

After completing the multimeter lesson, students will be able to:

1. Define what a multimeter is.
2. Recall who invented the multimeter.
3. Explain the values a multimeter can measure.
4. Identify the various parts of a multimeter and their uses.
5. Connect the *probes* to the correct *ports* to measure various electrical properties.
6. Set the multimeter dial to the correct positions to measure: *Continuity*, *DCV*, *ACV*, *Resistance* or to turn it “*Off*”.
7. Measure
 - a) *DC voltage (DCV)* from a battery or circuit.
 - b) *AC voltage (ACV)* from a wall socket or power supply.
 - c) *Resistance* from a resistor, component, or circuit.
8. Adjust the *dial* of a multimeter to the correct range position in the *DCV* section to most accurately measure the voltage of a battery.
9. Adjust the *dial* of a multimeter to the correct range position in the Ω (Ohm or resistance) section to most accurately measure the resistance of a resistor.
10. Show if two points in a circuit have *continuity*.
11. Identify the *polarity* of a battery using the multimeter.

