EXERCISE 5

Chem 100

(Due date _____)

10 points

Name _____

(last) (first)

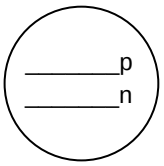
Lecture Section #_____ Instructor _____

A. Electronic Configuration. Diagram the following atoms, showing the number and location of protons and neutrons, and showing electrons in proper shells. (Note: you may not need to use all the shells drawn.)
Please note: on this exercise the nuclear symbol is written a little bit differently. This is another correct alternative for writing the nuclear symbol:

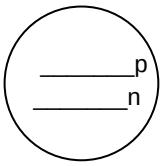
E = element symbol

$_{Z}E^{A}$ A = mass number

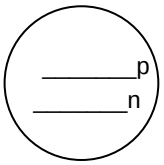
Z = atomic number

1. $_{42}Mo^{94}$ 

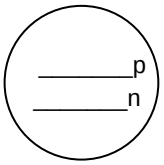
_____) _____) _____) _____) _____)

2. $_{14}Si^{30}$ 

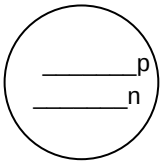
_____) _____) _____) _____) _____)

3. $_{27}Co^{59}$ 

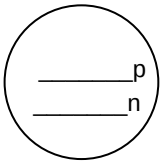
_____) _____) _____) _____) _____)

4. $_{12}Mg^{26}$ 

_____) _____) _____) _____) _____)

5. $_{34}Se^{80}$ 

_____) _____) _____) _____) _____)

6. $_{54}Xe^{134}$ 

_____) _____) _____) _____) _____)

(over)

B. Lewis Electron Dot Symbols for Elements. Draw the electron dot symbols for the following elements.

1. potassium	4. strontium
2. silicon	5. sulfur
3. bromine	6. boron

C. Compounds. Complete the following table. To complete the column labeled "CLASS" write one of the following letters : A (acid) B (base) C (covalent) S (salt)

	FORMULA	CLASS	TOTAL # OF IONS	NAME OF COMPOUND
1.				hydrogen iodide
2.	$Ca(C_2H_3O_2)_2$			
3.				strontium hydroxide
4.	S_4N_4			
5.	$FePO_4$			
6.				cobalt (III) oxalate
7.	$NaHSO_4$			
8.				disilicon hexachloride
9.	$HClO_3$			
10.	$Ni(OH)_2$			
11.				ammonium carbonate
12.				zinc nitrite