

ATOMIC STRUCTURE WORKSHEET

Complete the table. There is enough information given for each element to determine all missing numbers.

Symbol	Atomic Number	Mass Number	Number of Protons	Number of Electrons	Number of Neutrons
^{23}Na					
K		40		19	
O^{2-}			8		8
N^{3-}					
Cl^{-}					
S	16				16

1. Please use the following table to calculate the average atomic mass of chlorine.

Isotope	% Abundance	Mass (amu)
^{35}Cl	75.78%	34.969
^{37}Cl	24.22%	36.966

2. Raiderium (Cv) has three naturally occurring isotopes. Raiderium is 74.655% ^{44}Cv , which has an atomic mass of 43.064 amu, 24.958% ^{46}Cv , which has a mass of 46.125 amu, and 0.387% ^{48}Cv , which has an atomic mass of 47.982 amu. Please calculate the average atomic mass of Raiderium.