ENGLAND GCSE PHYSICS OCR GATEWAY FOUNDATION · UNIT 7 · 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 rocket is pushed up by hot gases. What is the upward force called?**

- A thrust
- B lift
- C weight
- D drag

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2 **A red race car has a large rear wing. What does the wing do?**

- A reduces drag to zero
- B increases speed
- C increases grip
- D reduces grip

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3 **A force of 20 N pushes a box 2 m along the ground. How much work is done?**

- A 40 J
- B 80 J
- C 70 J
- D 20 J

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4 **A 2 kg object is lifted 10 m. Use g = 10 N/kg. What is the gain in gravitational potential energy?**

- A 400 J
- B 20 J
- C 100 J
- D 200 J

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5 **A spring has a spring constant of 50 N/m. It is stretched by 4 cm. What is the elastic potential energy stored?**

- A 0.04 J
- B 0.02 J
- C 0.16 J
- D 0.08 J

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6 **A machine uses 120 J of energy and gives out 60 J of useful energy. What is its efficiency?**

- A 50%
- B 100%
- C 60%
- D 25%

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

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

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8 **Which of these is a renewable energy resource?**

- A oil
- B natural gas
- C wind
- D coal

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

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

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10 **Two motors do the same work. One takes half the time of the other. How does its power compare?**

- A half as much
- B four times as much
- C twice as much
- D the same

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ANSWER KEY

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

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