

Side 1

Types of Reactions

Physical states of matter and symbols

All physical states are given at standard temperature and pressure for each chemical in the reaction.

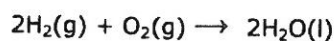
(aq) = aqueous solution (dissolved in water, from aqua or water) (l) = liquid

(s) = insoluble solid or precipitate

(g) = gas

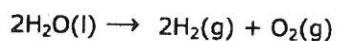
Classify the following reactions into two groups.

1. Hydrogen + Oxygen → Water



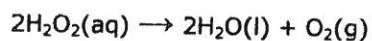
Synthesis

2. Water → Hydrogen + Oxygen



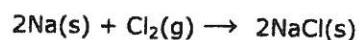
Decomposition

3. Hydrogen peroxide → Water + Oxygen



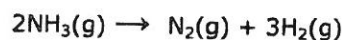
Decomposition

4. Sodium + Chlorine → Sodium chloride



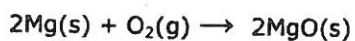
Synthesis

5. Ammonia → Nitrogen + Hydrogen



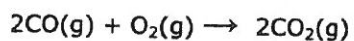
Decomposition

6. Magnesium + Oxygen → Magnesium oxide



Synthesis

7. Carbon monoxide + Oxygen → Carbon dioxide



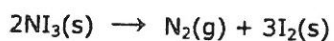
Synthesis

8. Copper carbonate → Copper oxide + carbon dioxide



Decomposition

9. Nitrogen triiodide → Nitrogen + Iodine



Decomposition

Side 2

Ans. key

Types of Reactions

Physical states of matter and symbols

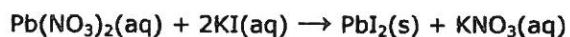
All physical states are given at standard temperature and pressure for each chemical in the reaction.

(aq) = aqueous solution (dissolved in water, from aqua or water) (l) = liquid

(s) = insoluble solid or precipitate (g) = gas

Classify the following reactions into two groups.

1. Lead nitrate(aq) + Potassium iodide(aq) → Lead iodide(s) + potassium nitrate(aq)



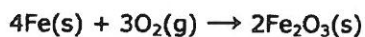
Precipitation

2. Methane + Oxygen → Carbon dioxide + Water



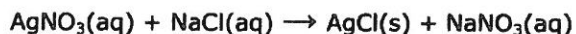
Oxidation

3. Iron + Oxygen → Iron oxide



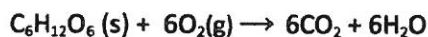
Oxidation

4. Silver nitrate(aq) + sodium chloride(aq) → Silver chloride(s) + sodium nitrate(aq)



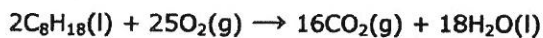
Precipitation

5. Glucose + oxygen → carbon dioxide + water



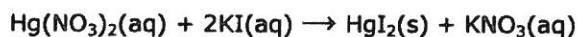
Oxidation

6. Octane + oxygen → Carbon dioxide + Water



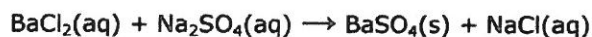
oxidation

7. Mercury(II) nitrate(aq) + Potassium iodide(aq) → Mercury iodide(s) + Potassium nitrate



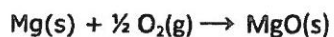
Precipitation

8. Barium chloride(aq) + Sodium sulfate(aq) → Barium sulfate(s) + Sodium chloride(aq)



Precipitation

9. Magnesium + oxygen → Magnesium oxide



Oxidation