ENGLAND GCSE PHYSICS AQA HIGHER · UNIT 6 · 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 wristwatch measures time. What is the unit of time?**

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

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2 **A guitar string vibrates to make a sound. What type of wave is the sound wave?**

- A transverse
- B standing
- C electromagnetic
- D longitudinal

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

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

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

- A friction only, gripping the seat
- B centripetal force
- C gravity only, pulling them down
- D air resistance pushing them back

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

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

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6 **A set square measures angles. What is a right angle?**

- A 360 degrees
- B 90 degrees
- C 180 degrees
- D 45 degrees

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7 **What do all electromagnetic waves travel at in a vacuum?**

A zero speed

B the speed of sound

C different speeds

D the speed of light

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8 **A wave travels at 30 m/s with a wavelength of 10 m. What is its frequency?**

A 6 Hz

B 3 Hz

C 1.5 Hz

D 300 Hz

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

A its wavelength

B its loudness

C its pitch

D its speed in air

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10 **What does a concave lens do to parallel rays of light?**

A it brings them together

B it reflects them back

C it spreads them apart

D it stops them

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11 **What does a concave lens do to light?**

A it reflects light

B it spreads light out

C it brings light to a focus

D it absorbs light

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

A 3 m/s

B 12 m/s

C 11 m/s

D 6 m/s

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

A 150 m/s

B 300000000 m/s

C 1000 m/s

D 340 m/s

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14 **What is a perfect black body?**

A an object that is always cold

B it absorbs all radiation

C an object that reflects all radiation

D an object that makes no radiation

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15 **What is total internal reflection used for?**

A in optical fibres

B heating water

C making sound louder

D making mirrors

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

A 100 m/s

B 50 m/s

C 25 m/s

D 15 m/s

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

- A 4 Hz
- B 200 Hz
- C 8 Hz
- D 16 Hz

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18 **What are ultrasound waves?**

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

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19 **What happens to the focal length if a convex lens is made more curved?**

A it becomes zero

B it gets shorter

C it stays the same

D it gets longer

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20 **Which type of radiation is used to take images of bones?**

A infrared

B microwaves

C ultraviolet

D X-rays

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

- A 50 m/s
- B 55 m/s
- C 25 m/s
- D 100 m/s

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22 **What is the wavelength of a wave?**

- A the height of the wave
- B the number of waves per second
- C the time for one wave
- D the distance between two peaks

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23 **A hotter object gives out more radiation. What else changes as it gets hotter?**

- **A** the colour stays the same
- **B** the peak wavelength gets longer
- **C** the radiation stops
- **D** the peak gets shorter

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24 **What happens when light passes from air into glass?**

- **A** it reflects back only
- **B** it slows and bends
- **C** it speeds up and bends
- **D** it stops

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25

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

A 25 m/s

B 50 m/s

C 15 m/s

D 100 m/s

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Flag a mistake

ANSWER KEY

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

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