

Name: _____ Class: _____ Date: _____

Complete and balance the following reactions. Indicate the state (solid, liquid or gas) of the products when known. If heat is produced as a product include it. If no reaction occurs write NR in the answer blank.

1. $\text{Al}(\text{NO}_3)_3 (aq) + \text{Ca}_3(\text{PO}_4)_2 (aq) \rightarrow$ 1. _____
2. $\text{Ni} (s) + \text{Pb}(\text{NO}_3)_2 (aq) \rightarrow$ 2. _____
3. _____ + _____ $\rightarrow \text{Mg}(\text{OH})_2$ 3. _____
4. $2\text{HgO}(s) \rightarrow$ _____ + _____ 4. _____
5. $\text{PbCl}_2(aq) + (\text{NH}_4)_2\text{CO}_3 (aq) \rightarrow$ 5. _____
6. $\text{Fe}(s) + \text{H}_2\text{SO}_4 (aq) \rightarrow$ 6. _____
7. $\text{H}_3\text{PO}_4(aq) + \text{KOH}(aq) \rightarrow$ 7. _____
8. $\text{Ag}(s) + \text{HCl}(aq) \rightarrow$ 8. _____
9. $\text{Fe}(s) + \text{ZnCl}_2(aq) \rightarrow$ 9. _____
10. $\text{FeCl}_2(aq) + \text{AgNO}_3(aq) \rightarrow$ 10. _____
11. $(\text{NH}_4)_2\text{SO}_4(aq) + \text{NiCl}_2(aq) \rightarrow$ 11. _____
12. $\text{C}_2\text{H}_6(l) + \text{O}_2(g) \rightarrow$ 12. _____
13. $\text{NH}_4\text{Br}(aq) + \text{NaOH}(aq) \rightarrow$ 13. _____

