

## Task 2 Quantitative - Worksheet 1: Chemical formulae

---

Write the formulae of the following compounds.

Copper(II) sulfate	_____
Nitric acid	_____
Copper(II) nitrate	_____
Sulfuric acid	_____
Sodium carbonate	_____
Aluminium sulfate	_____
Ammonium nitrate	_____
Nitrogen dioxide	_____
Sulfur dioxide	_____
Ammonia	_____
Ammonium sulfate	_____
Potassium hydroxide	_____
Calcium hydroxide	_____

## Task 2 Quantitative - Worksheet 2: Cations and anions

---

Complete the table below to show the substance, its formula and its individual ions.

Substance	Formula	Cation (exact number)	Anion (exact number)
Sodium bromide			
	KI		
Silver nitrate			
Copper(II) sulfate			
	NaHCO <sub>3</sub>		
Magnesium carbonate			
Lithium carbonate			
	Ca(HSO <sub>4</sub> ) <sub>2</sub>		
Aluminium nitrate			
Calcium phosphate			
Potassium hydride			
Sodium ethanoate			
	KMnO <sub>4</sub>		
Potassium dichromate(VI)			
Zinc chloride			
Strontium nitrate			
Sodium chromate(VI)			
Calcium fluoride			
Potassium sulfide			
Magnesium nitride			
Lithium hydrogensulfate			
	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>		

## Task 3 Quantitative - Worksheet 3: Writing equations

---

**Write: (a) the chemical equation and (b) the ionic equation for each of the following reactions.**

**1** Magnesium with sulfuric acid

**2** Calcium carbonate with nitric acid

**3** Hydrochloric acid with sodium hydroxide

**4** Aqueous barium chloride with aqueous sodium sulfate

**5** Aqueous sodium hydroxide with sulfuric acid

**6** Aqueous silver nitrate with aqueous magnesium chloride

**7** Solid magnesium oxide with nitric acid

**8** Aqueous copper(II) sulfate with aqueous sodium hydroxide

**9** Aqueous lead(II) nitrate with aqueous potassium iodide

**10** Aqueous iron(III) nitrate with aqueous sodium hydroxide