**Stoichiometry Preview Worksheet**

1. Balance the following reactions ***on a separate piece of paper***:



1. Return to Question 1 and classify (to the left) each reaction as either synthesis (S), decomposition (D), combustions, single replacement (SR), double replacement (DR), or neutralization (N).
2. Classify each of the following reactions, using the following Key: synthesis (S), decomposition (D), combustions, single replacement (SR), double replacement (DR), or neutralization (N). Complete the equation and balance them ***on a separate piece of paper***. (***SKIP: b, d, e, f, p, and s***)

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1. Classify each of the following chemical changes. Write balanced formula’s for each ***on a separate piece of paper***. (***SKIP i)***
	1. A piece of magnesium ribbon on a stock shelf reacts over time with nitrogen gas in the air to form a black coating.
	2. Phosphoric acid solution removes iron (III) hydroxide stains from an old bath tub.
	3. Butane has is combusted in a disposable lighter.
	4. A zinc strip placed in a solution of copper (II) sulphate becomes coated with brownish solid.
	5. Sulphur dioxide emitted from industrial plamts combines with water vapour to form acid rain.
	6. Calcium carbonate in marble structures is eroded over time by nitric acid in acid rain.
	7. Nickle (III) hydroxide reacts with cadmium anode in a prototype rechargeable battery.
	8. Solutions of gold (III) nitrate and sodium carbonate are combined.
	9. Potassium chromate solution indicates the endpoint in a potato chip experiment with a standard silver nitrate solution.
	10. Methanol (CH3OH) is combusted in race car engines.
	11. A bright yellow pigment once used in paints is formed from the reaction of lead (II) nitrate and sodium iodide solution.
	12. Iron (III) oxide and water combine to form a basic compound often called rust.