

ELECTRICITY-County & State Fair Project

There will be a total of 6 State Fair entries: one from each division 1 – 4, and one from each section (a and b) of the Advanced division.

A completed record sheet signed by your 4-H leader **must** be presented, along with your exhibit, at project check-in at the fair.

General Rules

1. Attach a card to your exhibit (Division 2 and above) providing the following information:
 - a. What was done?
 - b. Why you did it.
 - c. The intended use of the item.
2. If a poster or display board is exhibited, it must be 22" x 28", displayed horizontally, must be mounted on a stiff backing, and have a transparent covering.
3. Place a small label in the lower right-hand corner of poster with the following information: Name, Grade/Age, Club, Project and Division.
4. Refer to "How To Prepare A Poster Project" for details on preparing posters.
5. **It is recommended/suggested that all posters, notebooks, and display boards 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 manner in which references are listed or a lack thereof.**
6. County workshops are held each year to assist 4-H'ers in completing their Electricity projects.

Exhibit Requirements

Requirements Electric Level 1 (Grade 3) Last modified 9/2020

Project Completion Recommendations:

Complete the activities as instructed in the manual and fill out the "4-H Club General Record Sheet" (4-H-528) or as specified by the County Extension Office. 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.

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 *Electricity Excitement* 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.

Indiana 4-H Electricity

Requirements Electric Level 2 (Grade 4) Last modified 9/2020

Project Completion Recommendations:

Complete the activities as instructed in the manual and fill out the “4-H Club General Record Sheet” (4-H-528) or as specified by the County Extension Office. 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.

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 *Electricity Excitement* 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.

Indiana 4-H Electricity

Requirements Electric Level 3 (Grade 5) Last modified 9/2020

Project Completion Recommendations:

Complete the activities as instructed in the manual and fill out the “4-H Club General Record Sheet” (4-H-528) or as specified by the County Extension Office. 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.

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** – (ie. 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.

Indiana 4-H Electricity**Requirements Electric Level 4 (Grade 6) Last modified 9/2020****Project Completion Recommendations:**

Complete the activities as instructed in the manual and fill out the "4-H Club General Record Sheet" (4-H-528) or as specified by the County Extension Office. 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.

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.

Indiana 4-H Electricity**Requirements Electric Level 5 (Grade 7-12) Last modified 9/2020****Do either an Electric power or Electronics project**

Complete the activities as instructed in the manual and fill out the "Advance Electric/Electronics 4-H Club Record Sheet" or as specified by the County Extension Office. 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 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 on exhibit for how references are presented. Each county may submit one advanced electric and one advance electronic exhibit to the state fair.

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.

Display boards should be appropriately sized for the displayed equipment.

Division 3: Manual: 4-H 423 *Alternating Your Thoughts about Electricity*

Manuals:

Division 1	Manual:	4-H 421	<i>Getting on Track with Electricity</i>
		4-H 421b-W	“What I Have Done” and “What I Have Learned”
	Record Sheet:	4-H 421a-W	
Division 2	Manual:	4-H 422	<i>Scoring Electricity Through Magnetism</i>
	Record Sheet:	4-H 422a-W	
	Record Sheet:	4-H 423a-W	
Division 4:	Manual:	4-H 1000	<i>Lighting the Way</i>
	Record Sheet:	4-H 1000a-W	
Division 5:	Manual:	4-H 425	<i>Wiring Around Your Home</i>
And Adv.	Record Sheet:	In manual	

(Rev 10/20)