



# Department 123 Electricity

<b>Entries due</b>	May 25	
<b>Entries checked in</b>	Tuesday of Fair	Noon – 6 pm
<b>Judging</b>	Tuesday of Fair	Noon – 6 pm
<b>Judging Type</b>	Face-to-Face	
<b>Exhibits released</b>	Sunday of Fair	5 pm

### Entry Information

- Open to youth enrolled in the 4-H electricity project or youth of other groups doing equivalent work.
- No more than 5 entries per exhibitor. 1 per lot.

### Exhibit Information

- See poster rules, if applicable.
- Displays and panels must not exceed 36" x 48".
- Unless otherwise noted, "exhibit" may be a display, poster, panel, article, or notebook.
- Entries not made according to project requirements will be marked down at least 1 placing.
- No kits or pre-cut articles allowed.
- Batteries can be removed from exhibits after judging is completed.
- Premiums: \$3.00 - \$2.75 - \$2.50 - \$2.25

### CLASS A – Electricity

Lot Numbers

1. Article which demonstrates the principles of an electric motor (securely attach a 3x5 card explaining how it works and what it demonstrates)
2. Display of electric cords, wires, or cables
3. Display of light bulbs and uses
4. Display showing a homemade fuse at work
5. Display showing types of fuses
6. Electric buzzer
7. Electromagnet
8. Exhibit demonstrating or showing closed circuit, parallel wiring, and /or series wiring (diagrams must use proper symbols)
9. Exhibit explaining electrical safety at home, farm, or around power lines, etc.
10. Exhibit showing electrical tools and supplies – labeled with explanation of use
11. Flashlight that you made from a bulb, wire, and a battery
12. Homemade electric motor
13. Homemade extension cord (light or heavy-duty)
14. Homemade lamp or lighting unit
15. Homemade light meter
16. Homemade rocket launcher
17. Homemade solar equipment – any kind

18. Homemade test lamp
19. Model telegraph station
20. Panel exhibit of small electric motor (take apart an electric motor – display on panel, label, & describe)
21. Poster with chart showing how much electricity your family uses with meter readings every day for a week and then once a week for a total of 4 weeks – explain ways your family conserves energy
22. Poster with chart showing results of at least 8 objects tested for resistance value and whether they are conductors or insulators – rank by resistance level
23. Project using diodes, transistors, and/or capacitors
24. Project using photo cell
25. Question board
26. Rewired (new cord and plug) 110-volt item – example: lamp, small appliance, etc.
27. Scrapbook of low voltage electricity experiments
28. Steady hand tester
29. Working exhibit showing proper wiring for switches (2-way, 3-way, or 4-way), plugs, fixtures, and/or outlets (standard or GFI)
30. Any other exhibit not listed
31. Any other exhibit using electronic components

