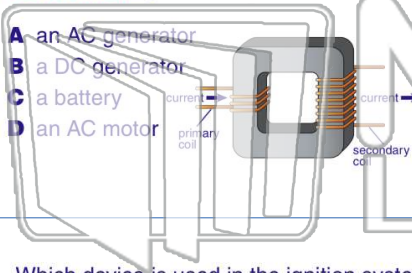




Name _____ Class _____ Date _____

1 Power would most effectively be supplied to the **primary coil** of a **step-up transformer** by

- A an AC generator
- B a DC generator
- C a battery
- D an AC motor



2 The **200-turn primary coil** of a transformer is connected to a **120-volt** line. How many **turns** must the **secondary coil** of the transformer have if it is to provide **240 volts**? [Assume 100% efficiency.]

- A 100
- B 400
- C 1,200
- D 2,400

3 Which device is used in the ignition system of a car to induce a **time-varying potential difference** from the car's battery?

4 What happens to the **frequency** and the **speed** of an electromagnetic wave as it passes from **air into glass**?

- A The frequency decreases and the speed

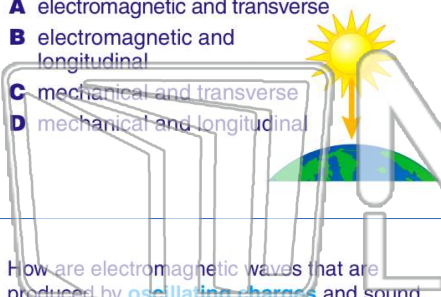


PREVIEW

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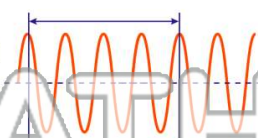
7

- A electromagnetic and transverse
- B electromagnetic and longitudinal
- C mechanical and transverse
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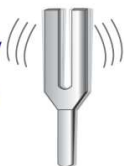
traveling in a **vacuum**?

- A speed
- B wavelength
- C period
- D frequency



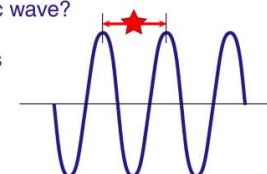
9 How are electromagnetic waves that are produced by **oscillating charges** and sound waves that are produced by **oscillating tuning forks** **similar**?

- A Both have the same frequency as their respective sources.
- B Both require a matter medium for propagation.
- C Both are longitudinal waves.
- D Both are transverse waves.



10 An electromagnetic wave traveling through a vacuum has a **wavelength** of 1.5×10^{-1} meter. What is the **period** of this electromagnetic wave?

- A 5.0×10^{-10} s
- B 1.5×10^{-1} s
- C 4.5×10^7 s
- D 2.0×10^9 s

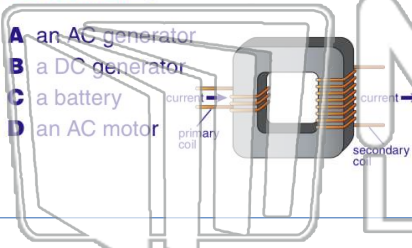




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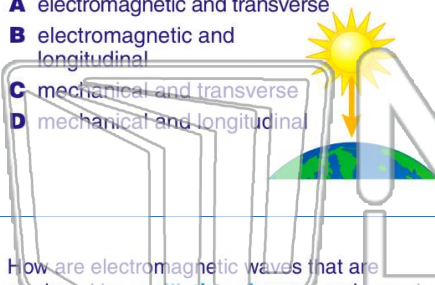


PREVIEW

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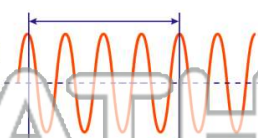
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