

## Ions &amp; Isotopes HW

Name \_\_\_\_\_

Class \_\_\_\_\_

Substance	Symbol	Atomic Number (Z)	Atomic Mass (A)	Protons	Neutrons	Electrons	Charge
Carbon			12				0
	Bi					83	
Magnesium					12	10	+2
	Sr <sup>+2</sup>						
				51		54	
			35			18	-1
Manganese							+7
Molybdenum-97						42	
Tungsten-175			175				0
Carbon-14		6					
	U				143		0
		53	130				

A sample of an element contains two isotopes. 58.23% of the sample is an isotope with atomic mass of 37.0 amu and 41.77% has an atomic mass of 39.0 amu. What is the atomic mass of the sample?

A scientist collects a sample of an element and determines its composition to be the following: 23.50% of the atoms have a mass of 47.0 amu, 48.0% have an atomic mass of 51.0 amu, and 28.50% have a mass of 46.0 amu. What is the atomic mass of the sample?