

**WKS**  
**Classification of Chemical Reactions**

**NAME** \_\_\_\_\_  
**Period** \_\_\_\_\_ **Date** \_\_\_\_\_

Identify the following chemical equations by type, then balance them. If a reaction belongs to more than one type, indicate all applicable types.

Reaction	Type(s)
1. ___ C <sub>4</sub> H <sub>8</sub> + ___ O <sub>2</sub> → ___ CO <sub>2</sub> + ___ H <sub>2</sub> O	_____
2. ___ HCl + ___ NaOH → ___ H <sub>2</sub> O + ___ NaCl	_____
3. ___ KNO <sub>3</sub> (s) → ___ KNO <sub>2</sub> (s) + ___ O <sub>2</sub> (g)	_____
4. ___ AgNO <sub>3</sub> + ___ NaCl → ___ NaNO <sub>3</sub> + ___ AgCl	_____
5. ___ Mg + ___ O <sub>2</sub> → ___ MgO	_____
6. Solid silver reacts with octasulfur (an allotrope of sulfur) to form solid silver sulfide.	_____
7. Solid magnesium carbonate is heated and forms solid magnesium oxide and carbon dioxide gas.	_____
8. Fluorine gas reacts with a solution of iron(III) chloride to form chlorine gas and iron(III) fluoride solution.	_____
9. Solid zinc reacts with a solution of gold(III) nitrate to form solid gold and zinc nitrate.	_____
10. Propanol (C <sub>3</sub> H <sub>7</sub> OH) liquid reacts with oxygen gas to form carbon dioxide gas and water vapor.	_____