

Name Mr. Perfect Date Su 10

1) Using the periodic table, predict the expected charge for the following elements:
(2 pts)

(a) S

-2

(b) Br

-1

2) List the following in order of increasing atomic ionization energy: (2 pts)

I, Cl, F, Br

$I < Br < Cl < F$

3) Draw the Lewis Dot Structures for the following: (2 pts)

(a) N



(b) Mg



4) Write the electron configurations for the following: (2 pts)

(a) F

$1s^2 2s^2 2p^5$
or
 $[\text{He}] 2s^2 2p^5$

(b) Kr

$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6$
or
 $[\text{Ar}] 4s^2 3d^{10} 4p^6$

5) Using the periodic table, predict the compound formed when the following elements combine to form a molecule. (2 pts)

(a) Ca^{2+} and Br^-

CaBr_2

(b) Mg^{2+} and S^{2-}

MgS