ENGLAND GCSE PHYSICS EDEXCEL HIGHER · UNIT 3 · 10 QUESTIONS

Conservation of 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 basketball is thrown up. What happens to its speed as it rises?**

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

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2 **A cheese pizza provides energy. Which nutrient provides most energy?**

- A fat
- B vitamins
- C fibre
- D protein

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3 **A 2 kg object moves at 3 m/s. What is its kinetic energy?**

- A 4.5 J
- B 19 J
- C 9 J
- D 18 J

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4 **A bicycle rolls down a hill. What happens to its gravitational potential energy?**

- A it decreases as kinetic energy increases
- B it increases
- C it stays the same
- D it becomes chemical energy stored in the bike

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5 **When a ball falls, what happens to its energy?**

- A energy disappears
- B gravitational potential energy becomes kinetic energy
- C kinetic energy becomes gravitational potential energy
- D energy is made

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

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

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

A causing a turn

B causing deceleration

C causing acceleration

D doing nothing

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8 **A 10 kg block has a specific heat capacity of 200 J/kg degrees Celsius. Its temperature rises by 20 degrees Celsius. How much energy is needed?**

A 40000 J

B 80000 J

C 40500 J

D 20000 J

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9 **A device transfers 1000 J of energy in 20 seconds. What is its power?**

- A 50 W
- B 100 W
- C 25 W
- D 20000 W

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

- A 16 J
- B 320 J
- C 160 J
- D 80 J

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ANSWER KEY

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

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