

Automotive Technology 7th Edition
Chapter 92: Fuel Cells and Advanced Technologies
Matching Quiz

Name: _____ Date: _____

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

- | | | |
|--|--|-----------|
| 1. Fuel Cell | A. A low-temperature combustion process that ignites a lean air-fuel mixture without a spark. | 1. _____ |
| 2. Electrolysis | B. A storage method where hydrogen atoms bond with metallic alloys in a tank. | 2. _____ |
| 3. Energy Carrier | C. A vehicle that uses both a fuel cell and a secondary electrical storage device for power. | 3. _____ |
| 4. Proton Exchange Membrane (PEM) | D. An electrical device that stores energy via electrostatic attraction and has an excellent cycle life. | 4. _____ |
| 5. Fuel-Cell Stack | E. A substance, like hydrogen, that must be generated and stored before it can be used as a fuel. | 5. _____ |
| 6. Fuel-cell hybrid vehicle (FCHV) | F. An electrochemical device that converts chemical energy from hydrogen and oxygen into electricity. | 6. _____ |
| 7. Liquid Hydrogen | G. The process of using an electric current to split water into its components. | 7. _____ |
| 8. Solid Storage of Hydrogen | H. A storage method that increases energy density but requires cryogenic tanks. | 8. _____ |
| 9. Ultracapacitor | I. The type of fuel cell best suited for vehicles due to its lightweight and compact design. | 9. _____ |
| 10. Homogeneous Charge Compression Ignition (HCCI) | J. Hundreds of individual fuel cells connected in series to produce a higher total voltage. | 10. _____ |

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Answer Key

Answer Key:

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