ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY HIGHER · UNIT 13 · 10 QUESTIONS

Radiation and 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 so it can be fixed.

1 **A thermometer is placed in hot water. What happens to the liquid inside the thermometer?**

- A it freezes
- B it contracts
- C it evaporates
- D it expands

Understand It with Pulse | Flag a mistake

2 **Glass marbles are shaken in a tray. What does this model?**

- A particles freezing into place
- B particles disappearing completely
- C particles bonding together
- D particles gaining energy

Understand It with Pulse | Flag a mistake

3 **Which electromagnetic wave has the longest wavelength?**

A X-rays

B gamma rays, which are the shortest

C ultraviolet

D radio waves

Understand It with Pulse | Flag a mistake

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

A the distance between peaks

B the number of waves per second

C the time for one wave to pass

D the height of the wave

Understand It with Pulse | Flag a mistake

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

- A 10 m/s
- B 12.5 m/s
- C 50 m/s
- D 25 m/s

Understand It with Pulse | Flag a mistake

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

- A 4 Hz
- B 2 Hz
- C 1 Hz
- D 200 Hz

Understand It with Pulse | Flag a mistake

7 **A wave has a frequency of 5 Hz and a wavelength of 4 m. What is the wave speed?**

- A 25 m/s
- B 40 m/s
- C 20 m/s
- D 10 m/s

Understand It with Pulse | Flag a mistake

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

- A watts
- B joules
- C kilograms
- D newtons, the unit of force

Understand It with Pulse | Flag a mistake

9 **Carbon dioxide levels rose from 280 ppm to 400 ppm. What is the increase?**

A 160 ppm

B 140 ppm

C 120 ppm

D 100 ppm

Understand It with Pulse | Flag a mistake

10 **What is a beta particle?**

A a neutron

B a proton

C a helium nucleus

D a fast electron

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.