ENGLAND GCSE COMBINED SCIENCE EDEXCEL FOUNDATION · UNIT 28 · 10 QUESTIONS

Particle Model — 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 **An ice cream cone melts. What is the melting point of the ice cream?**

- A around 0 degrees Celsius
- B around 100 degrees Celsius
- C around minus 20 degrees Celsius
- D around 37 degrees Celsius

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2 **A swimming pool holds water. Why does a person float in the pool?**

- A they are made of air
- B their density is close to water
- C the water pushes them down
- D they are heavier than water and sink

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3 **A cup of coffee cools down. Energy is transferred to the surroundings. What type of change is this?**

- A a neutralisation
- B a reversible reaction
- C an energy transfer
- D a chemical change

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4 **Why does a gas exert pressure on the walls of its container?**

- A particles hit the walls
- B the walls push the gas
- C gravity pulls the gas down
- D particles stick to the walls

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5 **Which change of state releases energy to the surroundings?**

A subliming, which takes energy in

B boiling, which takes energy in

C melting, which takes energy in

D condensing

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

A it evaporates

B it freezes

C it expands

D it contracts

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7 **A 10 kg mass of ice melts. The specific latent heat of fusion of ice is 200 J/kg. How much energy is needed?**

- A 4000 J
- B 2100 J
- C 2000 J
- D 1000 J

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8 **A block has a mass of 500 g and a volume of 200 cubic centimetres. What is its density?**

- A 5.5 g/cm³
- B 2.5 g/cm³
- C 5 g/cm³
- D 1.25 g/cm³

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9 **Glass marbles in a tray are used as a model for particles in a solid. What do the marbles show?**

A particles move freely through space

B particles vibrate in fixed positions

C particles are far apart from each other

D particles flow past each other easily

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10 **How much energy is needed to heat 1 kg of a substance with a specific heat capacity of 900 J per kg per degree Celsius by 20 degrees Celsius?**

A 18000 J

B 9000 J

C 900 J

D 36000 J

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ANSWER KEY

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

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