

Acids & Bases Ws #8: Neutralization Reactions

Directions: Use the words below to complete the paragraphs.

Spectator	cation	hydroxide	hydrogen	double-replacement	titration
Water	ionic	equivalence	antacids	Neutralization	indicator
Neutral	acid	pH meter	salt	equal	

In aqueous solutions, neutralization is the reaction of _____ ions and _____ ions to form _____ molecules. In this reaction, a _____ is also produced. A salt is an _____ compound composed of a _____ from a base and an anion from an _____. Because these ions appear on both sides of the overall ionic equation, they are called _____ ions. All neutralization reactions are _____ reactions.

_____ are bases which are safe to ingest and are used when the stomach contains too much _____. These bases react with stomach acid in a _____ reaction. In this reaction, _____ amounts of acid and base produce a solution which is _____.

A _____ is a controlled neutralization reaction that enables the determination of the amount of acid (or base) in a solution. An appropriate acid-base _____ or a _____ is used to determine when neutralization has occurred. The point at which a neutralization reaction is complete is known as the _____ point.

Directions: Write the **balanced** neutralization reaction for each of the following. Assume you have added equal amounts and equal concentrations of a strong acid and a strong base. Name the acid, the base and the salt that is formed.

	Acid	+	Base	→	Salt	+	Water
1.	$H_2SO_4(aq)$	+	$2NaOH(aq)$	→	Na_2SO_4	+	$2H_2O$
Name	<i>Sulfuric Acid</i>	+	<i>Sodium Hydroxide</i>	→	<i>Sodium Sulfate</i>	+	<i>Water</i>
2.	$HCl(aq)$	+	$NaOH(aq)$	→		+	
Name		+		→		+	
3.	$H_2SO_4(aq)$	+	$Ba(OH)_2(aq)$	→		+	
Name		+		→		+	
4.	$HBr(aq)$	+	$LiOH(aq)$	→		+	
Name		+		→		+	
5.	$H_2ClO_4(aq)$	+	$Sr(OH)_2(aq)$	→		+	
Name		+		→		+	
6.	HNO_3	+	$Ca(OH)_2(aq)$	→		+	
Name		+		→		+	