6.1 Types of Chemical Reactions

Tuesday, March 28, 2017

(1) Synthesis (5) Reaction

- 2 or more reactants/elements combine to produce a single product

ex. $\underline{2}$ Na + $\underline{1}$ Cl₂ \longrightarrow $\underline{2}$ Na Cl

2) <u>Pecomposition</u> (D) Reaction

→ the breaking down of a compound into separate elements.

ex. 2 H2O -> 2 H2 + 1 O2

3) Single Replacement (SR) Reaction

→ replace I element from a compound with a separate element added as a reactant.

ex. = Al + 3 CUCl2 -> 3 CU + 2 Al Cl3

y) Double Replacement (DR) Reaction

→ smap elements between 2 compounds → they react together to form 2 new compounds

W. _1 Pb (NO3)2 + 2 NaT → _1 PbI2 + 2 NaNO3

6) Neutralization (N) or Acid-Base Reactions

- an acid and base react to form salt and water

ACID: most compounds starting w/ H (hydrogen)

BASE: most compounds ending in OH or beginning with NH4

ex. 1 H₂ SO₄ + 1 Ca (OH)₂ \rightarrow 1 Ca SO₄ + 2 H₂O acid base salt water

6) Combustion (c) Reactions

ex. $\frac{2}{2}(_{2}H_{2} + \frac{5}{2}O_{1} \rightarrow \frac{4}{2}(O_{2} + \frac{2}{2}H_{2}O_{2})$