



# 4-H Electric – Level 1

## Record Sheet

Record for Year \_\_\_\_\_

A completed record sheet is due by the last business day of May to exhibit each project at the fair.  
Use any 4-H publications, the internet, the library, or a professional to help you prepare your responses.

Completed (40 possible) \_\_\_\_\_  
Accuracy of answers (30 possible) \_\_\_\_\_  
Appropriate grammar (15 possible) \_\_\_\_\_  
Neatness of record (15 possible) \_\_\_\_\_  
Total \_\_\_\_\_

A = 86-100 points  
B = 71-85 points  
C = 70 points or less

### The Basics

Name \_\_\_\_\_ 4-H Club \_\_\_\_\_

Years in 4-H \_\_\_\_\_ Grade \_\_\_\_\_

### Getting Started

List six things in your home that use electricity. Are they powered by batteries (AC or alternating current) or an electrical outlet (DC or direct current)?

Things that use electricity:	Powered by:
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)
	<input type="checkbox"/> Battery (DC) <input type="checkbox"/> Electrical Outlet (AC)

Conductors are materials that allow an electric current to flow through them easily. Insulators are substances that do not normally conduct electricity. Determine which items are conductors and which are insulators:

Item:	Which is it?
Metal bolt	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Sheet of paper	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Rubber band	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Metal scissors	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Rubber tire	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Paper clip	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Wooden ruler	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Metal screw	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Copper wire	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator
Plastic plug cover	<input type="checkbox"/> Conductor <input type="checkbox"/> Insulator

## Making Connections

Provide a brief description of your 4-H exhibit or plan for our exhibit.

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## Lighting It Up

We do not necessarily care what you spent constructing your exhibit, but it is good for you to understand that things have a cost. Even poster boards are not free. Approximately how much did you spend constructing your exhibit or think you'll spend once it is complete? Circle one.

\$0.00-\$5.00    \$5.00-\$15.00    \$15.00-\$30.00    \$30.00-\$50.00    Greater than \$50.00

What did you enjoy the most about your project this year? \_\_\_\_\_

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What was the most challenging thing you encountered with this year's exhibit? \_\_\_\_\_

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Does your family typically hire someone to help with electrical needs at your home, or do they tend to take care of electrical needs themselves? Why do you think they choose to hire or do it themselves? \_\_\_\_\_

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## Shining On

Businesses hire electricians, and this is how some people "make a living" and take care of themselves or their families. Name two electrical companies or companies that hire electricians in the area where you live.

1. \_\_\_\_\_
2. \_\_\_\_\_

What is one thing you learned or sparked your interest as a result of completing this project? \_\_\_\_\_

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In what way does this project apply to your life, or why is this subject matter important to you? \_\_\_\_\_

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