

READING:

ACT Reading Alignment – Electrical Circuits Unit

In addition to covering important science and math concepts, this **electrical circuits unit** can support **ACT Reading skills**. The ACT Reading section doesn't just test students' ability to recall facts—it challenges them to **analyze technical information, interpret data, and evaluate arguments**. By incorporating **scientific reading materials and real-world applications**, we can help students strengthen their **reading comprehension and critical thinking skills**, all while deepening their understanding of circuits.

Potential ACT Reading Standards Covered in This Unit

This unit can connect to three key areas assessed on the ACT Reading test:

1. Key Ideas and Details (Score 16-36)

- Students will **identify main ideas** in technical passages about circuits.
- They'll recognize **how scientific concepts relate to real-world applications**, such as how resistance affects current flow.
- Higher-level students will **synthesize information from multiple sources**, such as circuit schematics and written explanations.

2. Craft and Structure (Score 16-36)

- Students will **define technical vocabulary** like voltage, current, and resistance in context.
- They'll **analyze the structure of a scientific passage**—how text, diagrams, and tables work together to explain a concept.
- At higher levels, they'll **evaluate an author's intent and compare writing styles** in scientific vs. non-scientific texts.

3. Integration of Knowledge and Ideas (Score 20-36)

- Students will **compare different explanations** of electrical concepts, such as series vs. parallel circuits.
- They'll **evaluate the credibility of scientific sources**, helping them distinguish between well-supported explanations and misconceptions.
- Advanced students will **integrate text and data**, interpreting circuit performance from written descriptions, tables, and graphs.

Why This Matters for ACT Preparation

By engaging students in **scientific reading, data interpretation, and critical analysis**, this unit builds **ACT-ready reading skills**. They will learn to **think like scientists**, applying the same comprehension strategies they need for **success on the ACT and beyond**.