

Name \_\_\_\_\_

## What is Voltage, and How Does It Affect Electricity?

### Open-Ended Response Answer Key

1. Voltage regulation is essential for maintaining consistent electrical power, improving the efficiency of devices, and preventing damage to sensitive equipment.
2. Voltage controls the speed of electric motors by altering the force applied to move electrons, affecting the motor's rotation speed.
3. Safety precautions may include using insulating materials, wearing protective gear, and installing circuit breakers to prevent accidents.
4. In a world without voltage, electricity would not flow, rendering electrical devices and systems useless, leading to significant technological setbacks.

