of the two isotopes of boron in the natural sample:

- a) 40% ^{10}B and 60% ^{11}B
- b) 80% ^{10}B and 20% ^{11}B
- c) 20% ^{10}B and 80% ^{11}B
- d) 60% ^{10}B and 40% ^{11}B

Explain why you chose your answer in 1-2 sentences.