

Lesson 18: Acid-Base Reactions -
Neutralization (Nelson Textbook Pages 225-
229)

Learning Goals

- I can identify a neutralization reaction
- I can write and balance a neutralization reaction

Neutralizing Acids and Bases

- The **reaction between an acid and a base** is a **double displacement reaction** called **NEUTRALIZATION** (acidic & basic properties cancel each other out)
 - The **products** of a neutralization reaction are usually a **salt (ionic compound)**, and **water**.
- acid + base → salt (ionic compound) + water**

- The products have a **pH that is closer to 7.**
- **Acids** contain **hydrogen (H)** and **bases** contain **hydroxide (OH).**
- **H (acid) + OH (base)** to form **HOH (H₂O).**
- The other elements in acid & base combine to form salt.

- Because there are **many different acids and bases**, there are **many different salts**.
- The “salt” that we add to our food is **sodium chloride (NaCl)**.



Acids have
a hydrogen
(H)

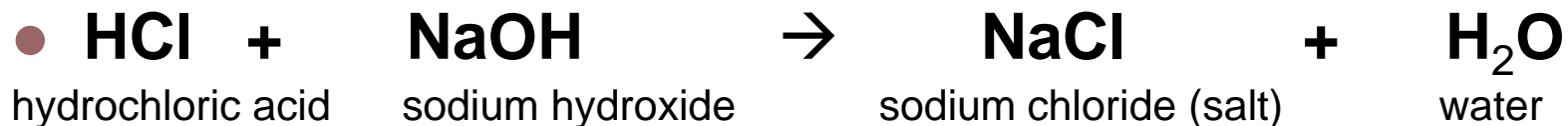
Bases have
hydroxide
(OH)

The other parts of
the acid and base
combine to
make a salt

The hydrogen (H) and
the hydroxide (OH)
often combine to make
water (H₂O or HOH)

Examples

Sodium hydroxide (strong base) reacts with **hydrochloric acid** (strong acid):



● **Potassium hydroxide** reacts with **sulfuric acid**:

