

## **DEPARTMENT 123 – ELECTRICITY**

All posters & charts are to be 14"x22" or 28"x22"

### **CLASS A**

#### **Unit 1 - Magic of Electricity Open to members in grades 4-5.**

Group "A"	Group "B"	Group "C"	Group "D"
\$1.75	\$1.50	\$1.25	\$1.00

1. Make a simple flashlight
2. Build a simple compass
3. Build an electromagnet
4. Display of different gauges of wire and how they are used
5. Poster illustrating magnetic attraction tests.
6. Chart showing everything in your house that uses electricity

### **CLASS B**

#### **Unit 2 - Investigating Electricity Open to members in grade 6-7**

Group "A"	Group "B"	Group "C"	Group "D"
\$2.00	\$1.75	\$1.50	\$1.25

10. Circuit diagram display with explanations
11. Make a series circuit
12. Make a parallel circuit
13. Make a soldered connection
14. Make a burglar alarm
15. Make a rocket launcher
16. Construct a three-way switch

### **CLASS C**

#### **Unit 3 - Wired for Power Open to members in grade 8-9**

Group "A"	Group "B"	Group "C"	Group "D"
\$2.25	\$2.00	\$1.75	\$1.50

20. An electrical tool and supply kit
21. Display of symbols on wires/cables and their meanings
22. Poster on how to read an appliance nametag
23. Chart showing the electrical useage of appliances
24. Display on replacing a switch
25. Display of light bulbs and the jobs they do best

## **CLASS D**

### **Unit 4 - Entering Electronics Open to members in grade 10 and up**

Group "A"	Group "B"	Group "C"	Group "D"
\$2.50	\$2.25	\$2.00	\$1.50

30. Display of different electronic parts
31. Construct and explain a diode
32. Build a circuit using a transistor
33. Make a blinking LED flasher
34. Make a SCR intruder alarm
35. An AM or AM/FM radio built by exhibitor (without housing)
36. A robotics exhibit
37. An electronic item designed and built by exhibitor