

Automotive Technology 7<sup>th</sup> Edition  
Chapter 48: 12-Volt Battery Testing and Service  
Short Answer Quiz

Name:

Date:

1. What are the safety precautions technicians should adhere to when working with batteries, especially concerning explosive gases?
2. Describe the hazards associated with batteries, specifically mentioning the gases they release during normal charging and discharging cycles.
3. List the warning signs that indicate a battery is nearing the end of its useful life.
4. Explain the significance of a battery voltage reading of 12.28 volts. What does it indicate about the battery's charge status?
5. Describe the purpose of a hydrometer in battery testing and what it measures.

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6. What can the specific gravity test of a battery's electrolyte indicate about the battery's condition?

7. What is the primary purpose of performing a battery load test?

8. Why is it recommended to set the charging voltage of a battery at or below 14.4 volts?

9. After changing a battery in a popular European vehicle, what additional step should a technician perform?

10. Explain the relationship between battery sulfation and the occurrence of corrosion on battery cables and connections.