

## County Fair Exhibit Ideas - Electricity



The county fair . . . what a great time it is! Every summer, families flock to county fairs to see the latest 4-H project exhibits. Exhibiting is a fun way for you to showcase your project work. The following list of exhibit ideas is based on the latest 4-H curriculum. Use it to generate project entries for your next county fair. If you're a county fair superintendent, use this list to enhance your county fair premium book.

### Unit 1: Magic of Electricity

1. Homemade flashlight
2. Simple switch
3. Circuit with two batteries and one light bulb
4. Compass
5. Electromagnet
6. Galvanometer
7. Electric motor
8. Completed member guide (06848)

### Unit 2: Investigating Electricity

1. Circuit diagrams with explanation
2. Series circuit
3. Parallel circuit
4. Momentary switch
5. Three-way switch
6. Soldered connection
7. Rocket launcher
8. Burglar alarm
9. Completed member guide (06849)

### Unit 3: Wired for Power

1. Electrical tool and supply kit
2. Display of symbols on wires and cables and their meanings
3. Display of light bulbs and the jobs they do best
4. Poster on how to read an appliance nametag
5. Chart showing the electrical usage of appliances
6. Poster on how to replace a switch
7. Completed member guide (06850)

#### Unit 4: Entering Electronics

1. Display of electronic parts
2. Diode
3. Transistor
4. Light emitting diode (LED)
5. LED flasher
6. Photocell alarm
7. Light meter
8. Silicon controlled rectifier (SCR) intruder alarm
9. 6-8 watt amplifier with integrated circuit
10. Completed member guide (06851)

## ***Tips for County Fair Judges***

Wisconsin 4-H recommends that you use the following criteria to judge electricity entries at county fairs.

1. Workmanship
  - a. Difficulty of project or number of skills and components involved should be weighed. An item made from “scratch,” for example, should rate higher than an item made from a purchased kit. No kits should be used unless the class specifies a kit.
  - b. Quality of workmanship should be developmentally-appropriate and in proportion to the amount of help received.
  - c. Wires should be accurately cut and spliced.
  - d. Wires, switches, power source, etc., should be properly joined.
  - e. Item should be durable and easy to repair, where appropriate.
2. Appearance: Wiring and total exhibit should be neat.
3. Materials selection
  - a. Proper materials should be selected according to intended use of item.
  - b. All entries must comply with current OSHA standards.
  - c. Cords and trouble lights must be grounded.
4. Design: Wiring layout should show switches, outlets, lighting fixtures and circuits.
5. Practicality/usefulness
  - a. Item should have clear directions on how it is to be used.
  - b. Item should work and serve the purpose for which it is intended. All exhibits should be in safe operating condition, complete with batteries where necessary.
6. Originality