

## Department 23 – Electricity

531, 532, 533, 534

Superintendents: Harvey & Marilyn Fifield

### Requirements:

1. Youth eligible to exhibit in this department are those enrolled in a 4-H Electricity Project or other youth groups carrying a similar program as their supervised project
2. Posters must be 14" x 22".
4. Scrapbooks will be 8 ½" x 11" or 12" x 12". The scrapbook should describe the work done in the project. Pictures and sketches are encouraged.
5. Exhibits may be removed after 8:00 p.m. Sunday.

<b>PREMIUMS</b>	<b><u>1st</u></b>	<b><u>2nd</u></b>	<b><u>3rd</u></b>	<b><u>4th</u></b>
Class A Grades 3-5	2.00	1.75	1.50	1.25
Class B Grades 6-8	2.50	2.25	2.00	1.75
Class C Grades 9 & up	3.00	2.75	2.50	2.25

### ELECTRICITY - PROJECT CODES 531, 532, 533, 534

Lot Nos.

1. Homemade flashlight
2. Homemade open & close circuit board
3. Poster on safety in the home
4. Poster listing appliances & devices in or out of the home that use electricity.
5. Display of a simple electromagnet
6. Build a compass
7. Build a galvanometer
8. Build an electric motor
9. Homemade series circuit board
10. Homemade parallel circuit board
11. Homemade electric question board
12. Homemade three-way switch
13. Build a rocket launcher
14. Build an alarm
15. Display of conductors and insulators
17. Poster or display on different meters and how to read them
18. Display of circuit breakers and fuses
19. Display of different types of plugs and indicate their uses
20. Display of different cords (minimum of 6 - about 6" long) indicating proper use
21. Trouble light
22. Light duty extension cord (16 gad. or lighter with 10' or shorter)
23. Heavy duty extension cord (14 gad. or heavier with no length limit, 25' long cord or longer must use 12 gauge. or larger conductor)
24. Display of electric wires and cables (about 6" long with no limit on display board size)
25. Demonstration Board using three-way and four-way switches in a lighting circuit.
26. Homemade lamp or lighting unit
27. Scrapbook plans or photographs showing lighting improvements made at home.
28. Display or poster of 10 or more different electronic parts, labeled, with a description of how each part is used.
29. A circuit with a diode, explain what a diode does.

30. A circuit with transistor, explain what a transistor does.
31. A circuit with a light emitting diode (LED), explain what a LED is.
32. A circuit with LED flasher.
33. Photocell alarm.
34. Light meter
35. Silicon controlled rectifier (SCR) intruder alarm, explain how it works.
36. 6-8 watt amplifier with integrated circuit.
37. Two-transistor radio receiver
38. Tachometer
39. Photoelectric controller
40. Display of electrical control system
41. Poster illustrating resistors and how to tell what size they are by color code
42. Any other exhibit, attach a 3"x 5" card explaining what it is