ENGLAND GCSE PHYSICS OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 2 · 10 QUESTIONS

Sustainable 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 hot. How is energy transferred to the air?**

- A by conduction and convection
- B by condensation on the cold cup
- C by evaporation only, from the top
- D by radiation only, from the surface

Understand It with Pulse | Flag a mistake

2 **A sunflower turns its head to follow the Sun. What is this a response to?**

- A light
- B touch
- C gravity
- D water

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

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

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4 **Why is it hard to rely only on renewable energy?**

- A the supply is unsteady
- B it costs nothing to build
- C it makes too much waste
- D it works the same everywhere

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5 **A machine uses 800 J of energy and gives out 400 J of useful energy. What is its efficiency?**

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

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

- A 42 J
- B 16 J
- C 64 J
- D 32 J

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7 **A kite flies in the wind. Which force holds the kite up?**

A drag

B lift

C weight

D thrust

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8 **Which energy resource is best for a windy island?**

A coal

B geothermal

C solar

D wind

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

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

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10 **A spring has a spring constant of 20 N/m. It is stretched by 4 cm. What is the elastic potential energy stored?**

- A 0.008 J
- B 0.064 J
- C 0.032 J
- D 0.016 J

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ANSWER KEY

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

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