ENGLAND GCSE PHYSICS EDEXCEL FOUNDATION · UNIT 2 · 25 QUESTIONS

Motion and Forces — 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 **Hardcover books have mass. What is mass measured in?**

- A newtons, the unit of force
- B kilograms
- C joules
- D watts

Understand It with Pulse | Flag a mistake

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

- A friction
- B thrust
- C gravity, pulling it down
- D lift

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3 **A tennis ball is hit across a court. Which force slows the ball down in the air?**

- A air resistance
- B the hit
- C friction with the ground
- D gravity

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4 **A wristwatch is used to time a race. What is speed calculated from?**

- A mass and time together
- B time only, not distance
- C distance only, not time
- D distance and time

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5 **A Ferris wheel is at the top. What is the person's height like?**

A unchanged

B at its greatest

C at its smallest

D at zero

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6 **A passenger aeroplane takes off. Which force lifts it up?**

A lift

B weight

C thrust

D drag

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7 **A kite rises higher. What happens to the wind speed usually?**

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

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8 **A rocket in space has no air around it. What happens to air resistance?**

- A there is none
- B it becomes gravity
- C it increases
- D it stays the same

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9 **What force is needed to accelerate a 4 kg object at 2 m/s squared?**

- A 8 N
- B 4 N
- C 13 N
- D 16 N

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10 **What is terminal velocity?**

- A the speed when an object starts to fall
- B the speed of sound in air
- C the speed when drag is zero
- D top steady falling speed

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

A doing nothing

B causing deceleration

C causing a turn

D causing acceleration

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12 **An object travels 100 m in 20 seconds. What is its speed?**

A 10 m/s

B 2000 m/s

C 5 m/s

D 2.5 m/s

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13 **What is the unit of force?**

A the watt

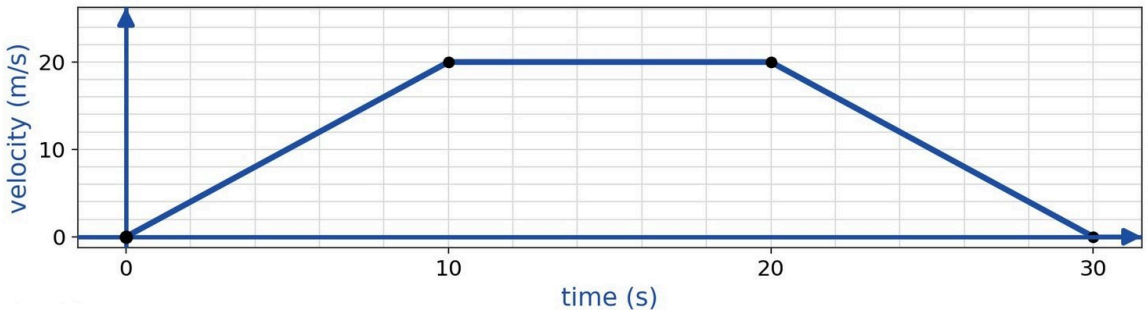
B the newton

C the kilogram

D the joule

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14 **The graph shows a velocity-time graph. What is the acceleration in the first 10 seconds?**



A 2 m/s²

B 0 m/s²

C 20 m/s²

D 10 m/s²

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15 What is the weight of a 50 kg object on Earth? Use g = 10 N/kg.

- A 50 N
- B 1000 N
- C 250 N
- D 500 N

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16 An object speeds up from 0 m/s to 30 m/s in 10 seconds. What is its acceleration?

- A 3 m/s²
- B 1.5 m/s²
- C 30 m/s²
- D 6 m/s²

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17 **A basketball is dropped. What energy store increases as it falls?**

A thermal

B kinetic

C elastic

D gravitational potential

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18 **A bicycle is ridden uphill. Which energy store increases?**

A kinetic energy of motion

B elastic potential energy

C gravitational potential

D thermal energy from friction

Understand It with Pulse | Flag a mistake

19 **What is a scalar quantity?**

A a quantity with no size

B a quantity with size and direction

C a quantity with direction only

D a quantity with size only

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20 **What force is needed to accelerate a 4 kg object at 5 m/s squared?**

A 25 N

B 20 N

C 40 N

D 10 N

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21 **Which factor increases braking distance?**

A a wet road

B drinking alcohol

C being tired

D being distracted

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22 **A skydiver falls and reaches terminal velocity. What is true about the forces on the skydiver?**

A there are no forces at all

B they are balanced

C drag is bigger than weight

D weight is bigger than drag

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23 **An object travels 400 m in 50 seconds. What is its speed?**

- A 20000 m/s
- B 16 m/s
- C 8 m/s
- D 4 m/s

Understand It with Pulse | Flag a mistake

24 **What is the weight of a 2 kg object on Earth? Use g = 10 N/kg.**

- A 2 N
- B 10 N
- C 40 N
- D 20 N

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25

An object speeds up from 0 m/s to 10 m/s in 10 seconds. What is its acceleration?

A 2 m/s²

B 1 m/s²

C 10 m/s²

D 0.5 m/s²

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Flag a mistake

ANSWER KEY

1.	B	**10.**	D	**19.**	D
2.	A	**11.**	D	**20.**	B
3.	A	**12.**	C	**21.**	A
4.	D	**13.**	B	**22.**	B
5.	B	**14.**	A	**23.**	C
6.	A	**15.**	D	**24.**	D
7.	C	**16.**	A	**25.**	B
8.	A	**17.**	B		
9.	A	**18.**	C		

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