Name _____

Electric Adventures of Acids and Bases: Can They Conduct?

Multiple Choice Questions

1. What is electrical conductivity related to in a substance?

a) The color of the substance

b) The ability to generate heat

c) The movement of charged particles

d) The resistance to temperature changes

2. What are ions, and how are they classified?

a) Electrically neutral particles

b) Positively charged particles only

c) Negatively charged particles only

d) Positively charged (cations) and negatively charged (anions) particles

3. Which type of ionization allows acids to conduct electricity?

a) Release of hydroxide ions (OH-)

b) Release of hydrogen ions (H+)

c) Release of oxygen ions (O2-)

d) Release of nitrogen ions (N-)

4. Why can both acids and bases conduct electricity?

a) Because they generate heat

b) Because they release carbon ions (C+)

c) Because of their ionization, which produces charged particles

d) Because they resist temperature changes

5. What determines the degree of electrical conductivity in acids and bases?

a) The color of the solution

b) The temperature of the solution

c) The concentration of ions produced by ionization

d) The resistance to electric current