

Chemical Equations Practice

1. When lithium hydroxide pellets are added to a solution of sulfuric acid, lithium sulfate and water are formed.

Word Equation

Skeleton Equation

Balanced Chemical Equation

2. If a copper coil is placed into a solution of silver nitrate, silver crystals form on the surface of the copper. Additionally, highly soluble copper (I) nitrate is generated.

Word Equation

Skeleton Equation

Balanced Chemical Equation

3. When exposed to oxygen, iron metal forms iron (III) oxide, known as rust.

Word Equation

Skeleton Equation

Balanced Chemical Equation

4. Ammonia gas reacts with iodine to form solid nitrogen triiodide (a contact explosive) and hydrogen gas.

Word Equation

Skeleton Equation

Balanced Chemical Equation

5. The combustion of propane (C_3H_8) in the presence of oxygen produces carbon dioxide gas and water vapor.

Word Equation

Skeleton Equation

Balanced Chemical Equation

6. The incomplete combustion of propane with oxygen forms carbon monoxide and water.
Word Equation

Skeleton Equation

Balanced Chemical Equation

7. Nitric acid reacts with potassium hydroxide to form potassium nitrate and water.
Word Equation

Skeleton Equation

Balanced Chemical Equation

8. Copper (II) oxide reacts with hydrogen to form copper metal and water.
Word Equation

Skeleton Equation

Balanced Chemical Equation

9. The complete combustion of butane in oxygen produces carbon monoxide and water vapor.
Word Equation

Skeleton Equation

Balanced Chemical Equation

10. The reaction of aluminum bromide with magnesium hydroxide yields magnesium bromide and aluminum hydroxide.
Word Equation

Skeleton Equation

Balanced Chemical Equation

11. The reaction of ammonia with sulfuric acid yields ammonium sulfate.

Word Equation

Skeleton Equation

Balanced Chemical Equation

12. When solid calcium carbonate is added to hydrochloric acid, calcium chloride, water, and carbon dioxide gas are produced.

Word Equation

Skeleton Equation

Balanced Chemical Equation

13. Silver oxide decomposes to produce solid silver and oxygen gas.

Word Equation

Skeleton Equation

Balanced Chemical Equation

14. When crystalline glucose is burned in oxygen, carbon dioxide and water vapor are formed.

Word Equation

Skeleton Equation

Balanced Chemical Equation

15. Sulfur and oxygen will combine to form sulfur trioxide gas, one of the pollutants in acid rain.

Word Equation

Skeleton Equation

Balanced Chemical Equation

16. Adding sodium bicarbonate to nitric acid results in the production of sodium nitrate, water, and carbon dioxide gas.

Word Equation

Skeleton Equation

Balanced Chemical Equation

17. Liquid hydrogen peroxide is synthesized from combining water and oxygen.

Word Equation

Skeleton Equation

Balanced Chemical Equation

18. Bunsen burners in our chemistry classroom utilize methane as fuel. Methane combusts in the presence of oxygen to produce carbon dioxide, water vapor, and energy in the form of heat and light.

Word Equation

Skeleton Equation

Balanced Chemical Equation

19. Solid white phosphorus (P_4) combines with oxygen to produce diphosphorus pentoxide, white crystalline solid.

Word Equation

Skeleton Equation

Balanced Chemical Equation

20. Ammonia is formed by reacting hydrogen and nitrogen gas.

Word Equation

Skeleton Equation

Balanced Chemical Equation