

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Brake pads and linings that use synthetic material such as aramid fibers instead of steel are usually referred to as _____. 1) _____
 - A) NAO
 - B) NAS
 - C) Ceramic
 - D) Any of the above

- 2) It takes 50 pounds of force to move a 100 pound block of wood across the floor. The coefficient of friction is _____. 2) _____
 - A) 1.5
 - B) 2.0
 - C) 0.5
 - D) 1.0

- 3) Which of the following is NOT a form of energy used in an automobile? 3) _____
 - A) Mechanical
 - B) Chemical
 - C) Coolant
 - D) Electrical

- 4) Maximum deceleration rates for a typical passenger car or light truck is _____. 4) _____
 - A) 1 to 3 ft/sec
 - B) 5 to 10 ft/sec
 - C) 16 to 32 ft/sec²
 - D) 200 to 250 ft/sec²

- 5) The process of braking is the conversion of kinetic energy into heat energy through friction. 5) _____
 - A) True
 - B) False

- 6) Why is copper being reduced in brake friction materials? 6) _____
 - A) Because it is a health concern when it becomes airborne
 - B) It can affect life in rivers and streams
 - C) To help reduce the weight of the vehicle
 - D) To help reduce the cost of the brake linings/pads

- 7) The static friction coefficient is always higher than the kinetic friction coefficient. 7) _____
 - A) True
 - B) False

- 8) Work is the transfer of energy from one physical system to another. 8) _____
 - A) True
 - B) False

9) What type of binder is used in all brake friction materials?

9) _____

- A) Rubber scrap
- B) Carbon
- C) Phenolic resin
- D) Ceramic powders

10) Which Greek letter is used to represent the coefficient of friction?

10) _____

- A) Mu (μ)
- B) Omega (Ω)
- C) Delta (Δ)
- D) Pi (π)

Answer Key

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1) D

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2) C

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3) C

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4) C

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5) A

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6) B

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7) A

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8) A

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9) C

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10) A

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