



Pathfinder Honour: Workbook

Electricity



Name:

Club:

Date Started:

Date Completed:

Instructor Name:

Signature:

Club Director's Name:

Signature:

Please Award Patch:

Date:

To be signed by Authorised Person (ie District Director for Pathfinders) after satisfactory completion. Leaders, please see the Assessment Sheet for a checklist of practical requirements and a short test to check knowledge of honour.

Date Patch Presented

Electricity Honour

Requirement 1 Be able to explain and illustrate an experiment by which the laws of electrical attraction and repulsion are shown.

Briefly describe what you did.

--

Requirement 2 Explain the difference between a direct and an alternating current, and describe the uses to which each is adapted. Give a method of determining which kind flows in a given circuit.

Difference between direct and alternating currents:	
Uses for direct current:	
Uses for alternating current:	
Methods for determining type of current flow:	

Requirement 3 Make a simple electromagnet or connect a bell or light with a battery using an in-line switch. Briefly describe what you did.

--

Electricity Honour

Requirement 4 Make and run a simple electric motor from a kit or take apart an electric motor and identify the parts and explain how it works.

Briefly describe what you did.

--

Requirement 5 Make a simple battery cell. Briefly describe what you did.

--

Requirement 6 Show how to splice electrical wires effectively.

Briefly describe what you did.

--

Requirement 7 Explain the use and application of electrical safety devices used to protect electrical systems and to reduce the risk of electrocution.

Briefly describe devices which.

Protect electrical circuits from overload:

--

Reduce risk of electrocution:

--

Electricity Honour

Requirement 8 Demonstrate the first things to do in the event of a person becoming insensible due to electric shock. This is before first aid or medical attention is administered. Briefly describe the main points.

Requirement 9 Understand the main elements of a simplified diagram of a lighting system of an automobile.

Please name what you consider to be important and what it does.

Requirement 10 Understand the main elements of a simplified diagram showing the lights, switches, and convenience (ie power) outlets controlled by each fuse or breaker in a house.

Please name what you consider to be important and what it does.

Electricity Honour

Requirement 11 Discuss a typical residential electricity bill and comment on the various tariff levels, ‘add-on costs’ and any benefits or special deals. Verify the amount charged on an electricity bill.

Description of bill (to whom, from whom, date, etc):	
Tariff levels:	
Add on costs:	
Benefits, special deals etc:	
Other things	
Verification of charges:	