

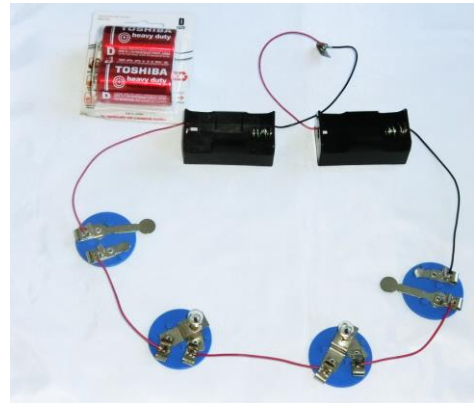


## *SIMPLE CIRCUITS (FAHNESTOCK) (Code: SIMPCFAHN)*

### DESCRIPTION

The *SIMPLE CIRCUIT* kit allows you to introduce students to electricity. By using the supplied components students can experiment with Basic circuits, Simple circuits, as well as learning about Series and Parallel circuits.

The kit can be expanded by adding additional components, such as a motor and propeller, and a buzzer.

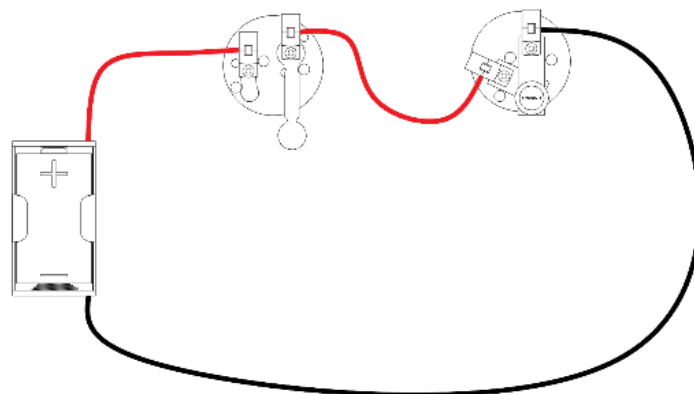


**LEVEL:**

Introductory

**SKILL DEVELOPMENT:**

- Electrical knowledge of terminology, symbols and circuit types



### WHAT'S IN THE KIT?

- All the electrical components required to carry out a range of experiments to learn about a variety of simple circuits.
- A detailed teaching unit with a complete parts list, step by step instructions for a variety of experiments, a series of questions to test understanding of the circuits, a glossary and general information about the components.



### WHAT ELSE IS NEEDED?

The following items are required and are available from Scorpio Technology, but need to be ordered separately:



## TOOLS REQUIRED

The following tools are required:

REQUIRED TOOLS	ORDERING CODE
Wire strippers	WIRESTR
Side cutters	SIDECUT or SIDECUTM

## GENERAL OBJECTIVES

Students are to experiment with a variety of circuits such as Simple, Closed, Series and Parallel. At the end of the activities, students should be able to distinguish different types of circuits.

## OBJECTIVES

As a result of these electricity activities, the students will be able to:

- Construct a simple circuit and add a switch to turn it on and off.
- Understand the role of the energy source in a circuit.
- Construct and understand the differences between a Parallel circuit and a Series circuit.
- Make an electrical motor work.
- Understand circuit symbols and draw circuit schematics.
- Draw diagrams of a variety of electric circuits (e.g. simple, Series, Parallel, open and closed) to explain how an electrical circuit works.
- Draw arrows to show flow of electricity.
- Test a variety of materials to describe and identify materials that are conductors and nonconductors of electricity.
- Define and use vocabulary associated with electricity.
- To be aware of the safety aspects electricity.
- Predict, observe and explain what they have seen during experimentation.

## THE UNIT

The unit provides examples of the different types of circuits as well as:

- Information on the different circuit symbols, components used and a Glossary
- Activities to carry out with different components to see how different circuits work
- Questions to check understanding
- Information on possible extension activities
- Information on conductivity and suggested activities
- A simple circuits Rubric

