



Name _____ Class _____ Date _____

1 Which statement best explains how the **resistivity of glass** compares to the **resistivity of copper**?

A Glass has a lower resistivity and is a poor conductor.
 B Glass has a lower resistivity and is a good conductor.
 C Glass has a higher resistivity and is a poor conductor.
 D Glass has a higher resistivity and is a good conductor.

2 Metals that are **excellent conductors** have **valence electrons** that are

A difficult to dislodge and difficult to move through the crystal
 B difficult to dislodge but easy to move through the crystal
 C easy to dislodge but difficult to move through the crystal
 D easy to dislodge and easy to move through the crystal

3 Which energy band diagram best represents a **semiconductor**?

4 Alternating current from a wall outlet can be **converted** to **direct current** by

A an N-type semiconductor



PREVIEW

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7 Which phrase best describes the **majority charge carriers** within the semiconductor?

A electrons moving to the left
 B electrons moving to the right
 C holes moving to the left
 D holes moving to the right

series with a source of alternating current having a frequency of **60 hertz**.

How many **times per second** does a **maximum current** exist in the light bulb?

A 30 C 120
 B 60 D 240

9 Which part of an **N-P-N transistor** is **forward biased**?

A an integrated circuit
 B a parallel circuit
 C an emitter-base combination
 D a collector-base combination

10 The transistor shown in the circuit diagram below is being used as an **amplifier**.

When the emitter current (I_e) **increases**, the collector current (I_c)

A decreases
 B increases
 C remains the same



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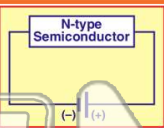
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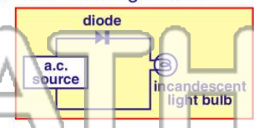


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