ENGLAND GCSE PHYSICS AQA HIGHER · UNIT 1 · 10 QUESTIONS

Energy — 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 to let Brett know so he can fix it.

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

- A it rises above room temperature
- B it falls to zero degrees
- C it stays the same all day
- D it falls to room temperature

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2 **A red race car speeds up on a straight track. What is the resultant force doing?**

- A causing a turn
- B causing acceleration
- C causing deceleration
- D doing nothing

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3 **A spring has a spring constant of 40 N/m. It is stretched by 2 cm. What is the elastic potential energy stored?**

- A 0.004 J
- B 0.008 J
- C 0.016 J
- D 0.032 J

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4 **A 4 kg object moves at 3 m/s. What is its kinetic energy?**

- A 18 J
- B 28 J
- C 9 J
- D 36 J

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5 **In a Sankey display, what does a wider arrow show?**

- A energy transferred in a straight line
- B more energy transferred
- C energy transferred faster
- D energy transferred for longer

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6 **A machine uses 1000 J of energy and gives out 200 J of useful energy. What is its efficiency?**

- A 20%
- B 10%
- C 30%
- D 40%

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7 **Why is hydroelectric power reliable?**

- A water can be stored
- B it needs no rain at all
- C it makes its own rain
- D it works without any water

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8 **A basketball is thrown up. What happens to its speed as it rises?**

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

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9 **A device transfers 500 J of energy in 50 seconds. What is its power?**

- A 25000 W
- B 20 W
- C 10 W
- D 5 W

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10 **What is the unit of power?**

- A the volt, which is potential difference
- B the newton, which is force
- C the joule, which is energy
- D the watt

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ANSWER KEY

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

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