Name Date

**Mass Defect Worksheet**

1. Calculate the nuclear binding energy of a sulfur-32 atom. The measured atomic mass is 31.972070 amu. (4.36 x 10-11 J)
2. Calculate the nuclear binding energy of an oxygen-16 atom. The measured atomic mass of oxygen-16 is 15.994915 amu.
3. Calculate the binding energy **per nucleon** of a manganese-55 atom. The measured atomic mass of manganese-55 is 54.938047 amu. (1.41 x 10-12 J)
4. Calculate the nuclear binding energy of a lithium-6 atom. The measured atomic mass of lithium-6 is 6.01512 amu.
5. Calculate the nuclear binding energy of a carbon-14 atom. The measured atomic mass of carbon-14 is 14.00324 amu.
6. Calculate the nuclear binding energy per nucleon of a beryllium-7 atom. The measured atomic mass of beryllium-7 is 7.01693 amu.