## **Electricity**

(Instructor Required)

- **1.** Explain and illustrate an experiment by which the laws of electrical attraction and repulsion are shown.
- 2. Explain the difference between direct and alternating current, and demonstrate the uses to which each is adapted. Give a method of determining which kind flows in a given circuit.
- 3. Connect a buzzer, bell, or light with a battery using a switch in line.
- **4.** Make and run a simple electric motor from a kit or take apart a motor and identify the parts, and explain how it works.
- **5.** Make a simple battery cell.
- **6.** Demonstrate ability to replace fuses or reset breakers and demonstrate a National Electric Code (NEC) approved splice using insulated wires.
- 7. Show how you would rescue a person in contact with a live electric wire, and have a knowledge of the method of reviving a person insensible from shock.
- **8.** Make a simple diagram of a lighting system of an automobile.
- **9.** Make a diagram that properly shows the lights, switches, and convenience outlets controlled by each breaker in a house.
- **10.** Read an electric meter correctly, and compute a residence bill at the rate charged in your community.

## Skill Level 1

**Original Honor 1929** 

