

Polyatomic Compounds**Polyatomic Ion**

- a charged _____ which chemically acts as a _____ particle with an ionic charge
- combine with metals, hydrogen, or other polyatomic ions to form _____

Common Polyatomic Ions

Name	Formula		Name	Formula
	$C_2H_3O_2^{1-}$			NO_3^{1-}
	NH_4^{1+}			NO_2^{1-}
	HCO_3^{1-}			MnO_4^{1-}
	CO_3^{2-}			O_2^{2-}
	ClO_3^{1-}			PO_4^{3-}
	CN^{1-}			SO_4^{2-}
	OH^{1-}			SO_3^{2-}

1. Write formulas for the following compounds:

(a) sodium phosphate

(b) calcium sulfate

(c) potassium chlorate

(d) aluminum hydroxide

(e) beryllium nitrate

2. Write names for the following compounds:

(a) K_2CO_3

(b) Na_2SO_4

(c) $Al(HCO_3)_3$

(d) $AgNO_3$

Polyatomic Compounds: Names and Formulas Worksheet

1. Write the formulas for the following compounds.

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|-------------------------------|--------------------------------|
| (a) magnesium sulfate _____ | (k) copper(I) chlorate _____ |
| (b) sodium chlorate _____ | (l) calcium sulfate _____ |
| (c) aluminum nitrate _____ | (m) nitric acid _____ |
| (d) potassium hydroxide _____ | (n) carbonic acid _____ |
| (e) lithium phosphate _____ | (o) sulfuric acid _____ |
| (f) calcium carbonate _____ | (p) lead(II) nitrate _____ |
| (g) beryllium sulfate _____ | (q) phosphoric acid _____ |
| (h) sodium bicarbonate _____ | (r) copper(II) hydroxide _____ |
| (i) magnesium hydroxide _____ | (s) iron(II) phosphate _____ |
| (j) aluminum phosphate _____ | (t) calcium chlorate _____ |

2. Write the names for the following compounds.

- | | |
|----------------------------------------|------------------------------------------------|
| (a) Li_2CO_3 _____ | (k) $\text{Pb}_3(\text{PO}_4)_2$ _____ |
| (b) AlHCO_3 _____ | (l) $\text{Sn}(\text{ClO}_3)_2$ _____ |
| (c) $\text{Mg}_3(\text{PO}_4)_2$ _____ | (m) NaOH _____ |
| (d) $\text{Ca}(\text{NO}_3)_2$ _____ | (n) $\text{H}_3\text{PO}_{4(\text{aq})}$ _____ |
| (e) K_2SO_4 _____ | (o) $\text{H}_2\text{CO}_{3(\text{aq})}$ _____ |
| (f) $\text{HNO}_{3(\text{aq})}$ _____ | (p) CuNO_3 _____ |
| (g) NaNO_3 _____ | (q) $\text{H}_2\text{SO}_{4(\text{aq})}$ _____ |
| (h) $\text{Al}(\text{OH})_3$ _____ | (r) FeSO_4 _____ |
| (i) CuSO_4 _____ | (s) $\text{Ca}(\text{HCO}_3)_2$ _____ |
| (j) $\text{Fe}(\text{ClO})_3$ _____ | (t) K_3PO_4 _____ |