ARIZONA PHYSICS · UNIT 3 · 10 QUESTIONS

Electricity, Magnetism, and Waves — 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 **An electric force of 30 N acts on a charge of 6 C. The electric field strength is**



A 180 N/C

B 36 N/C

C 24 N/C

D 5 N/C

Understand It with Pulse | Flag a mistake

2 **A voltage of 30 V is applied across a resistor of 6 ohms. The current, in amperes, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A wave has frequency 80 Hz and wavelength 3 m. Its speed, in meters per second, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A wave has frequency 25 Hz. Its period, in seconds, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A sound wave has speed 340 m/s and frequency 170 Hz. Its wavelength, in meters, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6

A material that allows electric charge to flow easily through it is called a

A conductor

B insulator

C magnet

D resistor only

Understand It with Pulse

Flag a mistake

7 **Opposite magnetic poles placed near each other will**



A repel each other

B attract each other

C lose their magnetism

D have no effect

Understand It with Pulse | Flag a mistake

8 **How does a sound wave with a higher frequency sound compared with one with a lower frequency?**

A louder sound

B quieter sound

C higher pitched sound

D lower pitched sound

Understand It with Pulse | Flag a mistake

9 **A device operates at 5 V and draws 4 A. The electrical power, in watts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **The graph shows the displacement of a wave against position. The amplitude of the wave is**



A 0.30 m

B 0.60 m

C 1.60 m

D 3.20 m

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. D
2. 5
3. 240
4. 0.04
5. 2
6. A
7. B
8. C
9. 20
10. B

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