

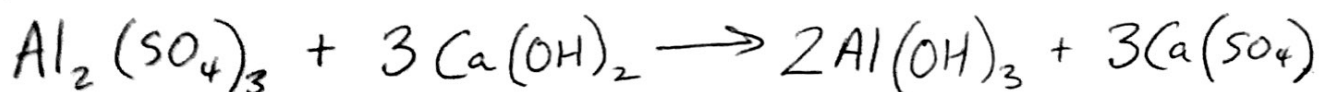
**Practice on Balancing Equations**

Write the balanced chemical equation for the following chemical reactions:

1. Calcium hydroxide <sup>+</sup> and hydrochloric acid (HCl) <sup>→</sup> produce calcium chloride <sup>+</sup> and water.



2. Aluminum sulphate <sup>+</sup> and calcium hydroxide <sup>→</sup> produce aluminum hydroxide <sup>+</sup> and calcium sulphate.



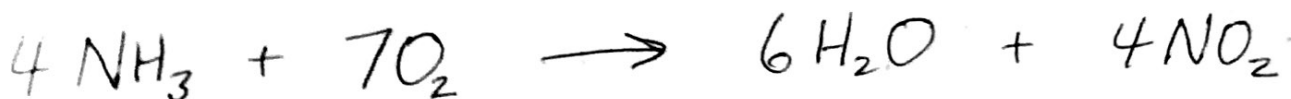
3. Zinc hydroxide <sup>+</sup> combines with sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) <sup>→</sup> to create zinc sulphate <sup>+</sup> and water.



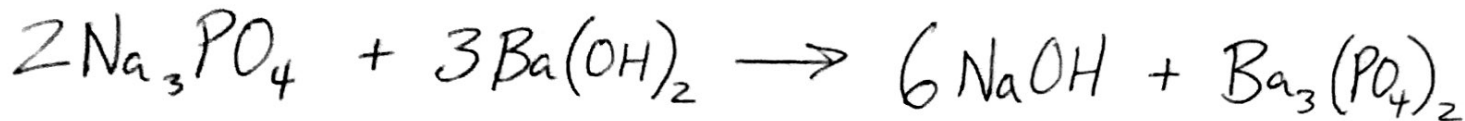
4. Barium chloride <sup>+</sup> and potassium sulphate <sup>→</sup> when combined produce potassium chloride <sup>+</sup> and barium sulphate.



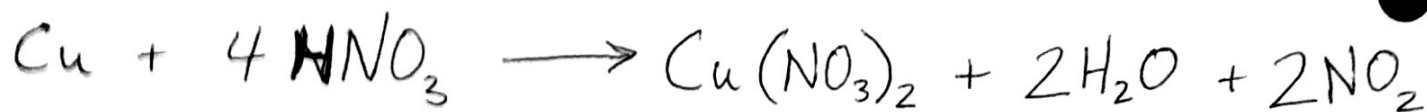
5. Ammonia (NH<sub>3</sub>) <sup>+</sup> burned in oxygen <sup>→</sup> can produce water vapour <sup>+</sup> and nitrogen dioxide gas (NO<sub>2</sub>).



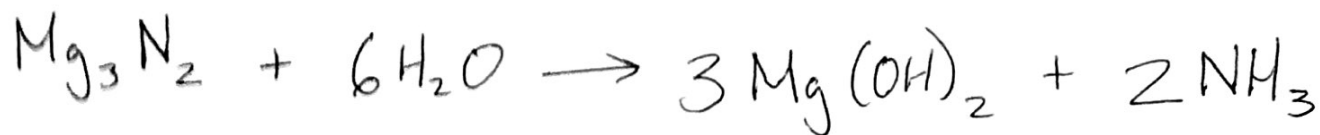
6. Sodium phosphate <sup>+</sup> and barium hydroxide <sup>→</sup> produce sodium hydroxide <sup>+</sup> and barium phosphate.



7. Copper <sup>+</sup> and hydrogen nitrate <sup>+</sup> when combined <sup>+</sup> produce copper (II) nitrate <sup>+</sup> and water <sup>+</sup> and nitrogen dioxide (NO<sub>2</sub>).



8. Magnesium nitride <sup>+</sup> and water <sup>+</sup> produce magnesium hydroxide <sup>+</sup> and nitrogen hydride.



9. Hydrogen iodide <sup>+</sup> reacts with hydrogen sulphate (sulphuric acid) <sup>+</sup> to create hydrogen sulphide <sup>+</sup> and iodine <sup>+</sup> plus water.



10. Calcium hydroxide <sup>+</sup> added to magnesium bicarbonate <sup>+</sup> produces magnesium hydroxide <sup>+</sup> plus calcium bicarbonate.



11. Manganese hydroxide <sup>+</sup> added to hydrogen phosphate <sup>+</sup> creates manganese phosphate <sup>+</sup> and water.



12. Silicon oxide <sup>+</sup> and calcium carbonate <sup>+</sup> create calcium silicate (CaSiO<sub>3</sub>) <sup>+</sup> and carbon dioxide.

