ENGLAND GCSE PHYSICS OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 4 · 10 QUESTIONS

Explaining Motion — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A red race car speeds up on a straight track. What is the resultant force doing?**

- A doing nothing
- B causing acceleration
- C causing deceleration
- D causing a turn

Understand It with Pulse | Flag a mistake

2 **A basketball is thrown up. What happens to its speed as it rises?**

- A it stays the same
- B it becomes zero
- C it decreases
- D it increases

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3 **A tennis ball bounces. What happens to its kinetic energy?**

A some becomes heat

B it all stays kinetic energy

C it disappears completely

D it becomes light energy

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4 **A door is hard to push open near its hinges. Why?**

A the handle is too far away

B the moment is small

C the hinges push back harder

D the door is heavier near the hinges

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5 **An object travels 100 m in 50 seconds. What is its speed?**

- A 2 m/s
- B 5000 m/s
- C 4 m/s
- D 1 m/s

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6 **A force of 50 N acts 2 m from a pivot. What is the moment of the force?**

- A 110 Nm
- B 100 Nm
- C 50 Nm
- D 200 Nm

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7 **Which factor increases braking distance?**

A a wet road

B being tired

C being distracted

D drinking alcohol

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8 **A passenger train brakes. What force slows it down?**

A thrust

B lift

C gravity, pulling it down

D friction

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9 **A force of 200 N acts on an area of 10 square metres. What is the pressure?**

- A 2000 Pa
- B 40 Pa
- C 10 Pa
- D 20 Pa

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10 **Why does a falling object reach a top speed?**

- A drag grows to match weight
- B the air disappears
- C gravity stops acting
- D the object runs out of energy

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ANSWER KEY

1. B
2. C
3. A
4. B
5. A
6. B
7. A
8. D
9. D
10. A

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