ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY HIGHER · 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 **A hot air balloon cools down. What happens?**

- A it bursts
- B it sinks
- C it stays still
- D it rises faster

Understand It with Pulse | Flag a mistake

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

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

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

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

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4 **A sample has a half-life of 5 days. What percentage of the sample is left after 10 days?**

- A 12%
- B 75%
- C 50%
- D 25%

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5 **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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6 **An atom has a mass number of 12 and an atomic number of 6. How many neutrons does it have?**

- A 8
- B 5
- C 6
- D 7

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7 **A cup of coffee is left for an hour. What happens to its temperature?**

A it falls to room temperature

B it stays the same all day

C it falls to zero degrees

D it rises above room temperature

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

A about 10 kilograms per cubic metre

B about 1 kilogram per cubic metre

C about 100 kilograms per cubic metre, roughly

D about 1000 kilograms per cubic metre

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

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

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10 **How can the risk from a radioactive source be reduced?**

- A by warming it up
- B keep distance, limit time
- C by looking at it closely, every day
- D by holding it for longer

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ANSWER KEY

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

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