

CONCEPT: BASES INTRODUCTION

Intro to Bases

- A **base** is any substance that can _____ an acid within a chemical reaction.
 - **Ionic Bases:** Ionic compounds containing a _____ cation connected to a basic anion.

Common Ionic Bases			
Hydroxides	Hydrides	Amides	Oxides
_____ + _____ → _____	_____ + _____ → _____	_____ + _____ → _____	_____ + _____ → _____


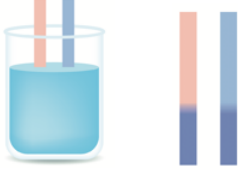
- **Covalent Bases** (Neutral Amines): Compounds containing ____ & ____ or ____, ____ & ____.

EXAMPLE: Which of the following represents the possible structure of a base?

- a) $\text{C}(\text{OH})_4$ b) NH_4^+ c) KOH d) $\text{HC}_2\text{H}_3\text{O}_2$

Characteristics of Bases

- Like acids, bases share certain similar characteristics when placed in aqueous solutions.

Characteristics of Bases		
Dissolution	Taste and feel	Litmus Paper
Bases ionize when placed in H_2O . $\text{NaH}(\text{aq}) \longrightarrow \text{_____} + \text{_____}$ $\text{Sr}(\text{OH})_2(\text{aq}) \longrightarrow \text{_____} + \text{_____}$	Bases have a _____ taste and are _____ to the touch. 	The litmus paper reacts to the presence of the basic anion.  Base: Red litmus paper turns _____.

EXAMPLE: Which of the following is a characteristic of a strong base?

- a) It turns blue litmus paper red.
b) It releases H^+ ions in a solution.
c) It removes OH^- ions in a solution.
d) It can be used in the production of cleaning supplies.

PRACTICE: Which of the following compounds will turn a piece of red litmus paper to a bluish color?

- a) HI b) $\text{C}_6\text{H}_5\text{NH}_2$ c) CH_3COOH d) HOCN