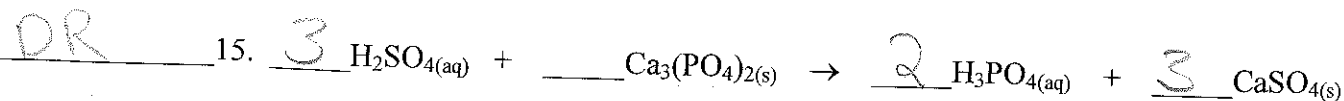
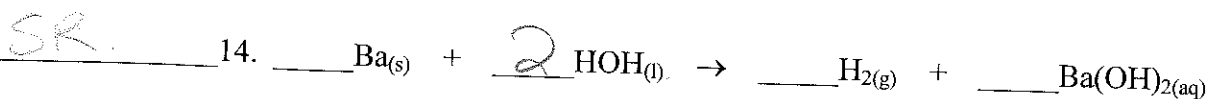
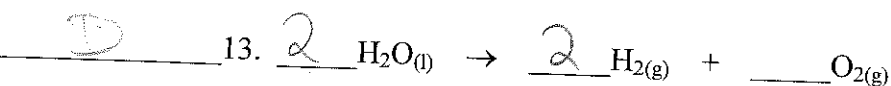
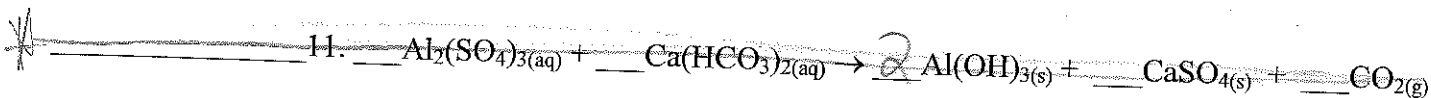
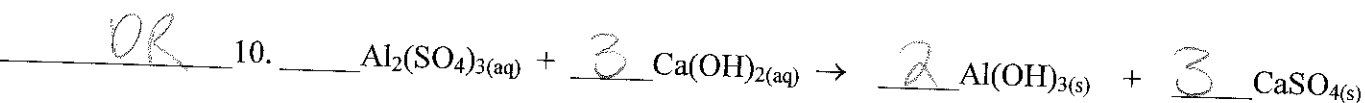
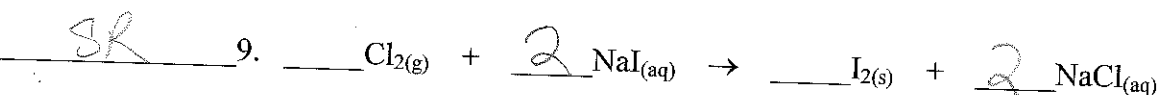
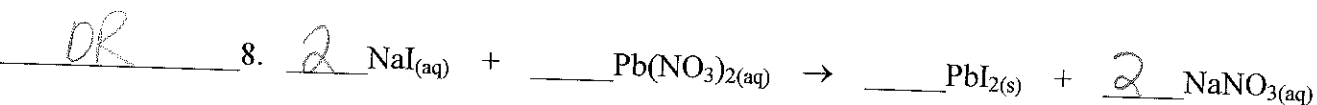
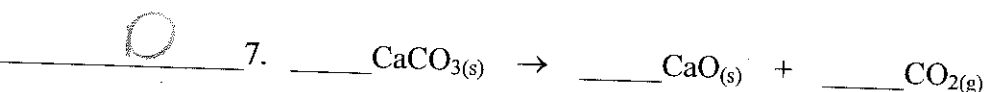
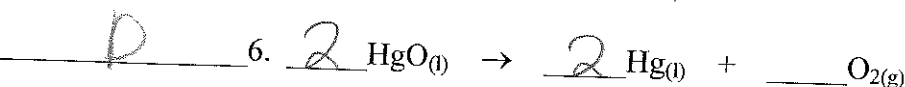
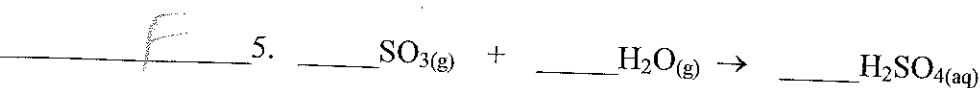
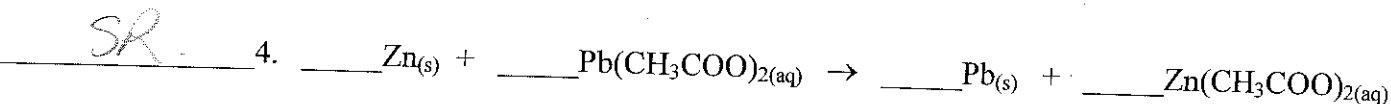
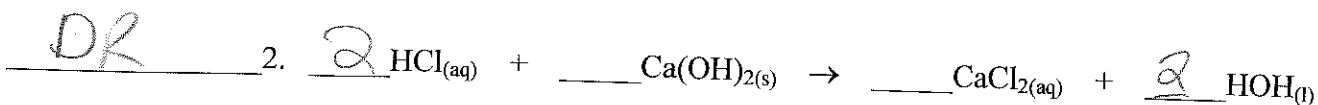
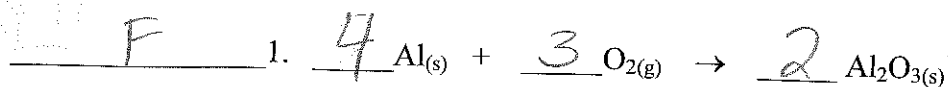


