

Chapter 6 - Understanding Chemical Reactions...

Word Equation: A way to represent a chemical reaction. It tells you what reacts and what is produced.

Format: Reactant + Reactant \longrightarrow Product + Product

**There may be one or more reactant/product.

Reactants and products are separated by an arrow. Individual reactants/products are separated by a "+".

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Examples:

copper + silver nitrate \longrightarrow silver + copper (II) nitrate

zinc + hydrochloric acid \longrightarrow hydrogen + zinc chloride

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Common acid names and formulas are listed on the same sheet as the polyatomic ions.

They are listed in the table "Concentrated (saturated) Reagents"

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Examples:

1. Calcium chloride and sodium sulfate react to form calcium sulfate and sodium chloride.



2. Barium carbonate reacts when heated to form barium oxide and carbon dioxide.



3. Silver nitrate reacts with potassium chloride to produce silver chloride and potassium nitrate.



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Try me:

4. Zinc and lead (II) nitrate react to form zinc nitrate and lead.



5. Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.



6. Sodium phosphate and calcium chloride react to form calcium phosphate and sodium chloride.



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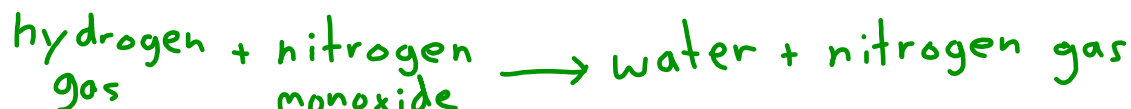
7. Potassium metal and chlorine gas combine to form potassium chloride



8. Aluminum and hydrochloric acid react to form aluminum chloride and hydrogen.



9. Hydrogen gas and nitrogen monoxide react to form water and nitrogen gas.



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Classwork

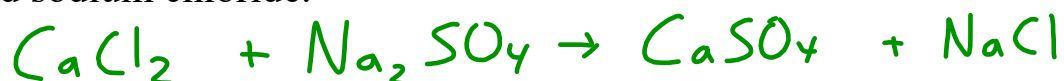
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Skeleton equations: word equations rewritten with chemical formulas in place of the chemical and compound names.

Examples:

1. Calcium chloride and sodium sulfate react to form calcium sulfate and sodium chloride.



2. Barium carbonate reacts when heated to form barium oxide and carbon dioxide.



3. Silver nitrate reacts with potassium chloride to produce silver chloride and potassium nitrate.



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Try me:

4. Zinc and lead (II) nitrate react to form zinc nitrate and lead.



5. Aluminum bromide and chlorine gas react to form aluminum chloride and bromine gas.



6. Sodium phosphate and calcium chloride react to form calcium phosphate and sodium chloride.



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7. Potassium metal and chlorine gas combine to form potassium chloride



8. Aluminum and hydrochloric acid react to form aluminum chloride and hydrogen.



9. Hydrogen gas and nitrogen monoxide react to form water and nitrogen gas.



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