ENGLAND GCSE PHYSICS EDEXCEL FOUNDATION · 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 cup of coffee cools down. Energy is transferred to the surroundings. What type of change is this?**

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

Understand It with Pulse | Flag a mistake

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

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

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3 **A red race car speeds up. What happens to its kinetic energy?**

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

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4 **A machine uses 2000 J of energy and gives out 400 J of useful energy. What is its efficiency?**

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

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5 **A 4 kg block has a specific heat capacity of 100 J/kg degrees Celsius. Its temperature rises by 10 degrees Celsius. How much energy is needed?**

- A 2000 J
- B 4000 J
- C 4500 J
- D 8000 J

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6 **What is kinetic energy?**

- A energy of light
- B energy of position
- C energy of heat
- D energy of movement

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7 **A motor lifts a load and does 500 J of work in 10 seconds. What is the power?**

- A 5 W
- B 50 W
- C 5000 W
- D 500 W

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8 **A 5 kg object is lifted 3 m. Use g = 10 N/kg. What is the gain in gravitational potential energy?**

- A 300 J
- B 150 J
- C 15 J
- D 75 J

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9 **A 10 kg object moves at 10 m/s. What is its kinetic energy?**

- A 1000 J
- B 500 J
- C 250 J
- D 510 J

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10 **A bicycle has brakes. What do the brakes do to kinetic energy?**

- A destroy it
- B transfer it to heat
- C store it
- D turn it into light and sound

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ANSWER KEY

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

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