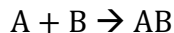


We have studied SIX main types of chemical reactions

Synthesis



Two Combine to Make One

Example:

Decomposition



One Decomposes Into Two

Example:

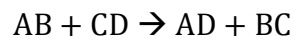
Single Replacement



Elements Trade Places to Make A
New Compound

Example:

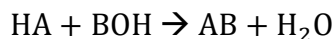
Double Replacement



Two Compounds React to Make
Two New Compounds

Example:

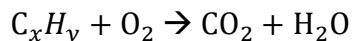
Neutralization



Acid Reacts with Base to Make
Salt and Water

Example:

Combustion



Hydrocarbon Reacts With Oxygen to
Make Carbon Dioxide & Water

Example:

Chemical Equations (Pg. 128-129)

What is a chemical equation?

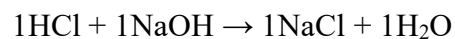
What symbol is used in a chemical equation to indicate “produces” or “yields”?

Give an example of an unbalanced chemical equation.

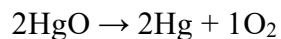
Give an example of a balanced chemical equation.

Match These Formulas

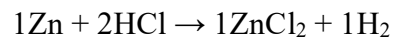
With These Reaction Types



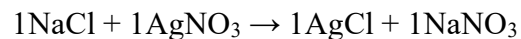
Single Replacement



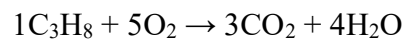
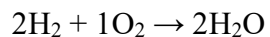
Double Replacement



Neutralization



Combustion

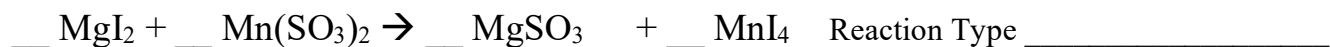


Synthesis

Decomposition

Balance the reaction

indicate which type of chemical reaction being represented:



____ Pb + ____ FeSO₄ → ____ PbSO₄ + ____ Fe Reaction Type _____

____ AgNO₃ + ____ Cu → ____ Cu(NO₃)₂ + ____ Ag Reaction Type _____

____ MgCl₂ + ____ Na₂O → ____ NaCl + ____ MgO Reaction Type _____

____ C₅H₅ + ____ Fe → ____ Fe(C₅H₅)₂ Reaction Type _____

____ SeCl₆ + ____ O₂ → ____ SeO₂ + ____ Cl₂ Reaction Type _____

____ Na + ____ Cl₂ → ____ NaCl Reaction Type _____

____ CaCO₃ → ____ CaO + ____ CO₂ Reaction Type _____

____ Fe + ____ CuSO₄ → ____ FeSO₄ + ____ Cu Reaction Type _____

____ BaCl₂ + ____ Na₂SO₄ → ____ BaSO₄ + ____ NaCl Reaction Type _____

Indicate which type of chemical reaction is being represented:

Then Build a Balanced Formula

When propane gas, C_3H_8 , is burned with oxygen, the products are carbon dioxide and water.

When silicon tetrachloride gas reacts with magnesium metal to form solid silicon and solid magnesium chloride.

Magnesium metal and oxygen gas are combined to form magnesium oxide.

Through the reaction between tetraphosphorus decoxide and water, phosphoric acid, H_3PO_4 , is produced.

Watch this Film: “Why It Was Almost Impossible to Make the Blue LED”

<https://www.youtube.com/watch?v=AF8d72mA41M>

Watch the Video. In your own words, write down three things from the video that you didn't know about before.

Watch this Film: “The Man Who Killed Millions and Saved Billions”

<https://www.youtube.com/watch?v=QQkmJI63ykI>

Watch the Video. In your own words, write down three things from the video that you didn't know about before.