ENGLAND GCSE PHYSICS OCR GATEWAY FOUNDATION · UNIT 3 · 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 wristwatch is used to time a race. What is speed calculated from?**

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

Understand It with Pulse | Flag a mistake

2 **Hardcover books are stacked on a table. What force pulls them down?**

- A tension
- B gravity
- C friction
- D air resistance

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

6 **A tennis ball is served fast. What is its speed like?**

- A high
- B zero
- C low
- D negative

Understand It with Pulse | Flag a mistake

7 **A component has a potential difference of 20 V across it and a current of 5 A through it. What is its resistance?**

- A 4 ohms
- B 8 ohms
- C 2 ohms
- D 100 ohms

Understand It with Pulse | Flag a mistake

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

- A 150 C
- B 600 C
- C 300 C
- D 65 C

Understand It with Pulse | Flag a mistake

9 **A lamp runs at 24 V with a current of 4 A. What is its power?**

- A 96 W
- B 106 W
- C 192 W
- D 48 W

Understand It with Pulse | Flag a mistake

10 **What does an ammeter measure?**

- A power
- B current
- C resistance
- D voltage

Understand It with Pulse | Flag a mistake

11 **What is the voltage of UK mains electricity?**

A 110 V

B 400 V

C 12 V

D 230 V

Understand It with Pulse | Flag a mistake

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

A 690 W

B 700 W

C 345 W

D 1380 W

Understand It with Pulse | Flag a mistake

13 **How does an antistatic mat stop a build-up of charge?**

A it makes more charge

B it heats the charge away

C charge flows away

D it insulates the worker

Understand It with Pulse | Flag a mistake

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

A where there is no charge

B close to the charge

C in the middle of nowhere

D far from the charge

Understand It with Pulse | Flag a mistake

15 **A current of 3 A flows for 10 seconds. How much charge flows?**

- **A** 15 C
- **B** 60 C
- **C** 40 C
- **D** 30 C

Understand It with Pulse | Flag a mistake

16 **A resistor has a potential difference of 6 V across it and a resistance of 2 ohms. What is the current?**

- **A** 1.5 A
- **B** 6 A
- **C** 12 A
- **D** 3 A

Understand It with Pulse | Flag a mistake

17 **For a fixed resistor at constant temperature, what is the current-voltage characteristic?**

- A a flat line at zero current
- B a curve that flattens out
- C a straight line through zero
- D a curve that rises steeply then stops

Understand It with Pulse | Flag a mistake

18 **A component has a potential difference of 12 V across it and a current of 4 A through it. What is its resistance?**

- A 48 ohms
- B 3 ohms
- C 1.5 ohms
- D 6 ohms

Understand It with Pulse | Flag a mistake

19 **A lamp runs at 6 V with a current of 4 A. What is its power?**

- A 48 W
- B 24 W
- C 34 W
- D 12 W

Understand It with Pulse | Flag a mistake

20 **What colour is the neutral wire in a plug?**

- A red
- B blue
- C brown
- D green and yellow

Understand It with Pulse | Flag a mistake

21 **A device works at 6 V with a current of 5 A. What is its power?**

- A 30 W
- B 40 W
- C 15 W
- D 60 W

Understand It with Pulse | Flag a mistake

22 **A resistor has a potential difference of 12 V across it and a resistance of 6 ohms. What is the current?**

- A 4 A
- B 72 A
- C 2 A
- D 1 A

Understand It with Pulse | Flag a mistake

23 **Why does the resistance of a filament lamp increase as the current increases?**

- **A** the filament gets colder
- **B** the filament gets longer
- **C** the filament melts away
- **D** the filament gets hotter

Understand It with Pulse | Flag a mistake

24 **A current of 5 A flows for 10 seconds. How much charge flows?**

- **A** 50 C
- **B** 25 C
- **C** 15 C
- **D** 100 C

Understand It with Pulse | Flag a mistake

25 **A lamp runs at 12 V with a current of 4 A. What is its power?**

A 58 W

B 96 W

C 24 W

D 48 W

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.