Name:
Period:
Date:

6.5 Tracked Assignment (Obj 3)

Part 1: Answer the following questions.

1. What determines if one metal will replace another metal in a single replacement reaction?

   if the element is more active or reactive than one in the compo they'll switch

2. Label the following with the type of reaction expected:
   a. Two compounds reacting to produce two more double
   b. Two elements combining combin/syn
   c. An element and an ionic compound reacting single
   d. The products are CO_2 and H_2O combust
   e. One compound reacts decomp
3. What type of reaction is represented below? Write a balanced chemical equation for it. single $AB + C \rightarrow AC + B$

Part 2: Balance the following reactions and state the type of reaction involved.

4. 2 C_8H_{18} + 25 O_2 → 16 CO_2 + 18 H_2O type: combust
5. 6 Na + ___ $Cu_3(BO_3)_2$ → 2 Na_3BO_3 + 3 Cu type: single
6. ___ $Rh(OH)_4$ → ___ RhO_2 + 2 H_2O type: decomp
7. 2 $Bi(NO_3)_3$ + 3 H_2S → ___ Bi_2S_3 + 6 HNO_3 type: double
8. ___ Cl_2O_7 + ___ H_2O → 2 $HClO_4$ type: combin/syn
9. 2 KBr → 2 K + ___ Br_2 type: decomp
10. ___ Zn + ___ O_2 → ___ ZnO_2 type: Combin/Syn

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11. 2 NaI + ___ Cl_2 → 2 NaCl + ___ I_2 type: single

12. ___ $Al_2(SO_4)_3$ + ___ $Ca_3(PO_4)_2$ → 2 $AlPO_4$ + 3 $CaSO_4$ type: double

13. 2 $C_{10}H_{22}$ + 21 O_2 → 20 CO_2 + 22 H_2O type: combust

Part 3: Write a **complete balanced** equation for each of the reaction and **identify** the type of reaction. Remember to pay attention to charges and the activity series.

14. 1 $Al(OH)_3$ + 3 $NaNO_3$ → $Al(NO_3)_3$ + 3 NaOH type: double

15. 3 Fe (II when bonded) + ___ $Cu_2(SO_4)_3$ → type: single

3 $FeSO_4$ + 2 Cu

16. 2 Al + 3 $CuCl_2$ → 2 $AlCl_3$ + 3 Cu type: single

17. ___ $Al_2(SO_4)_3$ + 3 $BaCl_2$ → type: double

2 $AlCl_3$ + 3 $BaSO_4$

18. ___ NaF + ___ Mg → No reaction type: single

19. ___ C_5H_{12} + 8 O_2 → 5 CO_2 + 6 H_2O type: combust

20. ___ $MgCl_2$ + 2 AgF → MgF_2 + 2 AgCl type: double

21. ___ $C_5H_{10}O_3$ + 6 O_2 → 5 CO_2 + 5 H_2O type: Combust