CHEM Electron Configuration Practice: IONS

Use a periodic table. You may write on this sheet.

ION DIRECTIONS

a) Name the *atom*.
b) Using the periodic table, write the *VALENCE electron configuration for the neutral atom*.
c) Write the *symbol and charge* of the ions that the following elements can form. If no ion forms, write none.
d) Describe how many *electrons* are *gained* or *lost*.
e) Write the *name* of the ion formed. If no ion forms, write none.
f) Using the periodic table, write the *VALENCE electron configuration* for the *ion.*

EXAMPLE #1) Cs

a) cesium
b) $6s^1$
c) Cs^+
d) lost 1
e) cesium
f) $5s^2\ 5p^6$

EXAMPLE #2) Cl

a) chlorine
b) $3s^2\ 3p^5$
c) Cl^-
d) gained 1
e) chloride
f) $3s^2\ 3p^6$

QUESTIONS

1) Al
2) Fr
3) Bi
4) Rb
5) Ba
6) P
7) O
8) K
9) Zn (typical transition metal)
10) S
11) Cd (typical transition metal)
12) Ni (typical transition metal)
13) Br
14) Sr