	Name:
	SCH 4C Balancing from Word Descriptions
1.	The synthesis reaction between magnesium oxide and water
	MgO + $H_2O$ $\rightarrow$ Mg(OH) <sub>2</sub>
2.	The decomposition of sodium hydroxide to produce two compounds
	2NaOH → Na₂O + H₂O
3.	The single replacement between magnesium and silver phosphate
	$3Mg + 2Ag_3PO_4 \rightarrow Mg_3(PO_4)_2 + 6Ag$
4.	The single replacement between chlorine gas and ammonium iodide
	$Cl_2$ + $2NH_4I$ $\rightarrow$ $2NH_4C1$ + $I_2$
5.	The double displacement between sodium sulphate and aluminum nitrate
	$3Na_2SO_4$ + $2Al(NO_3)_3$ $\rightarrow$ $Al_2(SO_4)_3$ + $6NaNO_3$
6.	The neutralization between calcium hydroxide and phosphoric acid (hint #1 - a neutralization reaction is double displacement the produces a salt and water (a.k.a. hydrogen hydroxide, hint #2 - phosphoric acid has the same formula as hydrogen phosphate)
	$3Ca(OH)_2 + 2H_3PO_4 \rightarrow Ca_3(PO_4)_2 + 6H_2O$
7.	The double displacement decomposition reaction between sodium bicarbonate and hydrochloric acid
	$NaHCO_3$ + $HCl$ $\rightarrow$ $NaCl$ + $H_2O$ + $CO_2$
8.	The combustion of $C_5H_{12}$
	$C_5H_{12}$ + $8O_2$ $\rightarrow$ $5CO_2$ + $6H_2O$
9.	A reaction that produces lithium carbonate and gold(III) nitrate
	$Au_2(CO_3)_3$ + $6LiNO_3$ $\rightarrow$ $3Li_2CO_3$ + $2Au(NO_3)_3$
10.	The decomposition reaction of ammonium chloride
	NH <sub>4</sub> Cl → NH <sub>3</sub> + HCl