



Name _____ Class _____ Date _____

1

Donor materials are added to semiconductors so that the number of available electrons will

- A decrease
- B increase
- C remain the same



2

A material having **extremely low conductivity** would be classified as

- A a conductor
- B a semiconductor
- C an insulator
- D a metalloid

3

Magnetic-card door locks utilize many electronic components on one small piece of semiconductor material. This combination of components on a single

4

The **Band Model** has replaced the Electron-sea Model of conduction because the **Electron-sea Model**

5



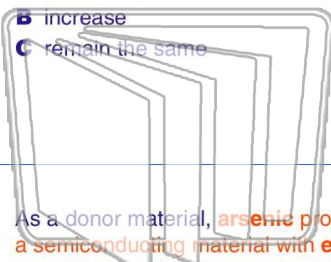
PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

7

valence band will

- A decrease
- B increase
- C remain the same

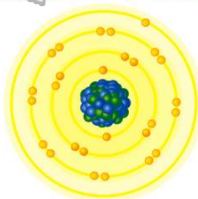


- A electron-cloud model
- B electron-sea model
- C band model
- D doping model

9

As a donor material, **arsenic** provides a semiconducting material with **extra**

- A electrons
- B holes
- C protons
- D neutrons



10

In a working transistor circuit, as the **emitter-base current is increased**, the **collector current**

- A decreases a small amount
- B decreases a large amount
- C increases a small amount
- D increases a large amount



Name _____ Class _____ Date _____

1 Donor materials are added to semiconductors so that the number of available electrons will



- A decrease
- B increase
- C remain the same

2 A material having extremely low conductivity would be classified as

- A a conductor
- B a semiconductor
- C an insulator
- D a metalloid

3 Magnetic-card door locks utilize many electronic components on one small piece of semiconductor material. This combination of components on a single

4 The Band Model has replaced the Electron-sea Model of conduction because the Electron-sea Model



5

PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

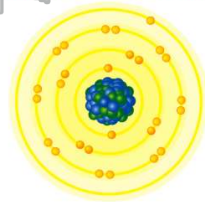
7 valence band will

- A decrease
- B increase
- C remain the same

- A electron-cloud model
- B electron-sea model
- C band model
- D doping model

9 As a donor material, arsenic provides a semiconducting material with extra

- A electrons
- B holes
- C protons
- D neutrons



10 In a working transistor circuit, as the emitter-base current is increased, the collector current

- A decreases a small amount
- B decreases a large amount
- C increases a small amount
- D increases a large amount