

Chemistry
Unit #4—Periodicity

Homework Part II

Please Fill In The Table for Isotopes

# protons	16				
# electrons		20			
# neutrons		24		10	
Atomic Number (Z)				9	11
Mass Number (A)	32				23
Name					
Symbol					
Isotope Form #1			Zn-64		
Isotope Form #2					
Isotope Form #3					
Isotope Form #4					

1. Calculate the atomic mass for the element neon when Neon-20 has a mass of 19.992 amu and 90.47%, Neon-21 has a mass of 20.994 amu and 0.27%, and Neon-22 has a mass of 21.991 amu and 9.25%.

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2. Given the following data:

Isotope	Mass (amu)	Percent Abundance
X-6	6.015 amu	7.5%
X-7	7.016 amu	92.5%

Calculate the atomic mass of the unknown element and identify unknown element from the Periodic Table.

3. Calculate the atomic mass of magnesium. The three magnesium isotopes have atomic masses and percent abundances of 23.985 amu and 78.99%, 24.986 amu and 10.0%, and 25.982 amu and 11.01%.

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