

# DEPARTMENT 23 – ELECTRICITY

## Junior Class

SUPERINTENDENTS

Mr. and Mrs. Roger Miles

ASSISTANT SUPERINTENDENTS

Lois Krantz, Mary Lou Bausch, Debra Krantz

**Judging - 9:00 a.m. Friday**

**No Exhibitor May Enter both Open and Junior Classes.  
All exhibits must be in place by 6:00 p.m. on Thursday.**

### CLASS 1 - MAGIC OF ELECTRICITY

#### PREMIUMS

Blue	Red	White	Pink
\$2.00	\$1.75	\$1.50	\$1.25

Open to Electricity members enrolled in Unit 1, Magic of Electricity, or members of other youth groups doing equivalent work. Grades 3-5. Page numbers refer to where each exhibit maybe found in the 4-H manual, "Magic of Electricity."

Lot No.

1. Working switch - pages 12-13
2. Identifying Conductors chart (11" x 14") showing test results - pages 16-17
3. Series and Parallel Circuits chart (11" x 14") - pages 18-19
4. Magnetic Attraction Test chart (11" x 14") - pages 20-21
5. Testing for Magnetism chart (11" x 14") - pages 22-23
6. Electromagnet, including chart (11" x 14") - pages 28-29
7. Galvanometer - pages 30-31
8. Electric Motor - pages 32-33
9. Completed Project Book
10. Other electrical activity

Open to Electricity members enrolled in Unit 1, Magic of Electricity, or members of other youth groups doing equivalent work. Grades 6 and over.

Lot No.

11. Working switch - pages 12-13
12. Identifying Conductors chart (11" x 14") showing test results - pages 16-17
13. Series and Parallel Circuits chart (11" x 14") - pages 18-19
14. Magnetic Attraction Test chart (11" x 14") - pages 20-21
15. Testing for Magnetism chart (11" x 14") - pages 22-23
16. Electromagnet, including chart (11" x 14") - pages 28-29
17. Galvanometer - pages 30-31
18. Electric motor - pages 32-33
19. Completed Project Book
20. Other electrical activity

### CLASS 2 - INVESTIGATING ELECTRICITY

#### PREMIUMS

Blue	Red	White	Pink
\$2.00	\$1.75	\$1.50	\$1.25

Open to Electricity members enrolled in Unit 2, Investigating Electricity, or members of other youth groups doing equivalent work. All grades. Page numbers refer to where each exhibit maybe found in the 4-H manual, "Investigating Electricity."

Lot No.

21. Volt-Ohm Data chart (11" x 14") - pages 10-11
22. Insulator-Conductor chart (11" x 14") - pages 12-13
23. Power Up chart (11" x 14") - pages 14-15
24. Series Circuit and Voltages (display circuit and 11" x 14" chart) - pages 16-18
25. Parallel Circuit and Voltages (display circuit and 11" x 14" chart) - pages 19-21

26. Circuits and Voltages chart (display circuits and 11" x 14" chart) - pages 22-23
27. Momentary Switch - pages 24-25
28. Simple 3-way Switch and chart (11" x 14") - pages 26-27
29. Solder Connections and Comparisons chart (11" x 14") - pages 28-29
30. Rocket Launcher - pages 30-31
31. Burglar Alarm - pages 32-33
32. Completed Project Book
33. Other electrical activity

### CLASS 3 - WIRED FOR POWER

#### PREMIUMS

Blue	Red	White	Pink
\$2.50	\$2.25	\$2.00	\$1.75

Open to Electricity members enrolled in Unit 3, Wired for Power, or members of other youth groups doing equivalent work. All grades. Page numbers refer to where each exhibit maybe found in the 4-H manual, "Wired for Power."

Lot No.

34. Basic Electric Tool Kit, at least 6 items - pages 6-7
35. Interview Electrical Inspector chart (11" x 14") - pages 8-9
36. Electrical usage in home chart (11" x 14") - pages 10-11
37. Breaker Controls in home entrance box chart, list voltage and amperage of each circuit breaker (11" x 14") - pages 12-13
38. Types and Sizes of Wires chart (11" x 14") - pages 14-15
39. Types of Light Bulbs display (24" x 24" maximum) - pages 16-17
40. Light Bulb Survey chart (11" x 14") - page 6
41. Appliance Nameplates chart (11" x 14") of at least 6 appliances - page 18
42. Appliance Operating costs chart (11" x 14") of at least 3 appliances - page 20
43. Identifying Receptacles chart (11" x 14") - pages 22-23
44. Neon Circuit Tester parts diagram (11" x 14") - pages 24-25
45. Floor Plan poster (14" x 22") of electrical layout of home, one poster per floor - pages 28-29
46. Volt, Amp, and Watt Usage in two rooms of home poster (14" x 22") - pages 30-31
47. Other electrical activity (trouble light, extension cord, wired switch, etc.)
48. Completed Project Book
49. Other electrical activity

### CLASS 4 - ENTERING ELECTRONICS

#### PREMIUMS

Blue	Red	White	Pink
\$3.00	\$2.75	\$2.50	\$2.25

Open to Electricity members enrolled in Unit 4, Entering Electronics, or members of other youth groups doing equivalent work. All grades. Page numbers refer to where each exhibit maybe found in the 4-H manual, "Entering Electronic."

Lot No.

50. Electronic Parts display (14" x 22") of at least 6 parts - pages 6-7
51. Circuit display with diode - pages 10-12
52. Circuit display with transistor - pages 13-15
53. Simple LED Circuit display - pages 16-17
54. Flashing LED Circuit display - pages 18-19
55. Photocell Burglar Alarm - pages 20-21
56. Simple Light Meter - pages 22-23
57. SCR Intruder Alarm - pages 24-25
58. Amplifier - pages 26-27
59. Completed Project Book
60. Other electrical activity