

Simplify The Science Answer Key

Sample Simplified Translation

When electricity moves through the thin wire inside a light bulb, the wire gets very hot and glows, making light. This means electricity changes into heat and light energy. Old-style bulbs waste energy because they lose a lot of heat. New LED bulbs are better because they make light without getting hot, using a special material called a semiconductor.

Teacher's Guide

- **Skill** **Focus:**
Students practice **translating technical explanations** into **plain language**, improving comprehension of **scientific vocabulary** and **concept precision**.
- **Differentiation Tips:**
 - For younger or emerging readers, pre-teach key terms like *filament*, *resistance*, and *semiconductor* using visuals or analogies.
 - For advanced learners, ask students to rewrite the passage for different audiences (e.g., a 3rd grader vs. a science magazine).
- **Engagement Ideas:**
 - Use a real light bulb or LED to demonstrate the difference visually before students begin writing.
 - Create a "Tech Translator" competition-students vote for the clearest, simplest rewrite while keeping accuracy.
- **Extension Activities:**
 - Have students choose another short technical paragraph from a science or technology textbook and rewrite it in plain language.
 - Ask them to create an illustrated diagram showing the energy conversion process in both types of bulbs.