ENGLAND GCSE PHYSICS EDEXCEL HIGHER · UNIT 4 · 25 QUESTIONS

Waves — 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 guitar string is tightened. What happens to the pitch?**

- A it disappears
- B it falls
- C it rises
- D it stays the same

Understand It with Pulse | Flag a mistake

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

- A increasing speed
- B zero speed
- C decreasing speed
- D steady speed

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

- A the hour
- B the day
- C the second
- D the minute

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

6 **A passenger aeroplane flies at a steady speed and height. What is the resultant force on the aeroplane?**

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

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7 **What is the unit of frequency?**

A the second

B the joule

C the hertz

D the metre

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8 **A wave has a frequency of 20 Hz and a wavelength of 2 m. What is the wave speed?**

A 20 m/s

B 80 m/s

C 45 m/s

D 40 m/s

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9 **What is the speed of sound in air?**

A 300000000 m/s

B 1000 m/s

C 340 m/s

D 150 m/s

Understand It with Pulse | Flag a mistake

10 **How is ultrasound used in medicine?**

A to heat the body

B to cut skin

C to see inside the body

D to make X-ray pictures of bones

Understand It with Pulse | Flag a mistake

11 **A wave travels at 30 m/s with a wavelength of 5 m. What is its frequency?**

- A 6 Hz
- B 3 Hz
- C 150 Hz
- D 12 Hz

Understand It with Pulse | Flag a mistake

12 **A wave has a frequency of 5 Hz and a wavelength of 10 m. What is its speed?**

- A 25 m/s
- B 15 m/s
- C 50 m/s
- D 100 m/s

Understand It with Pulse | Flag a mistake

13 **Which type of wave is a sound wave?**

A longitudinal

B electromagnetic

C transverse

D standing

Understand It with Pulse | Flag a mistake

14 **What does sound need to travel through?**

A a vacuum

B a medium

C water only

D air only

Understand It with Pulse | Flag a mistake

15 **What does the amplitude of a sound wave decide?**

A its speed in air

B its pitch

C its loudness

D its wavelength

Understand It with Pulse | Flag a mistake

16 **A wave travels at 20 m/s with a wavelength of 10 m. What is its frequency?**

A 2 Hz

B 1 Hz

C 200 Hz

D 4 Hz

Understand It with Pulse | Flag a mistake

17 **A wave has a frequency of 2 Hz and a wavelength of 10 m. What is its speed?**

- A 40 m/s
- B 10 m/s
- C 20 m/s
- D 12 m/s

Understand It with Pulse | Flag a mistake

18 **A wave has a frequency of 10 Hz and a wavelength of 3 m. What is the wave speed?**

- A 15 m/s
- B 60 m/s
- C 30 m/s
- D 35 m/s

Understand It with Pulse | Flag a mistake

19 **Why can sound not travel through a vacuum?**

A it needs particles

B it is too slow

C it is blocked by glass

D it needs light

Understand It with Pulse | Flag a mistake

20 **A wave travels at 40 m/s with a wavelength of 5 m. What is its frequency?**

A 16 Hz

B 200 Hz

C 8 Hz

D 4 Hz

Understand It with Pulse | Flag a mistake

21 **A wave has a frequency of 2 Hz and a wavelength of 3 m. What is its speed?**

- A 12 m/s
- B 6 m/s
- C 3 m/s
- D 5 m/s

Understand It with Pulse | Flag a mistake

22 **A wave has a frequency of 4 Hz and a wavelength of 4 m. What is the wave speed?**

- A 32 m/s
- B 21 m/s
- C 16 m/s
- D 8 m/s

Understand It with Pulse | Flag a mistake

23 **What are ultrasound waves?**

- A sound above human hearing
- B radio waves
- C light waves
- D sound waves below human hearing

Understand It with Pulse | Flag a mistake

24 **A wave travels at 30 m/s with a wavelength of 2 m. What is its frequency?**

- A 30 Hz
- B 7.5 Hz
- C 60 Hz
- D 15 Hz

Understand It with Pulse | Flag a mistake

25

A wave has a frequency of 10 Hz and a wavelength of 2 m. What is its speed?

A 20 m/s

B 10 m/s

C 40 m/s

D 12 m/s

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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