

Chemical Reactions and Equations



FORMAT:

The test will cover three major areas: recognizing chemical reactions, writing chemical equations and balancing chemical equations. You must be able to name compounds and write formulas. Many of the questions will require analytical and critical thinking on your part. So think! Study and you will do well.

VOCABULARY

mole
product
catalyst

molar mass
reactant
coefficients

endothermic
stoichiometry
exothermic

Avogadro's number
law of conservation of mass

chemical equation
chemical reaction

KNOW

- Avogadro's number and the mole
- the symbols used in chemical equations
- how to write a chemical equation
- the evidences that a chemical reaction has occurred
- the types of chemical reactions
- how to balance a chemical reaction

BE ABLE TO

- recognize chemical reactions
- write a chemical equation from the reaction
- balance a chemical equation

REVIEW

- name ionic and molecular compounds
- write formulas for ionic and molecular compounds
- name common acids
- write formulas for common acids
- the periodic table
- the metric system

Practice

WRITE a balanced equation and classify the reaction.

1. potassium chloride + silver nitrate → silver chloride + potassium nitrate
2. ammonium nitrite → nitrogen + water
3. hydrogen + bromine → hydrogen bromide
4. sodium hydroxide + hydrochloric acid → sodium chloride + water
5. barium carbonate → barium oxide + carbon dioxide

DIRECTIONS: Determine the products and then write a balanced equation for the following.

6. calcium phosphate plus hydrochloric acid ...
7. nitric acid and calcium hydroxide ...
8. solid lithium oxide is added to water ...

“Do all things without complaining and disputing.” --Wiseman