ENGLAND GCSE COMBINED SCIENCE EDEXCEL FOUNDATION · UNIT 22 · 10 QUESTIONS

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

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2 **Hardcover books are stacked on a table. What force pulls them down?**

- A tension
- B gravity
- C air resistance
- D friction

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3 **A sample has a half-life of 5 days. What percentage of the sample is left after 20 days?**

- A 3%
- B 6%
- C 94%
- D 12%

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4 **What is nuclear fusion?**

- A adding electrons
- B removing electrons
- C splitting a large nucleus
- D joining small nuclei

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5 **A sample has an activity of 800 counts per minute. After 3 half-lives, what is its activity?**

- A 100
- B 200
- C 400
- D 50

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6 **What does the moderator do in a nuclear reactor?**

- A it makes the fuel
- B it slows neutrons down
- C it absorbs all the neutrons
- D it speeds neutrons up

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

A it evaporates

B it expands

C it contracts

D it freezes

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8 **A calculator uses a battery. What energy is stored in the battery?**

A kinetic energy of motion

B chemical energy

C thermal energy from heat

D light energy from the Sun

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9 **A sample has a half-life of 5 days. After 15 days, what fraction remains?**

- A 1/8
- B 1/4
- C 1/2
- D 1/16

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10 **What is the difference between irradiation and contamination?**

- A irradiation means the source is inside the body
- B contamination only affects plants
- C there is no difference
- D the source is on the body

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ANSWER KEY

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

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