

Chemical reactions and chemical equations

Rewrite the following sentences as chemical word equations. Then write the skeleton equation and balance the equation.

1. Iron combines with oxygen to form rust, which is also known as iron (II) oxide.

Word equation:

Balanced equation:

2. A solution of hydrogen chloride reacts with sodium carbonate to produce carbon dioxide, sodium chloride, and water.

Word equation:

Balanced equation:

3. When aluminum metal is exposed to oxygen, a metal oxide called aluminum oxide is formed.

Word equation:

Balanced equation:

4. Water reacts with powdered sodium oxide to produce a solution of sodium hydroxide.

Word equation:

Balanced equation:

5. Hydrogen gas reacts with nitrogen trifluoride gas to form nitrogen gas and hydrogen fluoride.
Word equation:

Balanced equation:

6. Chromium (III) sulfate reacts with potassium carbonate to form chromium (III) carbonate and potassium sulfate.
Word equation:

Balanced equation:

7. Potassium chlorate when heated becomes oxygen gas and potassium chloride.
Word equation:

Balanced equation:

8. A piece of metallic zinc is placed in a blue solution of copper (II) sulfate. A reddish brown layer of metallic copper forms in a clear solution of zinc sulfate.
Word equation:

Balanced equation: