ENGLAND GCSE DESIGN AND TECHNOLOGY OCR · UNIT 4 · 10 QUESTIONS

Design Thinking, Technical Understanding and Manufacturing — 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

A cordless drill has gears inside that reduce the speed of the motor. Why reduce the speed?

A To increase the turning force for drilling

B To stop the drill from ever wearing out, in some situations

C To make the drill use no power

D To make the drill lighter to hold

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2 **An electric kettle has a thermostat that switches it off. What does the thermostat sense?**

- A The temperature of the water
- B The colour of the water
- C The size of the kitchen
- D The weight of the kettle, in some situations

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3 **What is annotation on a sketch?**

- A Notes that explain materials, sizes and functions
- B A copy of the sketch made by a machine
- C Colour added to make a sketch look finished, in some situations
- D A frame drawn around the sketch

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4 **Which of these is a class 3 lever?**

- A A pair of tweezers
- B A seesaw
- C A wheelbarrow, in some situations
- D A nutcracker

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5 **What is a tolerance?**

- A The amount a size may vary and still be accepted
- B The exact size a part must be
- C The time a part takes to make, in some situations
- D The weight a part may carry

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6 **What is torsion?**

- A A twisting force on a material
- B A pushing force that squashes a material
- C A pulling force that stretches a material
- D A force that cuts a material

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7 **What is a mortise and tenon joint?**

- A A joint made by welding two metals
- B A strong wood joint where a peg fits into a hole
- C A joint held only by glue on the surface, in some situations
- D A joint made with a screw and a plug

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8

Why do designers sketch ideas by hand?

A Sketches show the exact cost of a product, in some situations

B Ideas can be recorded and developed quickly

C Sketches replace the need for any testing

D Sketches are always drawn to exact scale

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9

Which of these is a class 1 lever?

A A seesaw

B A wheelbarrow

C A fishing rod

D A pair of tweezers

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10 **What do gears do?**

A They turn heat into light

B They hold parts together

C They pass on motion and change speed or direction

D They store electrical energy, which can happen in some cases

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ANSWER KEY

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

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