ENGLAND GCSE PHYSICS OCR GATEWAY HIGHER · UNIT 5 · 10 QUESTIONS

Waves in Matter — 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 **Glass marbles are used to model atoms. What is a limitation of the model?**

- A marbles are much bigger than atoms
- B marbles cannot be counted accurately at all
- C marbles are too small to see properly
- D marbles are the wrong colour for atoms

Understand It with Pulse | Flag a mistake

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

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

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3 **A guitar string is tightened. What happens to the pitch?**

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

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4 **Light travels from glass into air at a steep angle and does not leave the glass. What is this called?**

- A total internal reflection
- B diffraction
- C absorption
- D refraction, bending into the air

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5 **A wave travels at 40 m/s with a wavelength of 2 m. What is its frequency?**

- A 80 Hz
- B 40 Hz
- C 10 Hz
- D 20 Hz

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

- A 200 m/s
- B 100 m/s
- C 50 m/s
- D 105 m/s

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

A to make X-ray pictures of bones

B to cut skin

C to heat the body

D to see inside the body

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

A 5 m/s

B 3 m/s

C 6 m/s

D 12 m/s

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

A the hertz

B the metre

C the joule

D the second

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10 **A Ferris wheel is at the top. What is the person's height like?**

A at zero

B at its smallest

C at its greatest

D unchanged

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. D
3. B
4. A
5. D
6. B
7. D
8. C
9. A
10. C

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