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Period Period # Date Date

Introduction to Bonding

1. What is a chemical bond?
2. Why do most atoms form chemical bonds?

Bonding Comparison Chart

	IONIC	COVALENT	METALLIC
Types of Atoms Involved			
Method of Bond Formation			
Type of Structure			
Physical State			
Melting Point			
Solubility in Water			
Electrical Conductivity			
Other Properties			
Image			

Use the Bonding Comparison Chart to summarize your answers.

1. What types of atoms typically form ionic bonds?
2. How are ionic bonds formed and what type of structure do they create?
3. What are the typical properties of ionic substances? Include the following: physical state, melting point, solubility in water, electrical conductivity, and any other properties you'd like to include.

4. **Insert an image into the chart that you feel best represents ionic bonding. Resize the image to make it small enough to fit.**

Use the Bonding Comparison Chart to summarize your answers.

1. **What types of atoms typically form covalent bonds?**
2. **How are covalent bonds formed and what type of structure do they create?**
3. **What are the typical properties of covalent substances? Include the following: physical state, melting point, solubility in water, electrical conductivity, and any other properties you'd like to include.**
4. **Insert an image into the chart that you feel best represents covalent bonding. Resize the image to make it small enough to fit.**

Use the Bonding Comparison Chart to summarize your answers.

1. **What types of atoms typically form metallic bonds?**
2. **How are metallic bonds formed and what type of structure do they create?**
3. **What are the typical properties of metallic substances? Include the following: physical state, melting point, solubility in water, electrical conductivity, and any other properties you'd like to include.**
4. **Insert an image into the chart that you feel best represents metallic bonding. Resize the image to make it small enough to fit.**