

1. What is an ionic bond? What types of elements form ionic bonds?
2. Which of the following pairs of elements **cannot** combine to form an ionic compound?
 - a) Na and O
 - b) S and Cl
 - c) Ca and F
 - d) Al and P
 - e) Mg and N
 - f) P and Cl
 - g) K and S
 - h) Al and O
3. For the following pairs of elements draw the Lewis dot structure for the compound they form and write the empirical formula. Then name the ionic compound.

a) K and F

b) Ca and S

c) Al and Cl

Name: _____

Name: _____

Name: _____

d) Na and N

e) Al and S

f) Ca and Br

Name: _____

Name: _____

Name: _____

g) Li and P

h) Ba and N

i) Mg and Cl

Name: _____

Name: _____

Name: _____

4. Write the formula and draw the Lewis dot structure for the following binary ionic compounds.

a) strontium nitride

b) calcium fluoride

c) aluminum oxide

d) magnesium phosphide

e) sodium sulfide

f) aluminum iodide

g) barium sulfide

h) potassium chloride

i) lithium oxide

j) sodium fluoride

k) calcium phosphide

l) cesium sulfide

4. If ionic compounds are made of ions why don't they have a charge?