

**Automotive Technology 7<sup>th</sup> Edition**  
**Chapter 38: Series, Parallel, and Series-Parallel Circuits**  
**Matching Quiz**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Matching: Choose the item in column 2 that best matches each item in column 1.**

- |   |   |           |
|---|---|-----------|
| 1. Series Circuit                                     | A. A circuit with more than one electrical load where current has only one path.                | 1. _____  |
| 2. Parallel Circuit                                   | B. The sum of the voltage drops in a series circuit.  | 2. _____  |
| 3. Kirchhoff's Voltage Law                            | C. The total resistance of a parallel circuit with identical resistors.                         | 3. _____  |
| 4. Kirchhoff's Current Law                            | D. A circuit where current divides and flows through two or more paths.                         | 4. _____  |
| 5. Voltage Drop                                       | E. The sum of the currents entering a junction equals the sum of the currents leaving it.       | 5. _____  |
| 6. Compound Circuit                                   | F. The type of circuit that has branches or legs.   | 6. _____  |
| 7. Calculating Total Resistance in Parallel           | G. A reduction in electrical potential energy as current flows through a load.                  | 7. _____  |
| 8. Total Resistance in Parallel (Identical Resistors) | H. Often called a series-parallel circuit.  | 8. _____  |
| 9. Open Circuit in Series                             | I. Used to determine the total resistance of parallel circuits, especially with many resistors. | 9. _____  |
| 10. Solving Series-Parallel Circuits                  | J. Causes current to stop flowing through the entire circuit.                                   | 10. _____ |

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Answer Key

**Answer Key:**

1. A
2. D
3. B
4. E
5. G
6. H
7. I
8. C
9. J
10. F