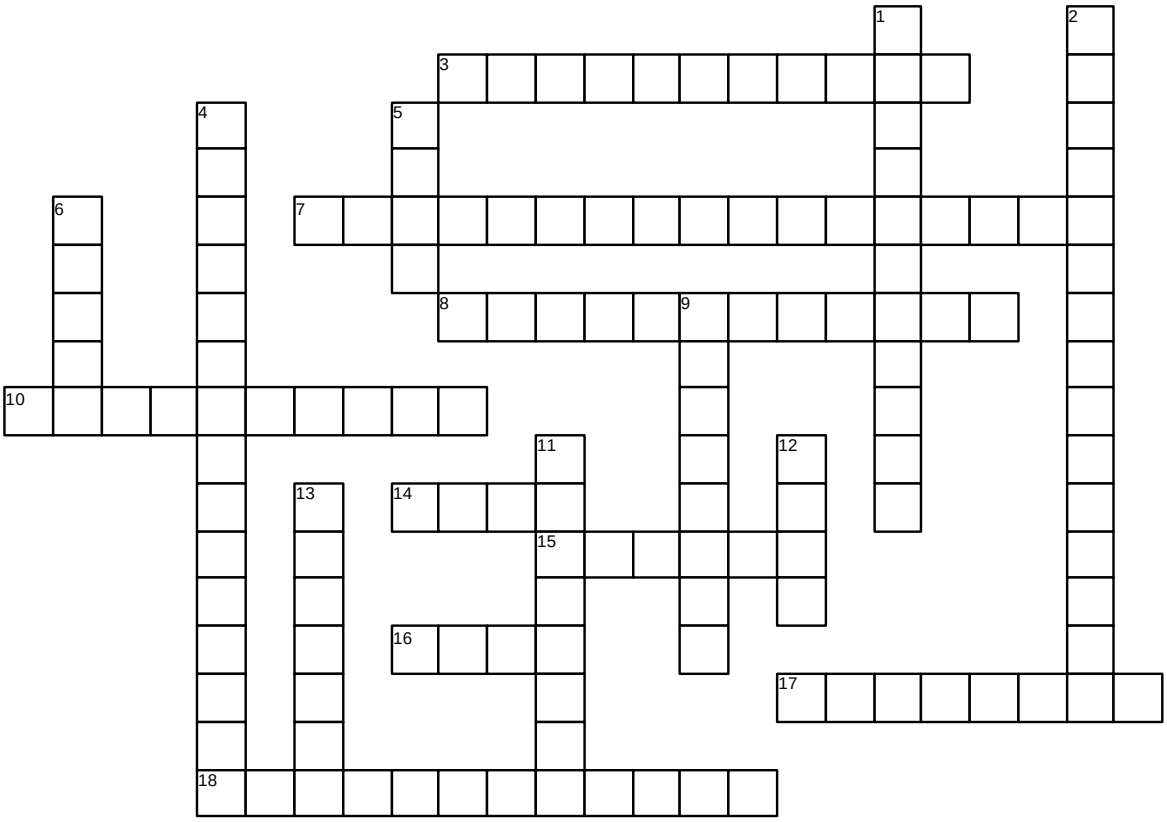
Parallel Circuits

Chapter 7



ACROSS

3 The fractions cannot be added together unless they all have the same _____.

7 _____ _____ law states: The current flowing into any junction of an electrical circuit is equal to the current flowing out of that junction.

8 If _____ _____ resistance is needed, Ohm's law can be used to calculate it because voltage and current are known.

10 When installing extra lighting, the technician must determine the proper gauge wire and _____ device.

14 There are ____ basic methods that can be used to calculate the total resistance in a parallel circuit.

15 Another name for the separate paths that split and meet at junction points are _____.

16 Another name for branches are ____.

17 The separate paths that split and meet at junction points are called _____.

18 The _____ _____ can be calculated first by treating each leg of the parallel circuit as a simple circuit.

DOWN

1 Most circuits in vehicles are parallel circuits and each branch is connected to the 12 volt _____ _____.

2 The only place where electricity takes the path of _____ _____ is in a series circuit where there are not other paths for the current to flow.

4 A _____ _____ is a complete circuit that has more than one path for the current to flow.

5 A parallel circuit drops from source voltage to ____ (ground) across the resistance in each leg of the circuit.

6 The total resistance of a parallel circuit is always _____ than the smallest resistance in the leg of the circuit.

9 Electronic fuel injector and diesel engine glow plug circuits are two of the most _____ tested circuits where parallel circuit knowledge is required.

11 Which _____ is R1, and which is R2 is not important.

12 Parallel circuits are used in _____ automotive applications.

13 Additional _____ can flow when resistances are added in parallel, because each leg of a parallel circuit has its own power and ground and the current flowing through each leg is strictly dependent on the resistance of that leg.