ENGLAND GCSE DESIGN AND TECHNOLOGY EDEXCEL · UNIT 1 · 10 QUESTIONS

New Technologies, Energy and Modern Materials — 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 so it can be fixed.

1

An electric kettle is powered by mains electricity. What is mains electricity?

A Electricity made only from solar panels

B Electricity supplied through the national grid to homes and schools

C Electricity made by a hand cranked generator, which can happen in some cases

D Electricity stored in a rechargeable battery

Understand It with Pulse

Flag a mistake

2 **A desk lamp uses a photochromic shade. What does the shade do?**

A It changes colour when the light level changes

B It changes colour when its temperature changes

C It changes shape when it is heated

D It gives out electricity when it is squeezed

Understand It with Pulse | Flag a mistake

3 **Why do companies use crowdfunding to launch a new product?**

A The product is given away free to every customer

B Money is raised from many people before the product is made

C The company avoids testing the product at all

D The product is made only after it has been sold in shops, in some situations

Understand It with Pulse | Flag a mistake

4 **What voltage is UK mains electricity?**

- A 12 V
- B 230 V
- C 110 V
- D 2300 V

Understand It with Pulse | Flag a mistake

5 **Which of these is a renewable energy source?**

- A Coal
- B Wind
- C Oil
- D Natural gas

Understand It with Pulse | Flag a mistake

6 **What does a piezoelectric material do?**

- A It returns to its shape when it is heated
- B It changes colour when its temperature changes, in some situations
- C It gives out light when it is in the dark
- D It produces a voltage when it is squeezed or bent

Understand It with Pulse | Flag a mistake

7 **Why might a new technology raise ethical questions?**

- A Ethical questions only apply to old technology
- B It can affect jobs, privacy or the environment in ways that need judging
- C New technology never affects people or the environment, in some situations
- D Designers never need to think about ethics

Understand It with Pulse | Flag a mistake

8

What is a microfibre?

A. A thick wool fibre used for carpets, which can happen in some cases

B. A metal fibre used for cables

C. A very fine synthetic fibre used for cleaning cloths and clothing

D. A natural fibre taken from a plant

Understand It with Pulse | Flag a mistake

9

How has computer aided design changed product design?

A. Designs can only be drawn by hand on paper now

B. Designs are always made by hand in a workshop

C. Designs can be changed and tested on screen before anything is made

D. Designs no longer need to be tested before they are made, in some situations

Understand It with Pulse | Flag a mistake

10 **Which of these is a rechargeable battery type?**

A Lithium ion

B A zinc carbon cell that cannot be recharged

C A single use alkaline cell

D A button cell that cannot be recharged

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.