ENGLAND GCSE COMBINED SCIENCE EDEXCEL HIGHER · 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 **A calculator is switched on. What does the battery transfer energy to?**

- A the screen only
- B the circuits
- C the buttons only
- D the case

Understand It with Pulse | Flag a mistake

2 **Glass marbles are used to model atoms. What is a limitation of the model?**

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

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3 **A radioactive sample has an activity of 800 Bq. What is its activity after 2 half-lives?**

- A 400 Bq
- B 100 Bq
- C 200 Bq
- D 800 Bq

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4 **Silver coins conduct electricity well. Why?**

- A they have free electrons
- B they are cold
- C they are shiny and reflective
- D they are heavy

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5 **Which radiation is used in smoke alarms?**

- A alpha
- B beta
- C gamma
- D neutron

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6 **A thermometer shows a patient's temperature is 39 degrees Celsius. Is this above or below normal body temperature?**

- A exactly normal
- B impossible to tell
- C below normal
- D above normal

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

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

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8 **Hardcover books are dropped. What happens to their speed as they fall?**

- A it decreases
- B it becomes zero
- C it stays the same
- D it increases

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9 **What is nuclear fusion?**

A two light nuclei join together

B a heavy nucleus splitting in two

C an atom losing electrons

D a nucleus breaking into protons

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10 **Why are gamma rays used to sterilise medical equipment?**

A they make the equipment stronger

B they kill bacteria

C they heat the equipment up

D they make the equipment radioactive

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ANSWER KEY

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

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