COME TOGETHER WEBQUEST

Day 1 Introduction to Bonding

Much like people, most atoms don't like to live solitary existences. They need to COME TOGETHER with other atoms to lead more stable, happier lives. This process of coming together is called chemical bonding. Through completing the following Internet Activities, you will learn the characteristics of three types of bonding - covalent, ionic, and metallic. Use the worksheet titled Come Together Worksheet (due Day 2 via email) to record your answers to the questions below. KEEP YOUR DESCRIPTIONS SHORT AND SIMPLE. If you need additional help in defining chemistry related terms, use this Chemistry Dictionary.

Introduction to Bonding

Answer the questions below using the link above:

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

Ionic Bonding

Chemical Bonding

Ionic Bonding

Use the Bonding Comparison Chart (or any graphic organizer) to summarize your answers. Answers can be found researching the links above.

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.**

Covalent Bonding

Chemical Bonding
Covalent Bonds
Molecular Structures - Physical Properties (*Note: "molecular" = "covalent"*)

Use the Bonding Comparison Chart (or any graphic organizer) to summarize your answers. Answers can be found researching the links above.

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.**

Metallic Bonding

Metallic Bonding - Bonding in Metals
Metallic Bonding

Use the Bonding Comparison Chart (or any graphic organizer) to summarize your answers. Answers can be found researching the links above.

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.**

Day 2-3 CONCLUSION

You have had the opportunity to explore the key aspects of ionic, covalent, and metallic bonding. Now, let's put your newfound knowledge to use!

1. **Use your Come Together Worksheet to complete the following quiz on Point. When you finish, submit quiz for grading. If your score is lower than 80%, you need to retake the quiz on Friday on the topics you missed.**

   Access Code: COVAPIVA5

2. **Choose one of the following products to demonstrate what you have learned.**

- **STORY -** Choose one type of bonding and write "A Day in the Life of an Atom" story describing what it's like to be an atom that forms your chosen bond type. The story should incorporate at least 5 properties from your Bonding Comparison Chart. The presentation of the story must be in the form of a prezi, animoto, or glogster.
- **COMIC STRIP -** Choose one type of bonding and write a comic strip with 5+ frames. The comic should incorporate at least 3 properties from your Bonding Comparison Chart. The presentation of the comic strip must be in the form of a prezi, animoto, or glogster.
- **Short Movie -** Each scene should incorporate at least one key property from your Bonding Comparison Chart. The presentation of the movie must be in the form of an animoto, or video.

******Only those students who have been given special permission can present projects in other forms, ie. powerpoint, poster, etc.**

****** All assignments are due on Day three and can be emailed (sharye.richardson@henry.k12.ga.us). If there are ANY questions email me at sharye.richardson@henry.k12.ga.us**