

Electricity with the Modular System

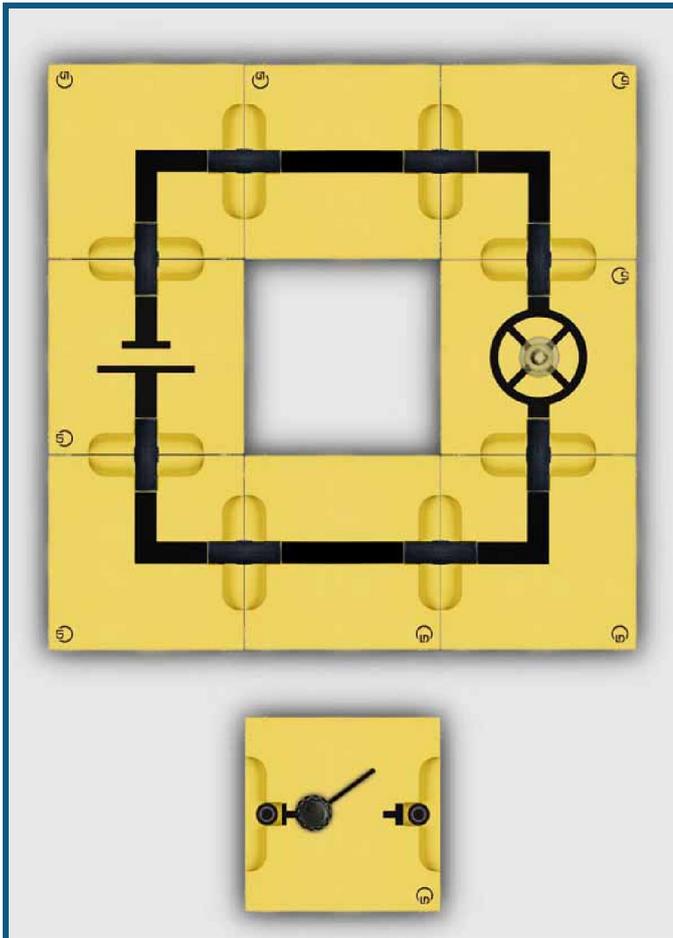
Basic Electric Circuits
Simple circuit

Simple circuit -
Function of a switch

Objective of the experiment

To investigate a simple circuit.

Setup



Apparatus

1		539 024	Lamp socket E10, BST
1	from	505 11	Incandescent lamp 2.5 V / 0.1 A, E10
1		539 025	Toggle switch, BST
1		539 053	Battery element, BST
2		539 001	Connector blocks BST, straight
4		539 004	Connector blocks BST, 90° angle
8		539 000	Bridging plug, BST
1		301 300	Demonstration experiment frame
1		301 301	Adhesive magnetic board

Carrying out the experiment

- Screw the incandescent lamp (2.5 V / 0.1 A) into the lamp socket and set up the circuit.
- Demonstrate that the lamp goes out by pulling out the bridging plug.
- Install the switch into the circuit and demonstrate its function.
- Change the order of battery element, lamp socket and switch in the circuit and observe the brightness of the lamp in each case.

Evaluation

A simple circuit consists of a battery (voltage source), a lamp (load), and electric lines, to which the battery and lamp are connected to form an electrical circuit.

A switch is used to open and close the circuit.

The order of battery, lamp, and switch is arbitrary in a simple circuit.