loreescience

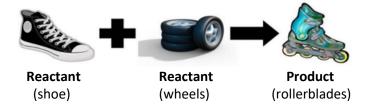
Cartoon Chemistry and Reaction Types

Directions:

- 1. Choose a **theme** for your project (ie. food, sports, clothing, entertainment ...)
- 2. Create an illustration/cartoon example for <u>each</u> of the 4 main types of reactions.
 - i. Synthesis reaction
 - ii. Decomposition reaction
 - iii. Single replacement reaction
 - iv. **Double-replacement reaction**
- The examples should <u>NOT</u> be real chemical reactions but represent the major <u>characteristics</u> of the types of reactions.
- o Include labels for all reactants & products
- o Provide an **actual example of a <u>balanced</u> chemical reaction** for <u>each type</u> of reaction. These must be different from the ones presented in the lesson video.
- 3. Provide an specific industrial/"real" world example for both complete & incomplete combustion.
 - o Include balanced equations & labels of molecules
 - o Indicate **where** this reaction takes place and what it is used for
 - O You may **not** use cellular respiration or the combustion of methane

EXAMPLE:

Synthesis Reaction



Ex. $2NO + O_2 \rightarrow 2NO_2$

Marking Rubric

Type of Reaction	Characteristics of Reaction		n	Specific Example	
Synthesis	1			1	
Decomposition	1			1	
Single Displacement	1			1	
Double Displacement	1			1	
	Specific Example			Explanation	
Combustion - complete - incomplete	1 1			1	2 2
Labelled reactants & products		1 (few)	2	(most)	3 (all)
Creativity of Analogies		1 (repetitive)	2	(straightforward).	3 (complex/unique)
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