

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

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

1. What types of springs are commonly used in vehicle suspension systems?

- A. Coil springs
- B. Leaf springs
- C. Torsion bars
- D. All of the above

2. Hooke's Law is a principle that states the force needed to extend or compress a spring by some distance is proportional to that distance. What is this commonly referred to as?

- A. Spring constant
- B. Spring rate
- C. Spring load
- D. Spring tension

3. What is the primary function of a stabilizer bar in a vehicle's suspension system?

- A. To absorb shock
- B. To reduce body roll during cornering
- C. To maintain the vehicle's balance
- D. To support the vehicle's weight

4. What is the key difference between a load-carrying and a follower (friction) ball joint?

- A. The load-carrying ball joint supports vehicle weight
- B. The follower ball joint supports vehicle weight
- C. The load-carrying ball joint acts as a pivot for the suspension
- D. Both A and C

5. What is the purpose of bump stops in a suspension system?

- A. To prevent the suspension from overextending
- B. To provide additional spring action
- C. To limit the maximum compression of the suspension
- D. To dampen the suspension's rebound

6. Which frame type is a truck most likely to use?

- A. Perimeter
- B. Ladder
- C. Stub-type
- D. Space frame

7. What is the spring rate of a spring measured in?

- A. Pounds per inch (lb/in)
- B. Foot-pounds (ft-lb)
- C. Pounds per square inch (PSI)
- D. Inches per pound (in/lb)

8. Which statement is correct regarding torsion bars?

- A. They are not adjustable for ride height
- B. They are not marked left and right
- C. They are adjustable and marked for specific sides
- D. They cannot be switched side to side

9. A center bolt is used in which type of spring?

- A. Coil
- B. Leaf
- C. Torsion bar
- D. Air

10. What suspension component is used to counteract body lean during cornering?

- A. Torsion bar
- B. Strut rod
- C. Stabilizer bar
- D. Control arm

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Chapter 111

Multiple Choice Quiz A

Answer Key

1. D

2. B

3. B

4. D

5. C

6. B

7. A

8. C

9. B

10. C