

Watch video <http://www.gpb.org/chemistry-physics/chemistry/605>

Notes: Types of Reactions and Predicting Products

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. Combination (Synthesis)

- _____ or _____ substances combine to form a more _____ substance.
- _____ \rightarrow _____
- Fe (s) + _____ \rightarrow _____
- H₂O (l) + _____ \rightarrow _____

2. Decomposition

- A _____ substance is _____ into _____ or more _____ substances.
- AB \rightarrow _____
- 2H₂O (l) \rightarrow _____ + _____
- _____ \rightarrow _____ + _____

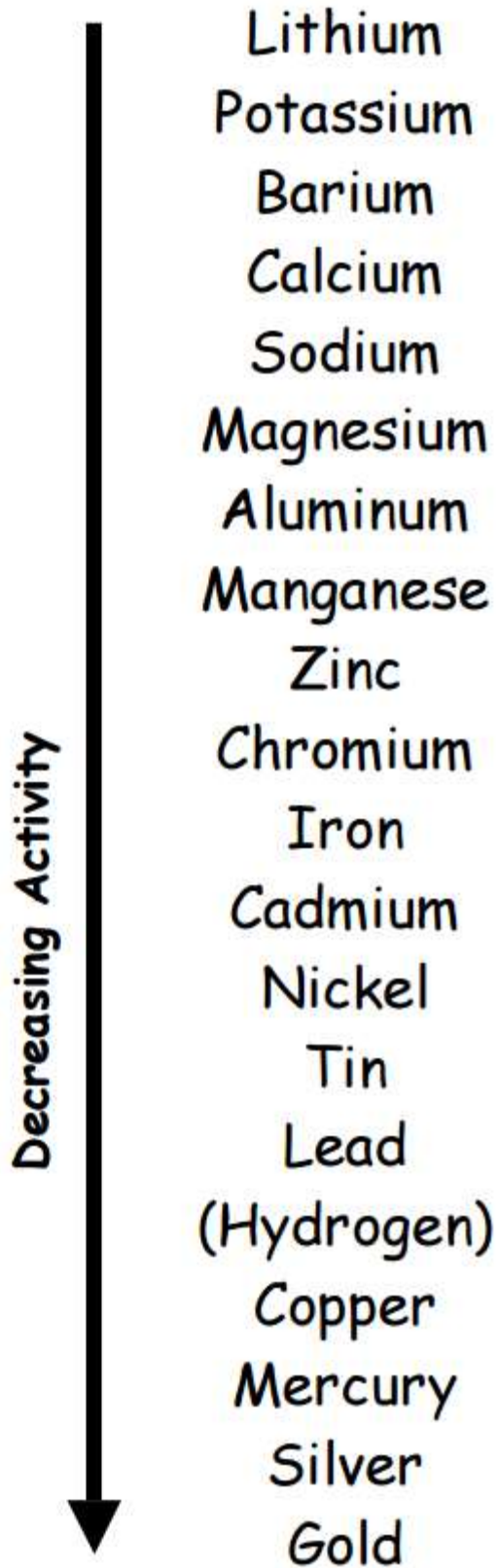
3. Single Exchange (Single Replacement)

- A free _____ replaces a _____ element in a _____.
- A + BY \rightarrow _____ + _____
- Zn(s) + _____ \rightarrow _____ + _____
- 2Al(s) + _____ \rightarrow _____ + _____
- Cu(s) + MgCl₂(aq) \rightarrow _____

Activity series: an _____ of elements in the order of their

_____ to _____

Activity Series of Metals



4. Double Exchange (Double Replacement)

- The _____ of reacting _____ each other.
- Normally takes place in an _____
- Also called _____ reactions
- $AX + BY \rightarrow$ _____ + _____
- $2KI(aq) +$ _____ \rightarrow _____ + _____
 - Precipitate
 - An _____
 - May be _____ in an equation by _____ or _____
- $NaCl(aq) +$ _____ \rightarrow _____ + _____

5. Combustion

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

The Chemistry Quiz

CR1. ____ CR2. ____ 1. ____ 2. ____

3. ____ 4. ____ 5. ____