ENGLAND GCSE PHYSICS AQA FOUNDATION · UNIT 2 · 25 QUESTIONS

Electricity — 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 tennis ball is hit across a court. Which force slows the ball down in the air?**

- A the hit
- B air resistance
- C friction with the ground
- D gravity

Understand It with Pulse | Flag a mistake

2 **Hardcover books are dropped. What happens to their speed as they fall?**

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

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3 **A calculator runs on a small current. What is current measured in?**

- A amperes
- B volts, the unit of voltage
- C watts, the unit of power
- D ohms, the unit of resistance

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4 **A guitar amplifier is connected to the mains. What is the voltage of the mains supply in the UK?**

- A 50 V
- B 110 V
- C 12 V
- D 230 V

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5 **A wristwatch is used to time a race. What is speed calculated from?**

- A distance and time
- B mass and time together
- C distance only, not time
- D time only, not distance

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6 **A basketball is dropped. What energy store increases as it falls?**

- A kinetic
- B thermal
- C elastic
- D gravitational potential

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7 **What is the frequency of UK mains electricity?**

A 100 Hz

B 230 Hz

C 50 Hz

D 60 Hz

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8 **In which direction do electric field lines go around a positive charge?**

A away from the charge

B towards the charge

C in circles around it

D they have no direction

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9 **A current of 4 A flows for 30 seconds. How much charge flows?**

- A 60 C
- B 120 C
- C 130 C
- D 240 C

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10 **A current of 4 A flows for 60 seconds. How much charge flows?**

- A 64 C
- B 240 C
- C 120 C
- D 480 C

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11 **A resistor has a potential difference of 24 V across it and a resistance of 3 ohms. What is the current?**

- A 16 A
- B 4 A
- C 72 A
- D 8 A

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12 **A lamp runs at 24 V with a current of 3 A. What is its power?**

- A 82 W
- B 36 W
- C 144 W
- D 72 W

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13 **Why does the National Grid use step-up transformers?**

A to make more electricity

B to raise the current and cut the voltage

C to change direct current to sound

D to raise the voltage and cut the current

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14 **Which of these can become charged by friction?**

A a metal wire, which is a conductor

B an insulator

C a magnet

D a battery

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15 **What does a thermistor do when its temperature rises?**

- A its resistance falls
- B it stops conducting at once
- C its resistance stays the same
- D its resistance rises

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16 **A component has a potential difference of 12 V across it and a current of 2 A through it. What is its resistance?**

- A 12 ohms
- B 3 ohms
- C 6 ohms
- D 24 ohms

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17 **A device works at 230 V with a current of 3 A. What is its power?**

- A 345 W
- B 700 W
- C 1380 W
- D 690 W

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18 **Where is an electric field strongest?**

- A close to the charge
- B in the middle of nowhere
- C where there is no charge
- D far from the charge

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19 **A current of 5 A flows for 60 seconds. How much charge flows?**

- A 300 C
- B 150 C
- C 600 C
- D 310 C

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20 **A current of 2 A flows for 10 seconds. How much charge flows?**

- A 20 C
- B 10 C
- C 12 C
- D 40 C

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21 **What is the unit of resistance?**

A the volt

B the ohm

C the watt

D the amp

Understand It with Pulse | Flag a mistake

22 **A resistor has a potential difference of 12 V across it and a resistance of 2 ohms. What is the current?**

A 3 A

B 6 A

C 24 A

D 12 A

Understand It with Pulse | Flag a mistake

23 **A lamp runs at 12 V with a current of 5 A. What is its power?**

- A 70 W
- B 120 W
- C 30 W
- D 60 W

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24 **Why are power cables hung high above the ground?**

- A to stop birds landing on them
- B the voltage is dangerous
- C to make them look tidy
- D to keep them cool

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25 **Why can static electricity be dangerous when filling a fuel tanker?**

A the fuel becomes magnetic

B the fuel freezes

C the tanker becomes too heavy

D a spark could ignite it

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	B	**10.**	B	**19.**	A
2.	A	**11.**	D	**20.**	A
3.	A	**12.**	D	**21.**	B
4.	D	**13.**	D	**22.**	B
5.	A	**14.**	B	**23.**	D
6.	A	**15.**	A	**24.**	B
7.	C	**16.**	C	**25.**	D
8.	A	**17.**	D		
9.	B	**18.**	A		

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