

Types of Reactions Project

- 1. Choose 1 balanced equation example for each main type of reaction.
 - These must be different from the ones presented in the lesson.
 - Synthesis

o Single displacement

o **Decomposition**

- Double displacement
- 2. Represent each reaction in **2 different ways**. Each representation format can only be used **ONCE**. These could include but are not limited to:
 - Cartoons
- Craft models/representations
- Word equation

- o Diagrams
- (SHORT) Story

Meme

o Symbols

Analogy

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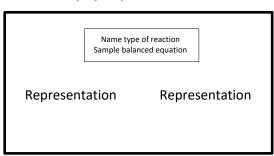
- Molecular models
- Chart/summary table

Be creative!

- 3. Provide a specific industrial/ "real" world example for both complete & incomplete combustion.
 - o Include balanced equations & names of molecules
 - o Indicate where this reaction takes place or where fuel is found and what it is used for
 - O You may **not** use cellular respiration or the combustion of methane
 - Ex. $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O + energy$

Methane is a major component of natural gas. It is burned to heat homes.

S, D, SD, DD LAYOUT:



Marking Rubric

Type of Reaction	Balanced Equation	Clear & Correct Atom Count	Key Characteristic of Reaction Evident
Synthesis	1	1 2	1 2
Decomposition	1	1 2	1 2
Single Displacement	1	1 2	1 2
Double Displacement	1	1 2	1 2
	Specific Example		Where & What
Combustion - complete - incomplete	1 1		1 2 1 2

TOTAL