

ELECTRIC

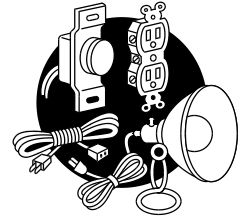
STATE FAIR ENTRY: Yes

EXHIBIT BY: All * items must come to project judging.

LEVEL	Project Book	Record Book
1	BU-06848	BU-06848*
2	BU-06849	BU-06849*
3	BU-06850	BU-06850*
4	BU-06850	BU-06850*
5 - 10	BU-06851	4-H ELE-9/96*

NOTE: Complete all of the activities related to your project in the project book.

- Level 1 has a circuit board electric kit available. It does not include wooden mounting base.
- Level 2 magnetic powered flashlight kit is available for \$15.



JUDGING TIME: Fri., July 16 at 9:00 a.m. Check in your project on Fri., July 16 between 7:30 and 8:45 a.m.

PROJECT DESCRIPTION:

You will learn what electricity is, how to use it safely and how to show others to use it safely.

EXHIBIT:

Exhibit one article of choice displaying proper wiring techniques, made during the current 4-H program year. It must demonstrate a minimum of **five (5) or more** of the appropriate level of “Skills to be Attained” items as outlined in the “4-H Electric and Electronic Skills & Knowledge Chart”. **A completed copy of the “Exhibit Skills & Knowledge Sheet” must accompany the project.**

Reference List - All posters, notebooks, displays, and exhibits should include a reference list indicating where information was obtained, giving credit to the original source. This reference list may include website links, people that helped you, books, magazines, etc. It is recommended that this reference list be attached to the back of a poster or display, be the last page of the notebook, or included as part of the display or exhibit visible to the public. A judge is not to discredit an exhibit for how references are presented.

Exhibits listed by Level

All Levels: Any level can exhibit a poster (22” x 28’); display (sized for displaying the equipment); or a Notebook / Report covering any topic in the appropriate project book.

Level 1: Exhibit one of the following:

1. Circuit board labeled parallel or series circuit, size 6” by 6”.
2. Electromagnet.
3. Galvanometer.

Level 2: Exhibit one of the following:

1. Magnetic powered shake flashlight with display.
2. Circuit board labeled parallel or series circuit, size 6” by 6” (with modifications if exhibited in Level 1).
3. Electromagnet.
4. Galvanometer.
5. Electric motor.

Level 3: Exhibits may include:

1. Wiring Project – (ie. extension cord, trouble light, wire sizes and uses, plug configurations, test equipment, etc.)
2. Electrical tool and supply kit.

Level 4: Exhibit one of the following:

1. Wiring – Wire a lamp. The lamp can be a re-wired lamp or one that is built new.
2. Electrical tool and supply kit.

Level 5 - 10: Exhibit ONE of the following:

1. **Equipment Wiring** – including but not limited to: parts identification, appliance repair, lamps and other lighting, equipment wiring, control system, security system, topic that covers safety, motors/generators, electric heating, heat pumps, AC, water heaters, and other electric equipment.
2. **Home Wiring** – included by not limited to any circuits found in the wiring of a house or “barn”, service entrance, switching, receptacles, generator transfer circuit, safety, electrical math, and others.
3. **Electronic Equipment** – Any project or kit containing transistors or integrated circuits or vacuum tubes such as radio, TV, computer, robot, cell phone, and others.
4. **Video Presentation** Create a video showing the work accomplished and skills learned. This video should include the same type of information as required in written notebook listed above. This video is to be no more than ten minutes in length and formatted as MP4 and submitted on a thumb drive. This video can also be uploaded to a YouTube account with the video being made public and the link submitted for evaluation.

Poster Requirements:

1. Poster exhibits should have the standardized exhibit card in the lower right hand corner with the 4-H member's name, project and club. You should allow room on your poster for the exhibit card (Height - 3½" x Width – 4¼"). The exhibit card will be available at check-in time at the fair. **NOTE: Add your name, club and the date poster was completed in the bottom right corner in permanent ink under the plastic, where the exhibitor card will cover.**
2. Posters must be 22" x 28" and DISPLAYED HORIZONTALLY ■ and not vertically ▮ .
3. POSTER MUST BE SELF-SUPPORTING (remain standing when leaned at a slight angle). Use heavy cardboard, foam board, or pegboard for stiffness. For sources of heavy cardboard, contact the Extension Office.
4. All posters must be covered with clear plastic.

STATE FAIR: One State Fair entry is chosen per divisions 1-4, two State Fair entries are selected in the advanced divisions (one from Div. A & one from Div. B).