



# 4-H Electric – Level 2 Record Sheet

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

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

A completed record sheet is due by the last business day of June 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.

## The Basics

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

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

## Getting Started

Magnets can attract certain metals, and when you team up magnets, coiled wire, and motion, you can produce electricity. Look around your home and list things in your home that contain or use magnets. Are there appliances, toys, or gadgets in your home that come to mind?

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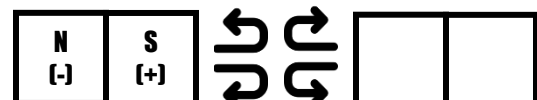
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Magnets have opposing or opposite poles. One side is the “north pole” and one side is the “south pole.” Opposite poles attract, and like poles repel. Fill in the boxes below to demonstrate how poles attract and repel.

### Attracting Poles



### Repelling Poles



## Making Connections

Describe how a direct current (DC) works. \_\_\_\_\_  
 \_\_\_\_\_

Describe how an alternating current (AC) works. \_\_\_\_\_  
 \_\_\_\_\_

Define electromagnet: \_\_\_\_\_

## Lighting It Up

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

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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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## Shining On

High voltage electricity is very dangerous. If someone were to get in an accident in which an electrical power line fell on their vehicle, why might it be important for the driver and/or passengers to stay in the car rather than exiting the vehicle? \_\_\_\_\_

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

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

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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