

## 4. Stoichiometry

Writing the chemical formula of compounds  
Drag the correct answer to the box next to the given 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           |  |

What is the formula of ammonium ion:



Inorganic compounds: Match the following chemical names with its correct formulae.

Calcium oxide

Aluminium chloride

Zinc iodide

Lithium hydride

Magnesium nitride

Calcium hydroxide

Lead (II) chloride

Lead (IV) chloride

$\text{Ca(OH)}_2$

$\text{ZnI}$

$\text{LiH}$

$\text{PbCl}_4$

$\text{CaO}$

$\text{PbCl}_2$

$\text{AlCl}_3$

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

Compounds containing two non-metals. Write the correct name/ formula!

$\text{CO}$

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

Simple molecules: write the names of the following

1. Methane .....
2. Water .....
3. Sulfuric acid .....
4. Ammonia .....
5. Nitric acid .....
6. Hydrochloric acid .....