ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY FOUNDATION · UNIT 22 · 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 so it can be fixed.

1 **A cardboard box is full of books. What is its mass like?**

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

3 **Hardcover books have mass. What is mass measured in?**

A watts

B kilograms

C joules

D newtons, the unit of force

Understand It with Pulse | Flag a mistake

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

A it stays the same

B it increases

C it becomes zero

D it decreases

Understand It with Pulse | Flag a mistake

5 **A red race car brakes hard. What happens to its kinetic energy?**

- A it disappears
- B it becomes sound only, nothing else
- C it is transferred to heat
- D it increases

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

9 **An object speeds up from 0 m/s to 20 m/s in 10 seconds. What is its acceleration?**

A 2 m/s²

B 20 m/s²

C 4 m/s²

D 1 m/s²

Understand It with Pulse | Flag a mistake

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

A gravity

B air resistance

C friction

D thrust

Understand It with Pulse | Flag a mistake

11 **A kite flies in the wind. Which force holds the kite up?**

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

Understand It with Pulse | Flag a mistake

12 **What is the weight of a 5 kg object on Earth? Use g = 10 N/kg.**

- A 25 N
- B 5 N
- C 50 N
- D 100 N

Understand It with Pulse | Flag a mistake

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

A a simple machine

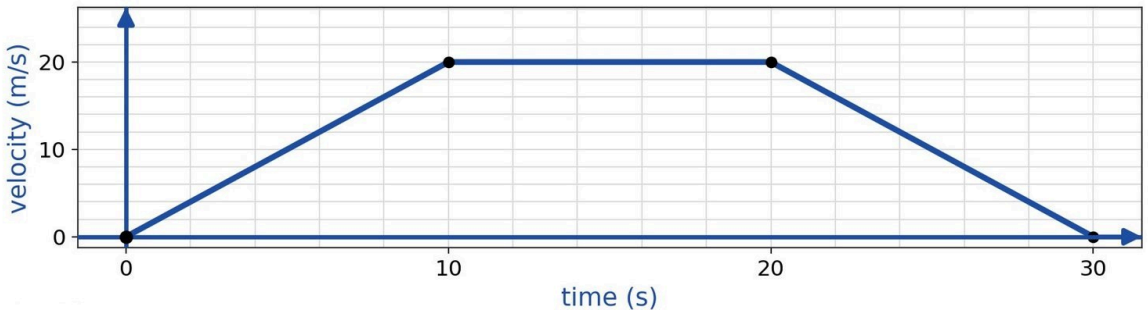
B a lever only

C a complex machine

D a power source

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse | Flag a mistake

15 **Which factor increases thinking distance?**

A being tired

B a wet road

C worn tyres

D worn brakes

Understand It with Pulse | Flag a mistake

16 **A Ferris wheel turns. What force keeps a person moving in a circle?**

A air resistance pushing them back

B centripetal force

C gravity only, pulling them down

D friction only, gripping the seat

Understand It with Pulse | Flag a mistake

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

- A gravitational potential
- B kinetic energy of motion
- C thermal energy from friction
- D elastic potential energy

Understand It with Pulse | Flag a mistake

18 **What force is needed to accelerate a 10 kg object at 3 m/s squared?**

- A 60 N
- B 35 N
- C 30 N
- D 15 N

Understand It with Pulse | Flag a mistake

19 **A passenger train travels at a steady speed. What is its acceleration?**

- A 9.8 m/s²
- B 1 m/s²
- C 0 m/s²
- D 10 m/s²

Understand It with Pulse | Flag a mistake

20 **A force of 400 N acts on an area of 4 square metres. What is the pressure?**

- A 1600 Pa
- B 200 Pa
- C 50 Pa
- D 100 Pa

Understand It with Pulse | Flag a mistake

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

A it becomes light energy

B it disappears completely

C it all stays kinetic energy

D some becomes heat

Understand It with Pulse | Flag a mistake

22 **An object travels 200 m in 25 seconds. What is its speed?**

A 5000 m/s

B 16 m/s

C 8 m/s

D 4 m/s

Understand It with Pulse | Flag a mistake

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

- A 20 m/s²
- B 1 m/s²
- C 4 m/s²
- D 2 m/s²

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

25

Which factor increases braking distance?

A a wet road

B drinking alcohol

C being distracted

D being tired

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.