## Review of Chemical Reactions

For each of the following reactions, identify the reaction type and balance the reaction.



## Review of Chemical Reactions

For each of the following word equations, write out the balanced chemical reaction including all states and identify the reaction type.

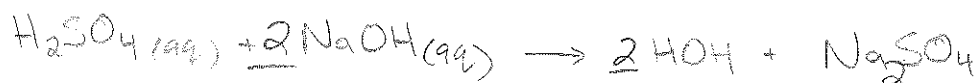
D 1. water → hydrogen + oxygen



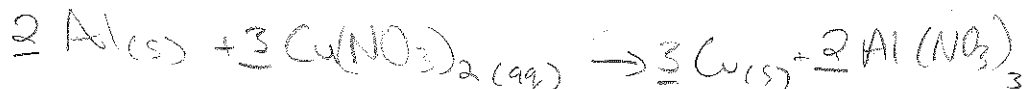
F 2. nitrogen + hydrogen → ammonia gas



SR 3. sulphuric acid + sodium hydroxide → water + sodium sulphate



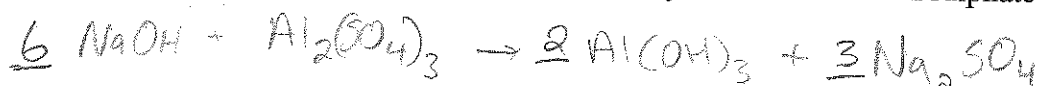
SR 4. aluminum + copper (II) nitrate → copper + aluminum nitrate



SR 5. chlorine + potassium bromide → bromine + potassium chloride



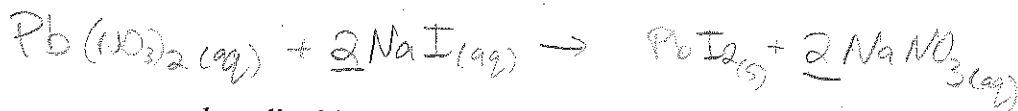
DR 6. sodium hydroxide + aluminum sulphate → aluminum hydroxide + sodium sulphate



