

ELECTRIC

PLEASE NOTE: Any changes/updates from the previous year will be **BOLDED and **ITALICIZED**! Pay special attention to any projects with **BOLD**, **ITALICIZED WORDS** because they have changed from last year.**

The 4-H electricity and electronic program provides youth with educational information about electricity and how it can be used to benefit the human race.

Completion, exhibition participation, and State Fair information for Electric			
Level	Grades (suggested)	Completion Activities Needed*	Maximum State Fair Entries
Level 1	1st year in Electric	Complete 7 Book Activities*, Record Sheet, Exhibit Skills Check Sheet	1 Entry
Level 2	2nd Year in Electric	Complete 7 Book Activities*, Record Sheet, Exhibit Skills Check Sheet	1 Entry
Level 3	3rd Year in Electric	Complete 7 Book Activities*, Record Sheet, Exhibit Skills Check Sheet	1 Entry
Level 4	4th Year in Electric	Complete 7 Book Activities*, Record Sheet, Exhibit Skills Check Sheet	1 Entry
Level 5	5th Year or more in Electric	Complete 7 Book Activities*, Record Sheet, Exhibit Skills Check Sheet	1 Entry for Electric 1 Entry for Electronic

*"Activities" are defined as project manual activities and/or Hendricks County 4-H Workshops related to this topic. Members must be able to prove attendance by getting a signature from 4-H Leader/Project Advisor that conducts the workshop. Activity sheets available in the Extension Office with Electric Project Manuals. Fair Exhibit guidelines are listed below.

Remember: All posters, notebooks, and display boards **MUST** include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed. Reference Sheets are available at the Extension Office for use if needed. For personal safety, do not include personally identifiable information such as mailing address or phone numbers on posters/displays/exhibits.

GUIDELINES:

1. Refer to the Hendricks County 4-H Policies, Entry & Exhibit **Guidelines** for poster and general display guidelines.
- 2. Youth are encouraged to complete the activities as instructed in the manual or found on the 4-H electric web page.**
3. It is recommended a note be attached to your exhibit explaining what was done, the intended use, and the materials you used in completing the exhibit.

EXHIBIT CLASSES:

SUGGESTION FOR ALL DIVISIONS: include an explanation card on how your exhibit is to be used.

Electric Level 1 (1st year in Electric)

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.

Exhibit Suggestions:

- Circuit board – 6" by 6" of Series/Parallel Circuit

- Electromagnet
- Galvanometer
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Magic of Electricity Book 1 or Investigating Electricity Book 2, Purdue Extension website Level 1 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart.

Guidelines Electric Level 2 (2nd Year in Electric)

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.

Exhibit Suggestions:

- Magnetic Powered Shake Flashlight – with display
- Circuit board – 6" by 6" of Series/Parallel Circuit (with modifications if exhibited in Level 1)
- Electromagnet
- Galvanometer
- Electric Motor
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Magic of Electricity Book 1 or Investigating Electricity Book 2, Purdue Extension website Level 2 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart.

Guidelines Electric Level 3 (3rd Year in Electric)

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.

Exhibit Suggestions:

- Wiring Project – (i.e. extension cord, trouble light, wire sizes and uses, plug configurations, test equipment, etc.)
- Electrical tool and supply kit
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Wired for Power Book 3, Purdue Extension website Level 3 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart.

Guidelines Electric Level 4 (4th Year in Electric)

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.

Exhibit Suggestions:

- Wiring – Wire a lamp. The lamp can be a re-wired lamp or one that is built new.
- Electrical tool and supply kit
- Poster board (22" by 28")

- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Wired for Power Book 3, Purdue Extension website Level 4 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart.

Guidelines Electric Level 5 (5th year or more in Electric)

Exhibit one article of choice, displaying proper wiring techniques, made during the current 4-H program year that demonstrates 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.

Exhibit Suggestions:

- 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.
- 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.
- Electronic Equipment – Any project or kit containing transistors or integrated circuits or vacuum tubes such as radio, TV, computer, robot, cell phone, and others.
- Poster board (22” by 28”)
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Entering Electronics, Purdue Extension website Level 5 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart.
- 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

ENTRY & EXHIBIT GUIDELINES FOR THE HENDRICKS COUNTY 4-H FAIR

All exhibits and entries must be made during the period indicated on the fair schedule.

1. All exhibits must be picked up during the allotted time period or ribbons and awards will be forfeited.
2. All project selections must be made on 4-HOnline. Exhibits that will be presented/displayed at the Hendricks County 4-H Fair must be entered into FairEntry online by designated date.
3. **Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this handbook as a guide rather than a requirement.**
4. All non-livestock exhibits must include an exhibit label in the lower right hand corner of their exhibit available from FairEntry. Livestock exhibits will receive stall/cage cards when the project is brought to the fairgrounds.
5. In case of an unavoidable circumstance, such as death of animal or drought, which prevents members from exhibiting, insert an explanation in your record book, signed by your parent or guardian and 4-H Leader, and turn book in at the Extension Office to be considered as completing the project.
6. White cards ("My Record of Achievement") must be turned in to exhibit in 4-H. Completion cards must be presented at check-in.
7. **Members are eligible to exhibit their project via Interactive Demonstration during the County Fair, but will not qualify for State Fair. Additionally, Interactive Demonstrations will be a non-judged exhibit option where members may showcase what they have learned in the project to the general public. All projects have the option for Interactive Demonstration exhibit at the county level.**
8. A 4-H member can exhibit in only one division of each project.
9. All exhibitors will receive ribbons. Exhibits in the livestock classes will receive ribbons designated first to tenth places with all exhibits below tenth receiving achievement ribbons. All other projects will be graded as to quality with the highest quality to receive blue ribbons; average quality, red ribbons; below average, white ribbons. Any exhibit not meeting the **guidelines** of the project will be judged on its merit then lowered one placing ribbon. Exhibit entered late, improperly, or not judged will receive a green merit ribbon. Exhibits with exceptional merit will be awarded honor group ribbons as determined by the judge.
10. **Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect its contents. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right hand corner to place an exhibit tag provided by Purdue Extension Staff.**

The dimensions for the poster are 22 inches tall and 28 inches wide.

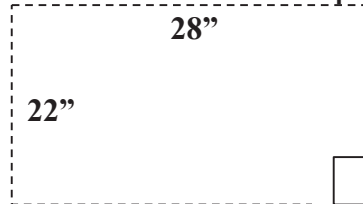


Exhibit tag comes from information entered on FairEntry prior to the 4-H Fair. The exhibit tag needs to go on the outside of the plastic sleeve in the bottom right hand corner.

11. State Fair Livestock 4-H entries are to be entered on the State Fair website by the 4-H member by June 1. The Extension Office will make all other non-livestock project entries through FairEntry.
12. Use of skateboards, skates, roller blades, and bicycles are prohibited on the grounds unless in conjunction with a fair event.
13. Dogs and other domestic animals are prohibited on the grounds unless in conjunction with a 4-H Fair event or dogs being used as service animals for impaired individuals.
14. All judges' decisions will be final.
15. **All** posters, notebooks, and display boards **MUST** include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed. Reference Sheets are available at the Extension Office for use.
16. For personal safety concerns, notebooks/posters/displays exhibited should only contain name, county, grade, level, and club if needed. Do not list personally identifiable information (i.e. phone, address, etc.).