

# Binding Energy of a Nucleus

Step 1: What is your isotope that you were assigned by the program? How many protons and neutrons does it contain?

Step 2: Show the calculation to get the mass defect ( $\Delta m$ ) between the nucleus and the particles that make it up. Give your answer in amu and then convert it to kg.

Step 3: Calculate the binding energy based on the mass defect. Give your answer in both Joules and MeV. Show all your work below.

Step 4: Finally, get the binding energy per nucleon. Give this answer in MeV/nucleon. Enter your answers into your program to verify that you did everything correctly