

## Polyatomic Ions Quiz Warm-Up

**I. Polyatomic Compounds**

1. Give the formula for each (include the charge). Note: some of these are monatomic.

- |                        |                     |
|------------------------|---------------------|
| _____ 1. calcium ion   | _____ 13. phosphate |
| _____ 2. iodide        | _____ 14. chromate  |
| _____ 3. nitride       | _____ 15. peroxide  |
| _____ 4. lithium ion   | _____ 16. carbonate |
| _____ 5. permanganate  | _____ 17. acetate   |
| _____ 6. dichromate    | _____ 18. ammonium  |
| _____ 7. oxide         | _____ 19. nitrate   |
| _____ 8. hydroxide     | _____ 20. chlorate  |
| _____ 9. cyanide       |                     |
| _____ 10. chloride     |                     |
| _____ 11. sulfate      |                     |
| _____ 12. aluminum ion |                     |

2. Complete the charts.

Name:	Formula:
_____	_____
calcium carbonate	_____
_____	NH <sub>4</sub> OH
magnesium peroxide	_____
_____	AlN
aluminum nitrate	_____
_____	_____

Name:	Formula:
	$\text{Na}_2\text{SO}_4$
cesium acetate	
	$\text{Ca}(\text{CN})_2$
aluminum oxide	
	$\text{RbClO}_3$
potassium chromate	
	$\text{CaCr}_2\text{O}_7$
ammonium permanganate	
	$\text{Sr}(\text{NO}_3)_2$
magnesium phosphate	

## II Review (Don't forget how to do these!).

### 1. Binary Molecular Compounds (mono, di, tri, etc)

a. Name the following compounds:

a.  $\text{PCl}_5$  \_\_\_\_\_

b.  $\text{N}_2\text{O}$  \_\_\_\_\_

c.  $\text{Br}_2\text{O}_3$  \_\_\_\_\_

d.  $\text{P}_4\text{F}_{10}$  \_\_\_\_\_

b. Write formulas for each of the following:

a. dinitrogen pentoxide \_\_\_\_\_

b. sulfur hexafluoride \_\_\_\_\_

c. iodine tetrachloride \_\_\_\_\_

d. sulfur dioxide \_\_\_\_\_

## 2. Monatomic Ions

i. Name each of the following ionic compounds (some need Roman numerals):

a.  $\text{LiCl}$  \_\_\_\_\_

b.  $\text{SrO}$  \_\_\_\_\_

c.  $\text{AlI}_3$  \_\_\_\_\_

d.  $\text{SnCl}_4$  \_\_\_\_\_

e.  $\text{Al}_2\text{S}_3$  \_\_\_\_\_

f.  $\text{CuF}_2$  \_\_\_\_\_

g.  $\text{NiO}$  \_\_\_\_\_

h.  $\text{SrBr}_2$  \_\_\_\_\_

i.  $\text{Mg}_3\text{N}_2$  \_\_\_\_\_

ii. Give the formula for each of the following ionic compounds.

a. lithium iodide \_\_\_\_\_

b. cobalt (II) iodide \_\_\_\_\_

c. sodium oxide \_\_\_\_\_

d. aluminum bromide \_\_\_\_\_

e. lead (IV) nitride \_\_\_\_\_

f. calcium chloride \_\_\_\_\_

e. iron (III) chloride \_\_\_\_\_