

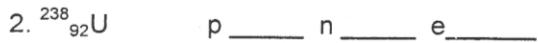
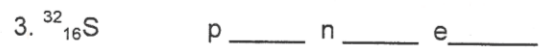
Name: _____

Date: _____

Period: _____

Isotope Handout

Sample Problems: Determine the number of protons, neutrons and electrons in the following atoms.



Warm-up: Fill in the blanks in the table below.

Symbol	Atomic Number	# of protons	# of neutrons	Number of electrons	Mass number
Be			5		
P ⁻³					31
U			146		
Sr ⁺²					87

Complete the following table:

Isotope	Atomic number	Mass number	# of protons	# of neutrons	# of electrons
$^{35}_{17}\text{Cl}^{1-}$					
$^{65}_{30}\text{Zn}^{2+}$					
Ag ⁺		107			
	16			16	16
N ³⁻		15			
$^{40}\text{Ca}^{2+}$					
Chromium-52					
Sn ⁴⁺				69	
Uraninum-238					
$^{19}\text{F}^{1-}$					
		23	11		10

Name: _____

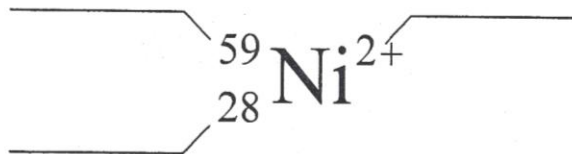
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Nuclides: Define the following in terms of the number of protons, the number of neutrons and the number of electrons. Label the numbers on the nuclide symbol with the appropriate terms.

Atomic Number:

Mass Number:



Charge:

	Nuclide	Atomic Number	Mass Number	Charge	Number of Protons	Number of Neutrons	Number of Electrons
a	${}^{14}_6\text{C}$						
b	${}^{41}_{20}\text{Ca}^{2+}$						
c		29	65	+1			
d					35	46	36
e		82				125	82
f		16		-2		16	
g			235	+4	92		
h			24		12		12
i				+3	13	14	
j				0		42	33
k			210	-1			86
j			200	0		120	