



WYOMING



## Exploring Electricity with 4-H

### Developing Life Skills by:

- experiences in problem solving, critical thinking, and decision making
- fostering a positive self-image
- communicating goals and sharing intentions and feelings
- organizing, planning, and cooperating

### Here are some places to share what you have learned by exhibiting or competing:

- County fair
- State fair
- Share with your club
- Take your exhibit to a senior citizen center or care center
- Share in a school show
- Display at a community event or activity along with others from your club or group

### Learning Objective

The purpose of the 4-H program is to provide positive opportunities for a young person to develop the essential life skills of mastery, independence, generosity, and belonging through their own areas of interest.

In this project area of interest, youth may learn...

1. about electric circuits, magnetism, motors, and a Galvanometer.
2. how to test stereos, burglar alarms, and other electronics.
3. how to solder, and build three-way switches and more complex wiring systems.
4. how voltage, watts, and advanced safety skills are applied.
5. how resistors and capacitors work and when they are useful.
6. about careers and opportunities ranging from electricians to engineers.

### Here are some suggestions of things you can make or create to exhibit or share with others:

- create a poster or display sharing something you learned
- make a simple switch or circuit board showing different types of each
- make an electromagnet and label the parts
- build an alarm using soldering and circuit techniques
- create diagrams of different circuits and electrical plans
- take apart a hair dryer or radio and show what you've learned
- create a mock household circuit with outlets, breakers, dimmers, and other switches
- demonstrate consumer product labels and compare voltage, safety, etc.
- make a photocell, diode, or silicon controlled rectifier
- make a quiz board with lights and switches for correct answers and questions

### Resource Materials

This project has curricula for youth education and to support volunteer teaching.

1. *Magic of Electricity (20501C)*
2. *Investigating Electricity (20502C)*
3. *Wired for Power (20503C)*
4. *Entering Electronics (20504C)*
5. *Leader's Guide (20500B)*

## Important Dates

Sign-up

Project and club designation

County fair entries due

## Citizenship Opportunities

Giving back to your community is a great way to not only provide service but also to learn more about the world we live in. You could...

1. help your club by doing a community service activity or project.
2. volunteer to help at a community event – help is always needed.
3. cleanup a highway or city park.
4. do a food drive, school-supply drive, or clothing drive to help others in need.
5. make and give something away or participate in an organized service drive or event.

## Leadership Opportunities

Providing leadership to others comes in many different forms. In fact, only a small part of being a leader is actually because of being elected. Here are some ways to be a leader or become a leader. You could...

1. volunteer to head a committee in your club over an activity.
2. volunteer to do something to help your club.
3. volunteer to be in charge of leading a song, ice-breaker, lead the pledge, or cleanup after a meeting.
4. volunteer to teach a workshop, clinic, or demonstration.
5. mentor a younger youth in 4-H with similar or different interests.
6. organize a field trip or fun activity for your club or project group.
7. run for a position in your club as president, secretary, or something else.

**READ YOUR  
4-H NEWSLETTER!**

## Goals/Recordkeeping/Completion

One of the basic principles of 4-H is to set goals and then work to accomplish them. Being able to share what you learned while working toward goals is valuable. We have a way that we like to use to help you, your parents, your club volunteers, and your 4-H educator to know how things went each year – it's called your 4-H Portfolio (some call them record books).

For each project, you are asked to set goals and share what you learned, tell what you did, show how you are involved, and tell what you liked, disliked, or felt about doing the project. You will be asked to complete these and give them to adults for evaluation and to possibly learn other ways to compete and be recognized.

## 4-H Opportunities

- County 4-H camp
- County/club educational workshops, days, clinics
- Club activities and events
- County activities and events
- Western National 4-H Roundup
- Youth Leadership Conference
- National 4-H Conference
- National 4-H Congress
- Citizenship Washington Focus trip
- County fair
- State fair

*The University is an equal opportunity/affirmative action institution.*

**For more information go online to [www.Wyoming4H.org](http://www.Wyoming4H.org)**