

Automotive Technology 7th Edition
Chapter 1: Automotive Background and Overview
Short Answer Quiz

Name: _____ Date: _____

1. Historical Development: Detail the significance of the "OTTO four-stroke cycle engine" developed in 1876 and its impact on the progression of self-propelled vehicles.

2. Chassis System Components: Explain the differences between disc brakes and drum brakes in the braking system of a vehicle, noting their respective advantages and common placement on modern vehicles.

3. Body Construction Evolution: Describe the difference between "unit-body construction" and "space-frame construction" in vehicle manufacturing. What are the key benefits and drawbacks of each?

4. Engine Design: How did the placement of valves in engine designs evolve from the early engines to the 1950s? Explain the advantages of the overhead camshaft (OHC) designs in comparison to older designs.

5. Monroney Label Significance: Why was the Monroney label introduced, and what crucial pieces of information does it provide to potential vehicle buyers? Why was the label named "Monroney"?

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6. Describe the function of the Positive Crankcase Ventilation (PCV) system and explain how it helps prevent the release of certain gases into the atmosphere.

7. Detail the differences in the powertrain components for transferring engine torque in rear-wheel-drive vehicles compared to front-wheel-drive vehicles.

8. Based on the evolution of vehicle electrical components, why were the early batteries often referred to as SLI batteries, and what did SLI stand for?

9. How does a catalytic converter function in the context of emission control, and where is it typically located in relation to the engine?

10. Contrast the comfort provisions in early model vehicles to those in contemporary vehicles, particularly focusing on heating and air-conditioning systems.
