ENGLAND GCSE PHYSICS AQA HIGHER · UNIT 5 · 25 QUESTIONS

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 **A bicycle freewheels downhill. What happens to its speed?**

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

Understand It with Pulse | Flag a mistake

2 **A passenger aeroplane cruises. Which force opposes its motion?**

- A drag
- B lift
- C weight
- D thrust

Understand It with Pulse | Flag a mistake

3 **A rocket is pushed up by hot gases. What is the upward force called?**

- A lift
- B weight
- C thrust
- D drag

Understand It with Pulse | Flag a mistake

4 **A tennis ball is served fast. What is its speed like?**

- A low
- B high
- C negative
- D zero

Understand It with Pulse | Flag a mistake

5 **A car goes around a roundabout. Which force keeps it turning?**

- A thrust
- B air resistance
- C gravity
- D friction

Understand It with Pulse | Flag a mistake

6 **Hardcover books are stacked on a table. What force pulls them down?**

- A tension
- B air resistance
- C friction
- D gravity

Understand It with Pulse | Flag a mistake

7 **A passenger train carries people around the country. Which part of the blood is like the train, carrying oxygen around the body?**

A plasma

B red blood cells

C white blood cells

D platelets

Understand It with Pulse | Flag a mistake

8 **A 4 kg trolley moves at 10 m/s. What is its momentum?**

A 40 kg m/s

B 45 kg m/s

C 80 kg m/s

D 20 kg m/s

Understand It with Pulse | Flag a mistake

9 **What is terminal velocity?**

A top steady falling speed

B the speed when drag is zero

C the speed when an object starts to fall

D the speed of sound in air

Understand It with Pulse | Flag a mistake

10 **A wristwatch measures time. What is the unit of time?**

A the hour

B the minute

C the day

D the second

Understand It with Pulse | Flag a mistake

11 **An object travels 100 m in 10 seconds. What is its speed?**

- A 5 m/s
- B 1000 m/s
- C 20 m/s
- D 10 m/s

Understand It with Pulse | Flag a mistake

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

- A 10 N
- B 25 N
- C 20 N
- D 40 N

Understand It with Pulse | Flag a mistake

13 **Why does a long spanner undo a tight nut more easily?**

A the nut gets hotter

B the spanner is heavier

C the moment is bigger

D the force is smaller

Understand It with Pulse | Flag a mistake

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

A 10 N

B 200 N

C 50 N

D 100 N

Understand It with Pulse | Flag a mistake

15 **A Ferris wheel turns slowly. A person on the wheel moves in a circle. What is the person's speed like?**

A steady speed

B increasing speed

C zero speed

D decreasing speed

Understand It with Pulse | Flag a mistake

16 **What is the momentum of a 5 kg object moving at 3 m/s?**

A 7.5 kg m/s

B 8 kg m/s

C 15 kg m/s

D 30 kg m/s

Understand It with Pulse | Flag a mistake

17 **A ladder is used to reach a roof. What is the ladder an example of?**

A a complex machine

B a lever only

C a simple machine

D a power source

Understand It with Pulse | Flag a mistake

18 **A force of 10 N acts 5 m from a pivot. What is the moment of the force?**

A 100 Nm

B 25 Nm

C 60 Nm

D 50 Nm

Understand It with Pulse | Flag a mistake

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

- **A** 0.5 m/s^2
- **B** 1 m/s^2
- **C** 2 m/s^2
- **D** 10 m/s^2

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

21 **A force of 100 N acts on an area of 5 square metres. What is the pressure?**

- A 40 Pa
- B 500 Pa
- C 20 Pa
- D 10 Pa

Understand It with Pulse | Flag a mistake

22 **A yellow school bus is full of children. What is its mass like?**

- A larger than when empty
- B zero
- C smaller than when empty
- D the same as when empty

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

24 **Which factor increases braking distance?**

- A drinking alcohol
- B being distracted
- C being tired
- D a wet road

Understand It with Pulse | Flag a mistake

25 **A force of 100 N acts on an area of 2 square metres. What is the pressure?**

A 55 Pa

B 100 Pa

C 50 Pa

D 25 Pa

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.