

Seventh Grade

Electrical Conduction and Insulators

Conductivity of Different Materials

- 1.2.1.1 Electrical Conductivity of Solid Materials
- 1.2.1.2 Electrical Conductivity of Fluids

Bonding of Ions (Ion Lattice, Ion Movement)

- 1.2.2.5 Ions Move at Different Speeds

Deriving New Substances by Electrical Current

Electrolysis of a Salt Solution

- 1.3.1.1 Electrolysis of a Zinc Oxide Solution
- 1.3.1.2 Electrolysis of a Copper Sulfate Solution
- 1.3.1.3 Electrolysis of a Sodium Sulfate Solution

Technical Significance of Electrolysis

- 1.3.2.1 Electrolytic Refinement of Copper
- 1.3.2.2 Copper Plating a Key

Eighth Grade

Acids and Bases in Daily Life

Electrical Conductivity of Acids and Bases

- 2.4.3.1 Testing the Electrical Conductivity of Acids
- 2.4.3.2 Testing the Electrical Conductivity of Bases

Natural Substances and Synthetic Products

Electrolysis of Table Salt

- 2.6.4.1 Electrolysis of a Table Salt Solution

Substances in the Working World

Aluminum

- 2.7.2.2 Anodizing and Coloring Aluminum

Alcohol and Carbonic Acids

Comparing Bases and Alcohol

- 2.9.2.2 Comparing the Conductivity of Ethanol and Sodium Solution