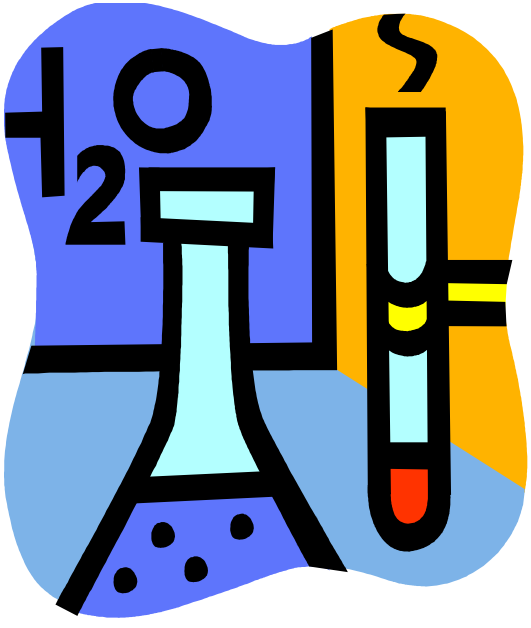
Chemical Reactions



8th Grade Science

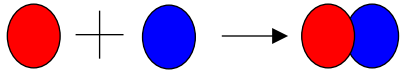
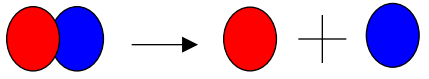
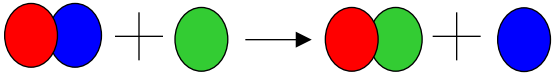
Watch this first

https://www.youtube.com/watch?v=qVWkTBSRElo

- https://www.youtube.com/watch?v=g-biRwAVTV8

- Alternate video:
- https://www.youtube.com/watch?v=p9a-gyXxbso

Watch the movie and then complete the chart.

Type of Reaction	Definition	★ Equation
Synthesis	Two or more elements or compounds combine to make a more complex substance	A + B → AB 
Decomposition	Compounds break down into simpler substances	AB → A + B 
Single Replacement	Occurs when one element replaces another one in a compound	AB + C → AC + B 
Double Replacement	Occurs when different atoms in two different compounds trade places	AB + CD → AC + BD 

A = Red B = Blue C = Green D = Yellow

Identifying Chemical Reactions

2. Use colored pencils to circle the common atoms or compounds in each equation to help you determine the type of reaction it illustrates. Use the code below to classify each reaction.

S = Synthesis D = Decomposition SR = Single Replacement DR = Double Replacement

____ $P + O_2 \rightarrow P_4O_{10}$

____ $Mg + O_2 \rightarrow MgO$

____ $HgO \rightarrow Hg + O_2$

____ $Al_2O_3 \rightarrow Al + O_2$

____ $Cl_2 + NaBr \rightarrow NaCl + Br_2$

____ $H_2 + N_2 \rightarrow NH_3$

____ $Na + Br_2 \rightarrow NaBr$

____ $CuCl_2 + H_2S \rightarrow CuS + HCl$

____ $HgO + Cl_2 \rightarrow HgCl + O_2$

____ $C + H_2 \rightarrow CH_4$

____ $KClO_3 \rightarrow KCl + O_2$

____ $S_8 + F_2 \rightarrow SF_6$

____ $BaCl_2 + Na_2SO_4 \rightarrow NaCl + BaSO_4$