

# Electric

## Exhibit Introduction

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 manner in which references are listed.

## Requirements

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### Level: Division I

Last Modified: 10/4/2019

### Project Completion Recommendations

1. Make a circuit board
2. Conduct a Hazard Hunt.
3. Complete your record.

### Exhibit

\*Exhibit at your local or county fair a circuit board **no larger than 6" by 6"** (using kit provided, label parallel or series circuit). "What I Have Done and Learned" is required for county only.

## Requirements

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### Level: Division II

Last Modified: 10/06/05

### Project Completion Recommendations

1. Make a magnetic powered flashlight or exhibit a poster (22" x 28") on a topic described in the manual.
2. Complete your record.

### Exhibit

\*Exhibit at your local or county fair either: magnetic powered flashlight or a poster (22" x 28") as outlined in the project manual or project CD.

## Requirements

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### Level: Division III

Last Modified 11/9/17

### Project Completion Recommendations

1. Make one of the following:
  - Build an extension cord using all new parts
  - Build an incandescent trouble light using all new parts
  - Build a fluorescent trouble light using all new parts
  - Repair an extension cord or trouble light by replacing the cord, plug, connector body or socket handle with a new part(s).

- Create a poster about wire size wire type current carrying capacity the parts of an extension cord or trouble light an important safety-related topic any topic covered in the Division III manual

All poster exhibits are to be displayed horizontally, sized 22"x 28", mounted on a firm backing (foam-core board or other) and covered in clear plastic or transparent material. Place standard identification label with your name, grade and county in the lower right-hand corner of the poster.

2. Complete your record.

Note: For parameters on any of the above project options, see the Division III electric manual

## Exhibit

\*Exhibit at your local or county fair either: Extension cord; a trouble light or a poster as outlined in the project manual. If the exhibit is not a poster, attach a note explaining how it is to be used.

## Requirements

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### Level: Division IV

Last Modified: 10/4/2019

### Project Completion Recommendations

1. Complete the activities presented in the manual.
2. Make or remake a lamp, or make a poster or display board on any topic covered in the manual
3. Complete your record

## Exhibit

\*Exhibit one of the following at your local county fair.

- Made or remade lamp
- Display board on any topic covered in manual Poster
- on any topic covered in this manual

If the exhibit is not a poster, attach a note explaining how it is to be used.

Display boards should be appropriately sized for the displayed equipment.

All poster exhibits are to be displayed horizontally, sized 22" x 28", mount on a firm backing (foam-core board or other) and covered in clear plastic or transparent material. Place standard identification label with your name, grade and county in the lower right-hand corner of the poster.

## Requirements

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Last Modified: 10/4/2019

**Level: Advanced Divisions 5-10 Electricity & Electronics** (This book is being updated and you may find other resources at your local library, electricians, instructors, internet, etc. to provide guidance for your project.)

### Project Completion Recommendations

The Advanced Division is split into two different categories. One area is "Advanced Electric 5-10" and the second is "Advanced Electronics 5-10." You may choose one category for your Advanced 5-10 exhibit. Each county may submit one advanced electric and one advance electronic exhibit to the state fair.

## Exhibit

Exhibit **ONE** of the following:

- An article based on wiring around the home, farm, or facility, etc.
- An article made in the area of heating and cooling
- An article made in the area of lighting
- An article made in the area of electronics (advanced division electronic projects may contain and use molded plugs if they are part of the electronic kit)
- An article made in the area of power
- A written report on: consumer buying, better electrical methods, or electrical careers.
- A written notebook report with photos of individual steps (close-up) and overall work, illustrations, explanation of each step performed, explanation of overall work done, reasons for performing work, reasons for selecting materials used, list of materials used and prices (budget), schematics, etc. of electric project. This option allows you to use your imagination and complete any electrical project that you cannot physically bring to the fair to exhibit. You could wire a room in a house, the barn, outdoor lighting, indoor lighting, control systems, alarm systems, etc.
- Display board (~~no larger than 36"x36"x36"~~) showing home wiring (3-way switch, 4-way switch, GFCI Grounding, Circuit Protection, etc.) or any topic covered in the Advanced Division manual.
- 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 MP3 or 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.

**\*\*For other exhibit ideas, refer to the Advanced Electric Project Ideas resource available on the Indiana 4-H Electric project page.**

Attach to the exhibit any kit instructions or book/manuals if you feel they will help explain the operation of the exhibit. This may be important for advanced electronic projects.

If the exhibit is not a poster, attach a note explaining how it is to be used.

**Display boards should be appropriately sized for the displayed equipment.**