Types of Chemical Reactions (26 pts) Name: _____

Chemistry- Week 22- Homework Date/Period: _____

Balance the reactions *and* ***indicate which type of chemical reaction*** *(synthesis, decomposition, single-replacement, double-replacement or combustion) is being represented* ***(2 pts each)****:*

1. _____ $NaBr$ + _____ $Ca(OH)_2$ → ___ $CaBr_2$ + _____ $NaOH$ Reaction Type : _____

2. _____ NH_3+ _____ H_2SO_4 → _____ $(NH_4)_2SO_4$ Reaction Type : _____

3. _____ C_5H_9O + _____ O_2 → _____ CO_2 + _____ H_2O Reaction Type : _____

4. _____ Pb + _____ H_3PO_4 → _____ H_2 + _____ $Pb_3(PO_4)_2$ Reaction Type : _____

5. _____ Li_3N + _____ NH_4NO_3 → ___ $LiNO_3$ + ___ $(NH_4)_3N$ Reaction Type : _____

6. _____ HBr + ___ $Al(OH)_3$ → ___ H_2O + ___ $AlBr_3$ Reaction Type : _____

Indicate which type of chemical reaction (synthesis, decomposition, single-replacement, double-replacement or combustion) is being represented in 7 to 20 **(1 pt each)**.

7. $Na_3PO_4 + 3\ KOH \rightarrow 3\ NaOH + K_3PO_4$ Reaction Type _____

8. $MgCl_2 + Li_2CO_3 \rightarrow MgCO_3 + 2\ LiCl$ Reaction Type _____

9. $C_6H_{12} + 9\ O_2 \rightarrow 6\ CO_2 + 6\ H_2O$ Reaction Type _____

10. $Pb + FeSO_4 \rightarrow PbSO_4 + Fe$ Reaction Type _____

11. $CaCO_3 \rightarrow CaO + CO_2$ Reaction Type _____

12. $P_4 + 3\ O_2 \rightarrow 2\ P_2O_3$ Reaction Type _____

13. $2\ RbNO_3 + BeF_2 \rightarrow Be(NO_3)_2 + 2\ RbF$ Reaction Type _____

14. $2\ AgNO_3 + Cu \rightarrow Cu(NO_3)_2 + 2\ Ag$ Reaction Type _____

15. $C_3H_6O + 4\ O_2 \rightarrow 3\ CO_2 + 3\ H_2O$ Reaction Type _____

16. $2\ C_5H_5 + Fe \rightarrow Fe(C_5H_5)_2$ Reaction Type _____

17. $SeCl_6 + O_2 \rightarrow SeO_2 + 3Cl_2$ Reaction Type _____

18. $2\ MgI_2 + Mn(SO_3)_2 \rightarrow 2\ MgSO_3 + MnI_4$ Reaction Type _____

19. $O_3 \rightarrow O\cdot + O_2$ Reaction Type _____

20. $2\ NO_2 \rightarrow 2\ O_2 + N_2$ Reaction Type _____