

**Automotive Technology 7<sup>th</sup> Edition**  
**Chapter 21: Intake and Exhaust Systems**  
**Matching Quiz**

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

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

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

- |                                    |   |           |
|------------------------------------|---|-----------|
| 1. Air intake filtration           | A. A component that distributes the air-fuel mixture or air evenly to the engine's cylinders.   | 1. _____  |
| 2. Air cleaner and filter          | B. The process of cleaning air before it enters the engine, essential for preventing damage from dirt and contaminants.                   | 2. _____  |
| 3. Intake manifold                 | C. A system that recirculates a portion of exhaust gases back into the engine cylinders to reduce NOx emissions.                          | 3. _____  |
| 4. Plenum                          | D. Components used to support the exhaust system components.  | 4. _____  |
| 5. Variable intake manifolds       | E. An exhaust system component that converts harmful pollutants in exhaust gases into less harmful substances.                            | 5. _____  |
| 6. EGR (Exhaust Gas Recirculation) | F. An exhaust system component that smooths out pressure pulses and reduces noise from the exhaust.                                       | 6. _____  |
| 7. Exhaust manifold                | G. A component that collects exhaust gases from multiple cylinders and directs them into a single exhaust pipe.                           | 7. _____  |
| 8. Catalytic converter             | H. A chamber within the intake manifold that collects air before it is distributed to individual runners.                                 | 8. _____  |
| 9. Muffler                         | I. Components that clean contaminants from the air entering the engine, silence intake noise, and act as a flame arrester.                | 9. _____  |
| 10. Hangers                        | J. Intake manifolds designed to optimize engine performance across different RPMs by changing the length or volume of the intake runners. | 10. _____ |

**Automotive Technology 7<sup>th</sup> Edition**  
**Chapter 21: Intake and Exhaust Systems**  
**Matching Quiz**  
**Answer Key**

**Answer Key:**

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