

- Directions:
- Substitute symbols and formulas for names being sure to denote phases.
 - Balance each equation.
 - Identify the type equation as synthesis, decomposition, single replacement, double replacement, or combustion.

1. Aluminum metal reacts with aqueous zinc chloride to produce zinc metal and aqueous aluminum chloride.

Type: _____

2. Iron and sulfur combine and form iron (II) sulfide.

Type: _____

3. Solid diphosphorus pentoxide can be produced from the elements oxygen and phosphorus. (Note: Solid elemental phosphorus contains 4 atoms per molecule; it is written P₄.)

Type: _____

4. When solid potassium nitrate is heated, it forms solid potassium nitrite and oxygen gas.

Type: _____

5. When hydrogen sulfide gas is passed over solid hot iron (III) hydroxide, it reacts to form solid iron (III) sulfide and water vapor.

Type: _____