

Electrical conductivity and pH

EST

 PAGES 55–61

Complete this concept review handout and keep it as a record of what you have learned.

Definitions

- An electrolyte is _____
- The electrical conductivity of a solution is _____
- Electrolytic dissociation is _____

EST Strength of electrolytes

Strength of the electrolyte	Dissociation	Electrical conductivity	Example
Strong electrolyte		Strong	
	Partial		
			Sugar

Characteristics of the types of electrolytes

Type of electrolyte	Acid	Base	Salt
Definition	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
Chemical composition	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____

Characteristics of the types of electrolytes (*cont.*)

Type of electrolyte	Acid	Base	Salt
Reaction to neutral litmus paper	_____ _____ _____	_____ _____ _____	_____ _____ _____
Examples	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____

pH scale

If the pH < 7, the solution is _____

If the pH = 7, the solution is _____

If the pH > 7, the solution is _____

pH of some common substances

pH	Acidity or basicity in comparison to a pH of 7	Examples of substances
	10 000 000 times more acidic	
	1 000 000 times more acidic	Gastric juices
	100 000 times more acidic	
	10 000 times more acidic	
	1 000 times more acidic	
	100 times more acidic	Rainwater
	10 times more acidic	Milk
	Neutral	
	10 times more basic	
	100 times more basic	
	1 000 times more basic	
	10 000 times more basic	
	100 000 times more basic	Lime
	1 000 000 times more basic	Oven cleaner
	10 000 000 times more basic	