

ELECTRIC

(State Fair Exhibit)

State Fair Entries: 5 electric exhibits per county, one per level; 1 electronic exhibit per county, level 5.

Transportation of extra-large projects must be arranged by the 4-H member.

General Exhibit Guidelines & References: See page 47 for more information

Manual Information: See page 11 for more information.

Additional Paperwork: Dubois County will no longer be requiring extra paperwork for exhibits. If selected for State

Fair, all electric exhibits must include a completed copy of the "Exhibit Skills & Knowledge Sheet". Skills sheets are for judging purposes only and will not be returned to the exhibitor.

Overall Exhibit Guidelines:

Youth are encouraged to complete the activities as instructed in the manual or found on the [4-H electric web page](#).

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."

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. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

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".

Exhibit Suggestions:

- Magnetic Powered Shake Flashlight – with optional 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. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

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”.

Exhibit Suggestions:

- Wiring Project – (i.e., extension cord, trouble light, wire sizes and uses, plug configurations, test equipment, replace cord/cord end on a tool or piece of 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. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

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”.

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. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

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”.

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. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

Video Presentation - Create a video showing the work accomplished and skills learned. This video should include the same type of information as required in the 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.