

Name: \_\_\_\_\_

Class: \_\_\_\_\_

### Writing the chemical formula of compounds

Drag the correct formula next to the name of each polyatomic ion.

|                    |                    |                    |                  |
|--------------------|--------------------|--------------------|------------------|
| $\text{NO}_3^-$    | $\text{SO}_3^{2-}$ | $\text{SO}_4^{2-}$ | $\text{HCO}_3^-$ |
| $\text{PO}_4^{3-}$ | $\text{NH}_4^+$    | $\text{CO}_3^{2-}$ | $\text{OH}^-$    |

| Name                |  |
|---------------------|--|
| Ammonium            |  |
| Nitrate             |  |
| Hydroxide           |  |
| Hydrogen carbonate, |  |
| Carbonate,          |  |
| sulfate,            |  |
| sulfite,            |  |
| Phosphate           |  |



Match the ionic compounds on the left with their correct formulae on the right.

Calcium oxide

Aluminium chloride

Zinc iodide

Lithium hydride

Magnesium nitride

Calcium hydroxide

Lead (II) chloride

Lead (IV) chloride

$\text{Ca(OH)}_2$

$\text{ZnI}$

$\text{LiH}$

$\text{PbCl}_4$

$\text{CaO}$

$\text{PbCl}_2$

$\text{AlCl}_3$

$\text{Mg}_3\text{N}_2$

Write the name or chemical formula for each of the covalent compounds below.

$\text{CO}$

Sulfur dioxide

$\text{PCl}_3$

Phosphorous pentachloride

$\text{CCl}_4$

Carbon dioxide

Compounds with polyatomic ions: write the formula of the following compounds.

1. Sodium Nitrate

2. Magnesium Nitrite

3. Iron (III) sulfate

4. Ammonium Chloride

5. Ammonium Sulfite

6. Magnesium Phosphate

State the type of bonding which occurs in the following compounds

| Formula of compound | Type of bonding in the compound |
|---------------------|---------------------------------|
| $C_2H_6$            |                                 |
| $Na_2O$             |                                 |
| $Mg_3N_2$           |                                 |
| $SO_2$              |                                 |
| $CaCl_2$            |                                 |
| $CHF_3$             |                                 |