

Name \_\_\_\_\_

## What is the Difference between AC (Alternating Current) and DC (Direct Current)?

### Short Answer Key

1. AC changes direction periodically by reversing the flow of electrons. This characteristic is important because it allows for efficient transmission of electricity over long distances.
2. A situation where DC is preferred over AC is in battery-operated devices, where a steady and constant source of power is required.
3. Thomas Edison played a pivotal role in the development of DC. DC had limitations in terms of transmitting electricity over long distances due to energy loss.
4. AC is more suitable for transmitting electricity over long distances because its periodic reversal allows for reduced energy loss during transmission.
5. Safety precautions should include proper insulation of wires and components, using circuit breakers, and wearing protective gear like gloves and safety goggles.

