ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 17 · 10 QUESTIONS

Radioactive Materials — 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 **Glass marbles are shaken in a tray. What does this model?**

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

Understand It with Pulse | Flag a mistake

2 **A swimming pool is filled with water. What is the density of water?**

- A about 1 kilogram per cubic metre
- B about 100 kilograms per cubic metre, roughly
- C about 1000 kilograms per cubic metre
- D about 10 kilograms per cubic metre

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

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

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4 **An atom has a mass number of 16 and an atomic number of 8. How many neutrons does it have?**

- A 9
- B 7
- C 8
- D 10

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5 **A sample has an activity of 1600 counts per minute. After 2 half-lives, what is its activity?**

- A 200
- B 400
- C 800
- D 1600

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6 **Why is iodine-131 used to treat the thyroid gland?**

- A it is absorbed by the bones
- B it makes the thyroid grow
- C it stops all radiation
- D it goes to the thyroid

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7 **What does background radiation come from?**

A rocks, air, space, medicine

B mobile phones only

C the Sun only

D power stations only, nowhere else

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8 **How can radiation be stopped?**

A by washing the source

B by heating the source

C by cooling the source

D by shielding

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

A it evaporates

B it contracts

C it freezes

D it expands

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10 **A hot air balloon is filled with hot air. Why does it rise?**

A hot air is colder

B hot air has no mass

C hot air is less dense

D hot air is heavier than cold air

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ANSWER KEY

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

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