



Name:

Class:

Literacy support worksheet

5.8 Voltage is the difference in energy between two parts of a circuit. Resistance makes it difficult for current to flow in a circuit

Pages 110–111 and 212–213

Voltage, current, resistance and Ohm's law



1 What is voltage?

2 How is voltage measured?

3 Where in a circuit do charged particles (electrons) usually have different amounts of energy?

4 Why do you think there are different amounts of energy in these places?

5 How is energy added to the charged particles (electrons)?

6 What is the amount of current determined by?



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7 What is electrical resistance?

8 State two purposes of a resistor in a circuit.

9 What is resistance measured in?

10 What is a:

a thermistor?

b potentiometer?

11 State three everyday objects that act as resistors.

12 Write Ohm's law in words and as an equation.



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13 Draw a voltmeter being used to measure the voltage in a circuit.

WORD DETECTIVE

14 True or false

Read pages 110 and 111 then circle whether the sentences are true or false.

- | | | | | |
|---|---|---|----|---|
| a | The voltage is the difference in potential energy at different points in a circuit. | T | or | F |
| b | Resistance is a measure of how easy it is for current to flow in a circuit. | T | or | F |
| c | Electrons will have different amounts of energy before and after a globe. | T | or | F |
| d | Batteries add energy to charged particles. | T | or | F |
| e | When electrons collide in the wires, all of their electrical energy converts to heat. | T | or | F |
| f | Most connecting wires are thin and good conductors. | T | or | F |