Lesson 73: Types of Reactions Notes

Chemistry with Lab

Descriptive Abbreviations

(_____) _____

(_____) _____

(_____) _____

(_____) _____

Determining State at Room Temperature

- All _____ are solids except for _____ which is a _____.
- Most _____ are _____ with these exceptions:
  - liquid - _____
  - solids - _____, _____, _____, _____, _____, and _____
- All _____ are solids.
- _____ compounds are _____, unless stated otherwise.
- _____ compounds are _____, unless stated otherwise.

When heated, solid mercury (II) oxide yields mercury and oxygen gas.

Classifying Reactions

1. Synthesis:

- _____ or _____ substances combine to form a more _____ substance

- _____ → _____
- Fe (*s*)+_____ → _____
- H_2O (*l*)+_____ → _____

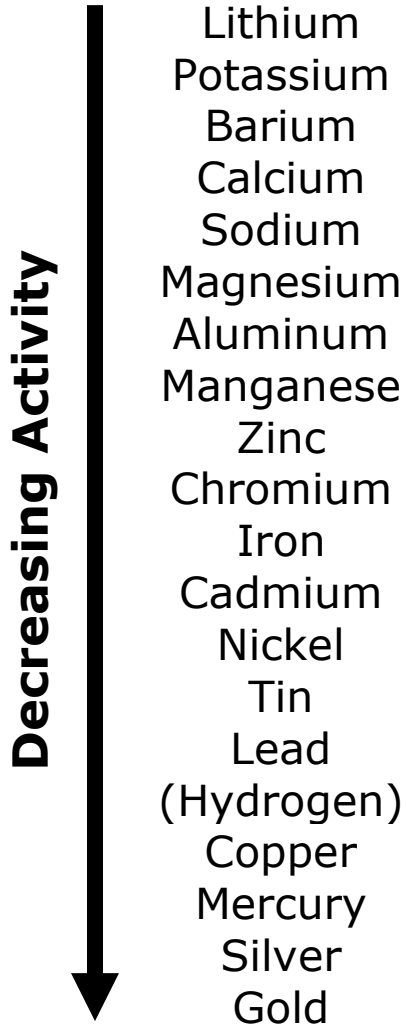
2. Decomposition:

- A _____ substance is _____ _____ into _____ or more _____ substances.
- AB → _____
- $2H_2O$ (*l*) → _____ + _____
- _____ → _____ + _____

3. Single Replacement:

- A free _____ replaces a _____ _____ element in a _____.
- A + BY → _____ + _____
- Zn (*s*)+ _____ → _____ + _____
- 2Al(*s*)+ _____ → _____ + _____
- Cu (*s*)+ $MgCl_2$ (*aq*) → _____
    - Activity series: an _____ of elements in the order of their _____ to _____

Activity Series of Metals



4. Double Replacement:

- The _____ of reacting _____ _____ each other.
- Normally takes place in an _____ _____
- Also called _____ reactions
- AX + BY → _____ + _____

- 2KI (*aq*)+ _____ → _____ + _____
  - Precipitate
    - an _____ _____
    - may be _____ in an equation by _____ or _____
- NaCl (*aq*)+ _____ → _____ + _____ _____, or _____ of the _____

5. Combustion:

- Involves the _____ of a substance with _____
- Often called _____.
- The _____ _____ of a _____ produces _____ and _____.
- $C_xH_y + O_2 \rightarrow$ _____ + _____
- $C_3H_8\ (g) + 5O_2\ (g) \rightarrow$ _____ + _____
- $CH_4\ (g)$+ _____ → _____ + _____

The Chemistry Quiz

CR1. _____ CR2. _____ 1. _____ 2. _____ 3. _____

4. _____ 5. _____