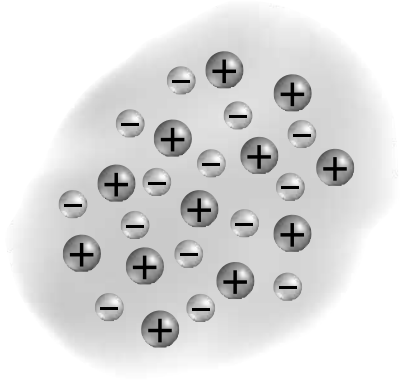


CHAPTER 8 STUDY GUIDE FOR CONTENT MASTERY

Section 8.4 Metallic Bonds and Properties of Metals

In your textbook, read about metallic bonds.

Use the diagram of metallic bonding to answer the following questions.



1. What is the name of the model of metallic bonding that is illustrated?

2. Why are the electrons in a metallic solid described as delocalized?

3. Which electrons from the metal make up the delocalized electrons?

4. Are the metal atoms that are shown cations or anions? How can you tell?

5. How do the metallic ions differ from the ions that exist in ionic solids?

6. Explain what holds the metal atoms together in the solid.

In your textbook, read about the properties of metals.

For each property, write *yes* if the property is characteristic of most metals, or *no* if it is not. If the property is a characteristic of metals, explain how metallic bonding accounts for the property.

7. Malleable _____

8. Brittle _____

9. Lustrous _____

10. High melting point _____

11. Low boiling point _____

12. Ductile _____

13. Poor conduction of heat _____

14. Good conduction of electricity _____