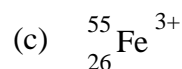
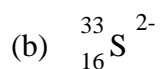
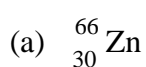


CHEQ 1094 ATOMS AND ISOTOPES

- An element consists of two isotopes. The major isotope (69.20%) has a mass of 62.9296 amu and the other isotope has a mass of 64.9278 amu. Calculate the atomic weight of the element and, using a table of atomic weights, identify the element.
- An element occurs naturally as a mixture of five isotopes. Their masses (amu) and abundances are: 69.9243 (20.5%), 71.9217 (27.4%), 72.9234 (7.8%), 73.9219 (36.5%) and 75.9214 (7.8%). Calculate the atomic weight of the element and hence identify the element.
- Give the number of protons, the number of electrons and the number of neutrons in each of the following:



- Complete the table for atoms:

Symbol	Atomic Number	Mass Number	Number of Protons	Number of Electrons	Number of Neutrons
${}_{28}^{59}\text{Ni}$					
	15				16
		108		47	

- Complete the table:

Symbol	Atomic Number	Mass Number	Number of Protons	Number of Electrons	Number of Neutrons
${}_{29}^{65}\text{Cu}^{2+}$					
	24	52		21	
		127		54	74