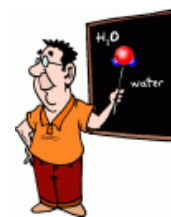


Name: _____ Date: _____
IPC

Class Notes



Writing Chemical Equations

Chemists describe chemical reactions with chemical equations based on the empirical evidences recorded in the laboratory. **Chemical equations are symbolic representations of a chemical reaction.** These chemical equations allow chemists to make several predictions about chemical reactions.

Writing a Chemical Equation

A chemical equation reveals three things about a chemical reaction.

1. the substances that react. _____
2. the substances formed. _____
3. the relative amounts of the substances involved. _____

The writing of a chemical equation is simple, but you must be familiar with the periodic table of elements, writing chemical formulas and a few simple symbols.

SYMBOLS:

(g) = _____	→ = _____
(l) = _____	Δ = _____
(s) = _____	+ = _____
(aq) = _____	↑ = _____

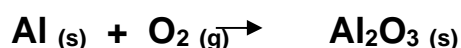
Steps to writing chemical equations:

1. Identify the reactants and the products.
2. Write formulas for the reactants and the products
3. Write the reactants on the left, the products on the right and place an arrow between the two sides.

Example: Aluminum reacts with oxygen to yield aluminum oxide

Reactants
aluminum = Al
oxygen = O₂

Products
aluminum oxide = Al₂O₃



Practice

dinitrogen pentoxide reacts with water to produce nitric acid

Reactants

Products

Equation:

sodium hydrogen carbonate produces sodium carbonate, water and carbon dioxide

Reactants

Products

Equation:

lead (II) nitrate is mixed with potassium iodide to produce lead (II) iodide and potassium nitrate

Reactants

Products

Equation:

"I hope I shall always possess firmness and virtue enough to maintain what I consider the most enviable of all titles, the character of an honest man." -- George Washington