L1 What is the hydronium ion and how does it account for the properties of acidic solutions?

L7 What is buffering capacity?

L7 What is a buffer and how does a buffer exhibit the characteristics of an equilibrium system?

L6 What events occur in the reaction of polyprotic acids and bases?

L1 What chemical components are part of the equilibrium of water?

L6 What information about acids and bases and their equilibrium is contained on a titration curve?

L5 How are values for K_a and K_b used to calculate the pH of solutions containing weak acids and bases?

Module 8 Questions

How does the equilibrium of acids and bases affect environmental and biological systems?

L1 How does the equilibrium of water affect the calculation of pH?

L5 How do K_a and K_b explain the position of the equilibrium of aqueous acids and bases?

L2 How is knowledge of equilibrium used to explain the differences in acid strength?

L5 What are K_a, K_b, and K_w?

L3 What occurs during a chemical reaction between an acid and a base?

L4 How is knowledge of the equilibrium of aqueous systems involved in predicting the outcome of acid-base reactions?

L3 How does the Brønsted-Lowry theory support what is known about the equilibrium of aqueous acids and bases?

L3 How do conjugate acid-base pairs represent an equilibrium system?