Section 8.2 Complete the following assignment in your class notebook with the heading: Classifying Equations

partial Key

Synthesis (S) Decomposition (D)	Single-Replacement Cationic (SRC) Single-Replacement Anionic (SRA) Double-Replacement Neutralization (DRN) Double-Replacement Precipitation (DRP)	Combustion (C)

For each of the following:

i.) Identify the type of chemical reaction taking place (see above).

ii.) *Write a complete and balanced chemical equation (including phases)*

1. Reaction type: DRP

$CaBr_2(aq) + 2AgNO_3(aq) \rightarrow Ca(NO_3)_2(aq) + 2AgBr(s)$

2. Reaction type: _____

$Al(s) + CuCl_2(aq) \rightarrow$

3 Reaction type: S

$4K(s) + 2C(s) + 3O_2(g) \rightarrow 2K_2CO_3(s)$

4. Reaction type: _____

$KOH(aq) + AlBr_3(aq) \rightarrow$

5. Reaction type: SRC

$Ca(s) + 2AgNO_3(aq) \rightarrow 2Ag(s) + Ca(NO_3)_2(aq)$

6. Reaction type: _____

$AlBr_3(s) \rightarrow$

7. Reaction type: DRP

$3Pb(C_2H_3O_2)_2(aq) + 2(NH_4)_3PO_4(aq) \rightarrow Pb_3(PO_4)_2(s) + 6NH_4C_2H_3O_2(aq)$

8. Reaction type: _____

$C_3H_6(g) + O_2(g) \rightarrow$

9. Reaction type: SRC

$2Mg(s) + Sn(ClO_4)_4(aq) \rightarrow Sn(s) + 2Mg(ClO_4)_2(aq)$

10. Reaction type: _____

$(NH_4)_2CrO_4(aq)$ + $FeI_3(aq)$ --->

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11. Reaction type: S

$Pb(s) + 2Br_2(l)$ ---> $PbBr_4(s)$

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12. Reaction type: _____

Aqueous Ammonium carbonate + Aqueous Calcium chloride --->

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13. Reaction type: S

$2Hg(l) + O_2(g) \rightarrow 2HgO(s)$

---> Solid mercuric oxide

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14. Reaction type: _____

aqueous lithium hydroxide + sulfuric acid (acids are always aqueous) --->

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15. Reaction type: D $2NH_3(g) \rightarrow N_2(g) + 3H_2(g)$

gaseous ammonia (NH_3) --->

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16. Reaction type: _____

fluorine + aqueous Iron(III) bromide --->

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17. Reaction type: S $4P(s) + 5O_2(g) \rightarrow 2P_2O_5(s)$

---> solid diphosphorus pentoxide

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18. Reaction type: _____

magnesium + hydrochloric acid --->