ENGLAND GCSE COMBINED SCIENCE AQA SYNERGY FOUNDATION · UNIT 6 · 25 QUESTIONS

Interactions over Small and Large Distances — 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 passenger aeroplane flies at a steady speed and height. What is the resultant force on the aeroplane?**

- A 1000 N
- B 10000 N
- C 0 N
- D 5000 N

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

3 **A kite is held by a string. What force does the string exert?**

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

Understand It with Pulse | Flag a mistake

4 **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 platelets
- C white blood cells
- D red blood cells

Understand It with Pulse | Flag a mistake

5 **A guitar amplifier is connected to the mains. What is the voltage of the mains supply in the UK?**

- A 12 V
- B 230 V
- C 110 V
- D 50 V

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

7 **A resistor has a potential difference of 24 V across it and a resistance of 4 ohms. What is the current?**

- A 96 A
- B 3 A
- C 12 A
- D 6 A

Understand It with Pulse | Flag a mistake

8 **A yellow school bus carries children to school. Which blood vessel carries blood away from the heart, like a bus leaving the station?**

- A a vein
- B a ventricle
- C a capillary
- D an artery

Understand It with Pulse | Flag a mistake

9 **A set square is placed on a mirror. What happens to light hitting the mirror?**

- A it reflects
- B it refracts
- C it is absorbed
- D it passes through

Understand It with Pulse | Flag a mistake

10 **An object travels 300 m in 25 seconds. What is its speed?**

- A 6 m/s
- B 12 m/s
- C 7500 m/s
- D 24 m/s

Understand It with Pulse | Flag a mistake

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

- A 25 N
- B 50 N
- C 12.5 N
- D 30 N

Understand It with Pulse | Flag a mistake

12 **Which of these is a vector?**

A time

B distance

C speed

D force

Understand It with Pulse | Flag a mistake

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

A the amp

B the volt

C the watt

D the ohm

Understand It with Pulse | Flag a mistake

14 **Two 4 ohm resistors are in series. What is the total resistance?**

A 8 ohms

B 16 ohms

C 4 ohms

D 2 ohms

Understand It with Pulse | Flag a mistake

15 **What is the period of a wave?**

A the time for one wave to pass

B the number of waves per second

C the height of the wave

D the distance between peaks

Understand It with Pulse | Flag a mistake

16 **A resistor has a potential difference of 6 V across it and a resistance of 6 ohms. What is the current?**

- A 36 A
- B 1 A
- C 2 A
- D 0.5 A

Understand It with Pulse | Flag a mistake

17 **An object travels 400 m in 10 seconds. What is its speed?**

- A 4000 m/s
- B 80 m/s
- C 20 m/s
- D 40 m/s

Understand It with Pulse | Flag a mistake

18 **Which type of radiation is used to cook food?**

A gamma rays

B microwaves

C ultraviolet

D X-rays

Understand It with Pulse | Flag a mistake

19 **What force is needed to accelerate a 4 kg object at 3 m/s squared?**

A 6 N

B 12 N

C 17 N

D 24 N

Understand It with Pulse | Flag a mistake

20 **What is the unit of current?**

A the ohm

B the amp

C the watt

D the volt

Understand It with Pulse | Flag a mistake

21 **What is Newton's Second Law?**

A an object stays still unless a force acts

B every action has an equal reaction

C energy is conserved

D force equals mass times acceleration

Understand It with Pulse | Flag a mistake

22 **What happens to the total resistance when resistors are added in parallel?**

A it increases

B it decreases

C it becomes zero

D it stays the same

Understand It with Pulse | Flag a mistake

23 **A resistor has a potential difference of 12 V across it and a resistance of 3 ohms. What is the current?**

A 4 A

B 2 A

C 36 A

D 8 A

Understand It with Pulse | Flag a mistake

24 **Which of these travels as a transverse wave?**

A a seismic P wave

B a water wave in a pond

C sound

D light

Understand It with Pulse | Flag a mistake

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

A 5000 m/s

B 4 m/s

C 8 m/s

D 16 m/s

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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