

Acid-Base Equilibria: Chemical Reaction Review

Write the generic chemical reaction for the dissociation of a weak acid.

Write a chemical reaction for the dissociation of a specific weak acid.

Name of weak acid: _____

Acid dissociation constant, K_a = _____ pK_a = _____

Write the generic chemical reaction for the dissociation of a weak base.

Write a chemical reaction for the dissociation of a specific weak base.

Name of weak base: _____

Base dissociation constant, K_b = _____ pK_b = _____

Write the generic chemical reaction for a buffer composed of a weak acid and its conjugate base.

Write the chemical reaction for a buffer composed of a hypochlorous acid and sodium hypochlorite. What is the pH of this system for 0.10M hypochlorous acid and 0.10M sodium hypochlorite?

Write a generic chemical reaction for the hydrolysis of a weak acid anion, A^- .

What is the pH of the resulting solution? acidic neutral basic

Write a chemical reaction for the hydrolysis of your favorite weak acid anion.

Name of anion: _____

Write a generic chemical reaction for the hydrolysis of a weak base cation, BH^+ .

What is the pH of the resulting solution? acidic neutral basic

Write a chemical reaction for the hydrolysis of your favorite weak base cation.

Write a generic chemical reaction for acid-base neutralization.

Complete the following neutralization reactions. Does the salt hydrolyze? If so, write the hydrolysis reaction.

