

# WRITING:

## Potential ACT Writing Alignment – Electrical Circuits Unit

In addition to science, math, and reading skills, our **electrical circuits unit** can also reinforce key **ACT Writing skills**. The ACT Writing section isn't just about grammar—it's about **building strong arguments, organizing ideas logically, and supporting claims with evidence**. These are essential skills for both **academic success and STEM careers**.

This unit can connect to ACT Writing in **three key areas**:

### 1. Ideas & Analysis – Constructing Logical Arguments

First, focus on how students **develop and analyze arguments**.

- They'll be asked to **construct well-reasoned positions** on circuit design, energy efficiency, and electrical safety.
- They'll **analyze multiple perspectives** on how electricity impacts our world.

#### ✓ Example Applications in Our Unit:

- **Explaining the advantages and disadvantages** of series vs. parallel circuits.
- **Evaluating the role of resistance** in energy conservation.
- **Comparing multiple viewpoints** on renewable energy and electricity use.

### 2. Development & Support – Using Evidence Effectively

Next, reinforce the importance of **supporting arguments with evidence**.

- Students will use **data, scientific principles, and real-world examples** to justify their claims.
- They'll practice **technical explanations** that are clear, logical, and well-supported.

#### ✓ Example Applications in Our Unit:

- **Citing scientific principles** to explain the role of resistance in a circuit.
- **Providing real-world applications** of electrical circuits in electric vehicles and smart grids.
- **Using case studies** to support arguments about power distribution and energy conservation.

### 3. Organization & Clarity – Structuring Ideas Logically

Finally, focus on **clear, well-organized writing**.

- Students will refine their ability to **logically sequence their ideas** when explaining electrical concepts.
- They'll learn how to **use transitions effectively** to connect ideas smoothly.

#### ✓ Example Applications in Our Unit:

- **Writing a structured explanation** of Ohm's Law.
- **Comparing and contrasting** series vs. parallel circuits in an organized essay.
- **Developing a persuasive argument** about energy conservation in circuit design.

### Why This Matters for ACT Success?

By incorporating **structured writing, logical arguments, and real-world applications**, this unit builds essential **ACT Writing skills** while strengthening **STEM communication**. These skills will help students not only on the ACT but also in **college, technical careers, and beyond**.