F 7. phosphorus + oxygen → solid tetraphosphorus decaoxide



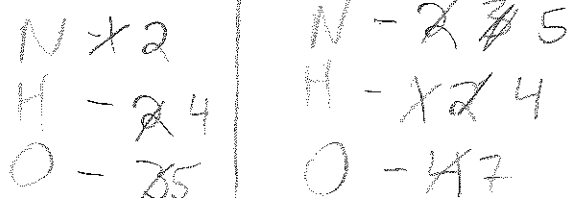
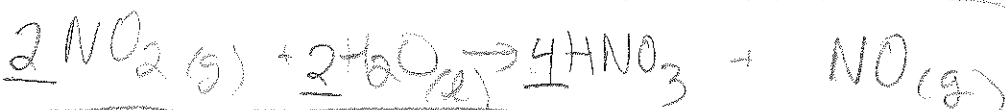
DR 8. lead (II) nitrate + sodium iodide → lead (II) iodide + sodium nitrate



C 9. methanol + oxygen → carbon dioxide + water vapour



~~10. nitrogen dioxide gas + water → nitric acid + nitrogen monoxide gas~~

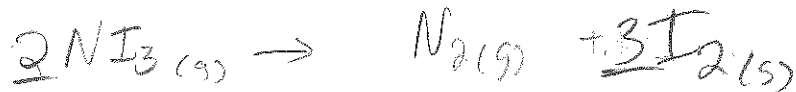


## Review of Predicting Chemical Reactions

For each of the following reactions:

1. Write the correct equation including states for each element and compound.
2. Balance the equation.
3. State the reaction type.

1. Nitrogen triiodide decomposes explosively into its elements.



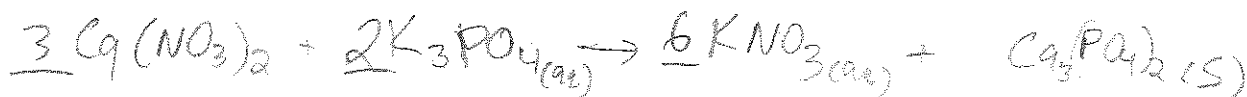
2. Gallium metal reacts with hydrochloric acid.



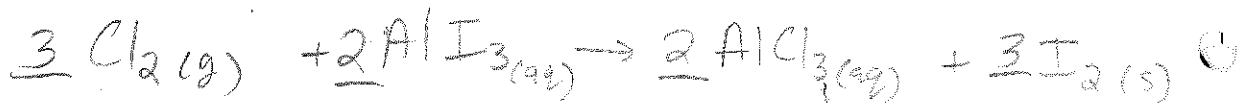
3. In a charcoal barbeque, some of the carbon undergoes incomplete combustion to produce deadly carbon monoxide gas.



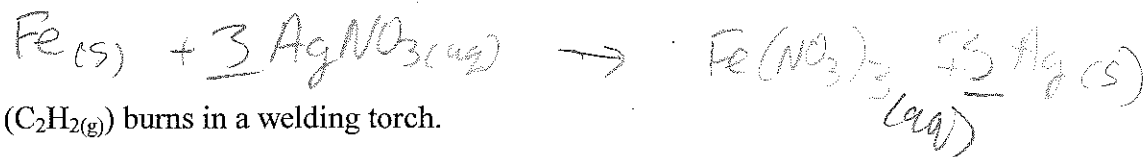
4. Solutions of calcium nitrate and potassium phosphate are mixed.



5. Chlorine gas is bubbled through an aluminum iodide solution.



6. Iron reacts with silver nitrate. The iron (III) compound is formed.



7. Acetylene ( $\text{C}_2\text{H}_2(\text{g})$ ) burns in a welding torch.



8. Copper ore (copper (II) oxide) is decomposed to produce copper metal.



9. Titanium (IV) chloride solution reacts with a sodium phosphate solution.



10. Sulphuric acid is neutralized by sodium hydroxide.

