

ELECTRICITY WORKSHEET

NAME \_\_\_\_\_

PERIOD \_\_\_\_\_

1. What voltage is required to make .250 A flow in a circuit with 8.00 ohms of resistance?

Answer \_\_\_\_\_

2. What current flows in a circuit with a potential difference of 12.0 V and a resistance of 25.0 ohms?

Answer \_\_\_\_\_

3. What is the resistance of a circuit with a voltage of 45.0 V and a current of 5.00 A?

Answer \_\_\_\_\_

4. A circuit has a total resistance of 80.0 ohms. What voltage will force 25.0 mA of current through it?

Answer \_\_\_\_\_

5. A 40.0 V circuit has a resistance of 80.0 ohms. What amount of current flows through it? How much power does the circuit use?

Current \_\_\_\_\_

Power \_\_\_\_\_

6. 4.00 Amps flow through a circuit with resistance of 8.00 ohms. What is the potential difference of the circuit? How much power is dissipated in the circuit?

Voltage \_\_\_\_\_

Power \_\_\_\_\_

7. How much current flows through the filament of a 75.0 W light bulb connected to a 120. V potential?

Answer \_\_\_\_\_

8. What is the resistance of an electric drill if its power rating is .500 hp if it is made to connect to 115 volts of potential?  
(1 hp = 746 W)

Answer \_\_\_\_\_

9. A total resistance of 8.00 ohms is found in a loudspeaker. The current in its circuit is measured and found to be 1.40 A. What power is given off by the speaker? What potential difference will be used across the speaker terminals?

Power \_\_\_\_\_

Voltage \_\_\_\_\_