

**Automotive Technology 7<sup>th</sup> Edition**  
**Chapter 87: Introduction to Electric and Hybrid Electric Vehicles**  
**Matching Quiz**

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

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

- |   |   |           |
|---|---|-----------|
| 1. Hybrid Electric Vehicle (HEV)          | A. Incorporates idle stop and regenerative braking but is not capable of using the electric motor to propel the vehicle on its own. | 1. _____  |
| 2. Full (Strong) Hybrid                   | B. A feature that allows a vehicle to be controlled, including remote start, using a smart phone application.                       | 2. _____  |
| 3. Range Anxiety                          | C. A design where both the engine and electric motor are connected to the transmission and can be combined to power the vehicle.    | 3. _____  |
| 4. Mild Hybrid                            | D. A design where the ICE turns a generator, and only the electric motor powers the vehicle.  | 4. _____  |
| 5. Series Hybrid Powertrain               | E. The fear that a vehicle will have insufficient range to reach its destination.   | 5. _____  |
| 6. Phone as a Key (PAAK)                  | F. A vehicle that is able to propel itself using only its electric motor(s).  | 6. _____  |
| 7. Parallel Hybrid Powertrain             | G. A hybrid vehicle with a larger capacity battery that can be recharged by plugging it into an AC power source.                    | 7. _____  |
| 8. Micro Hybrid                           | H. A vehicle that uses both an internal combustion engine and an electric motor to propel the vehicle.                              | 8. _____  |
| 9. Plug-in Hybrid Electric Vehicle (PHEV) | I. A feature that allows the vehicle to slow and often stop using just the accelerator pedal.                                       | 9. _____  |
| 10. One-Pedal Driving                     | J. A system that will incorporate idle stop, but is not capable of propelling the vehicle without starting the ICE.                 | 10. _____ |

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**Answer Key**

**Answer Key:**

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