

Activity 8: Electrical circuits (4 hours)

Learning Outcomes: To determine the properties and then the laws of series and parallel circuits.

Materials: Battery, bulb, bulb holder, current flowmeter wire, switch, voltmeter and light bulb.

Activity 8: Building a simple series and parallel circuits.
Procedures:

1. Build the circuit shown below connecting the battery, bulb, switch, voltmeter and ammeter in series.



Circuit 1



Circuit 2

2. Observe and explain both of the circuits built in Activity 8.
3. The voltages and currents in each branch from the series circuit. By replacing bulbs or resistors to compare the readings.
4. Once fully present circuit arrangements. The voltmeter will measure and the readings of both the potential and current through each parallel branch.
5. Another pair is connected in series to circuit 1, the resulting total is increased smoothness of both the voltage and current to record them.
6. Another bulb is connected in parallel to circuit 2. The resulting voltage differences and the readings of both the current and potential to record them.