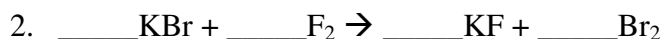


For each equation:

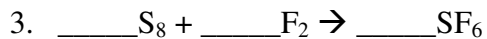
1. Balance the equation.
2. Identify the type of reaction (synthesis, decomposition, etc.).

**Reaction Type**

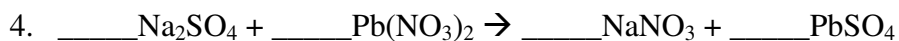
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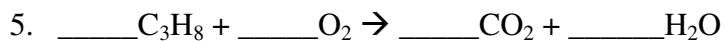
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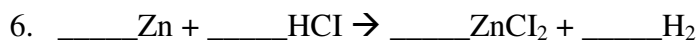
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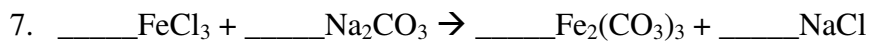
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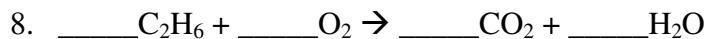
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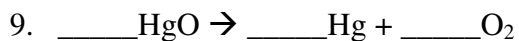
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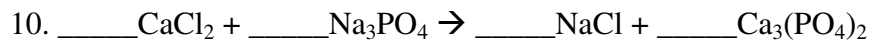
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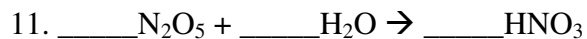
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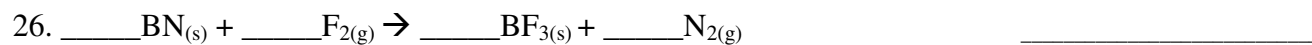


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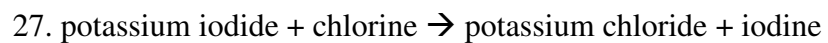


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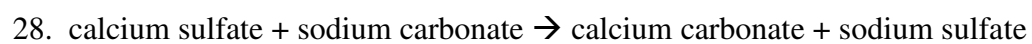
12. \_\_\_\_\_ Mg + \_\_\_\_\_ CuCl<sub>2</sub> → \_\_\_\_\_ MgCl<sub>2</sub> + \_\_\_\_\_ Cu \_\_\_\_\_
13. \_\_\_\_\_ Cu<sub>(s)</sub> + \_\_\_\_\_ O<sub>2(g)</sub> → \_\_\_\_\_ CuO<sub>(s)</sub> \_\_\_\_\_
14. \_\_\_\_\_ H<sub>2</sub>O<sub>(l)</sub> → \_\_\_\_\_ H<sub>2(g)</sub> + \_\_\_\_\_ O<sub>2(g)</sub> \_\_\_\_\_
15. \_\_\_\_\_ Fe<sub>(s)</sub> + \_\_\_\_\_ H<sub>2</sub>O<sub>(g)</sub> → \_\_\_\_\_ H<sub>2(g)</sub> + \_\_\_\_\_ Fe<sub>3</sub>O<sub>4(s)</sub> \_\_\_\_\_
16. \_\_\_\_\_ AsCl<sub>3(aq)</sub> + \_\_\_\_\_ H<sub>2</sub>S<sub>(aq)</sub> → \_\_\_\_\_ As<sub>2</sub>S<sub>3(s)</sub> + \_\_\_\_\_ HCl<sub>(aq)</sub> \_\_\_\_\_
17. \_\_\_\_\_ Fe<sub>(s)</sub> + \_\_\_\_\_ S<sub>8(s)</sub> → \_\_\_\_\_ FeS<sub>(s)</sub> \_\_\_\_\_
18. \_\_\_\_\_ H<sub>2</sub>S<sub>(aq)</sub> + \_\_\_\_\_ KOH<sub>(aq)</sub> → \_\_\_\_\_ H<sub>2</sub>O<sub>(l)</sub> + \_\_\_\_\_ K<sub>2</sub>S<sub>(aq)</sub> \_\_\_\_\_
19. \_\_\_\_\_ NaCl<sub>(l)</sub> → \_\_\_\_\_ Na<sub>(l)</sub> + \_\_\_\_\_ Cl<sub>2(g)</sub> \_\_\_\_\_
20. \_\_\_\_\_ Al<sub>(s)</sub> + \_\_\_\_\_ H<sub>2</sub>SO<sub>4(aq)</sub> → \_\_\_\_\_ H<sub>2(g)</sub> + \_\_\_\_\_ Al<sub>2</sub>(SO<sub>4</sub>)<sub>3(aq)</sub> \_\_\_\_\_
21. \_\_\_\_\_ H<sub>3</sub>PO<sub>4(aq)</sub> + \_\_\_\_\_ NH<sub>4</sub>OH<sub>(aq)</sub> → \_\_\_\_\_ H<sub>2</sub>O<sub>(l)</sub> + \_\_\_\_\_ (NH<sub>4</sub>)<sub>3</sub>PO<sub>4(aq)</sub> \_\_\_\_\_
22. \_\_\_\_\_ Al<sub>(s)</sub> + \_\_\_\_\_ O<sub>2(g)</sub> → \_\_\_\_\_ Al<sub>2</sub>O<sub>3(s)</sub> \_\_\_\_\_
23. \_\_\_\_\_ CH<sub>4(g)</sub> + \_\_\_\_\_ O<sub>2(g)</sub> → \_\_\_\_\_ CO<sub>2(g)</sub> + \_\_\_\_\_ H<sub>2</sub>O<sub>(l)</sub> \_\_\_\_\_
24. \_\_\_\_\_ K<sub>2</sub>SO<sub>4(aq)</sub> + \_\_\_\_\_ BaCl<sub>2(aq)</sub> → \_\_\_\_\_ KCl<sub>(aq)</sub> + \_\_\_\_\_ BaSO<sub>4(s)</sub> \_\_\_\_\_



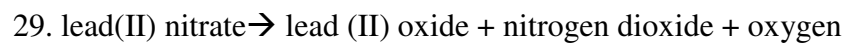
Write a balanced chemical equation for each of the following, and identify the type of reaction.



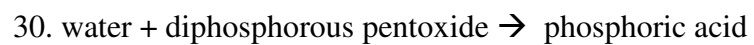
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