Predict the products for each reaction (remember to swap and drop if needed when writing formulas), then balance the equation.

Combination:

1. __$MgCl_2$ + __O_2 --->
2. __Na + __O_2 --->
3. __P_2O_3 + __H_2O ---> Phosphorous Acid
4. __K_2O + __H_2O --->
5. __BaO + __CO_2 --->
6. __BeO + __CO_2 --->
7. __Al_2O_3 + __H_2O --->
8. __N_2O_5 + __H_2O --->
9. __NaCl + __O_2 --->
10. __Ra + __Cl_2 --->

Single Replacement:

1. __Al + __$Pb(NO_3)_2$ --->
2. __Cl_2 + __NaI --->
3. __Fe + __$AgC_2H_3O_2$ ---> (Fe has a 2+ charge)
4. __Al + __$CuCl_2$ --->
5. __Br_2 + __CaI_2 --->
6. __Al + __HCl --->
7. __Mg + __HCl --->
8. __Zn + __H_2SO_4 --->
9. __ Fe + __$CuSO_4$ ---> (Fe has a 2+ charge)
10. __Cl_2 + __MgI_2 --->

Decomposition:

1. __$Ni(ClO_3)_2$ --->
2. __Ag_2O --->
3. __HNO_2 ---> (one product is dintrogen trioxide)
4. __$Fe(OH)_3$ --->
5. __$Zn(CO_3)$ --->
6. __Cs_2CO_3 --->
7. __$Al(OH)_3$ --->
8. __H_2SO_4 ---> (one product is sulfur trioxide)
9. __$RbClO_3$ --->
10. __$RaCl_2$ --->

Combustion Reactions

1) __C_6H_6 + __O_2 --->
2.) __$C_{12}H_{22}O_{11}$ + __O_2 --->
3) __$C_{25}H_{52}$ + __O_2 --->
4) __$C_2H_5OC_2H_5$ + __O_2 --->
5) __C_4H_9OH + __O_2 --->