**\*\*Everywhere you see PURPLE, type over. Be sure to erase all the purple**

Ionic vs. Covalent Substances

Insert picture/diagram above that relates to the lab

Your Name

Date

**Purpose: Clearly state *what* you are trying to determine, what you did to determine it and *how* what you did helped you to determine it.**

**Data Table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Substance** | **Did it melt?** | **Did it dissolve in water?** | **Did the solution conduct electricity?** | **Classification**  **Ionic/molecular** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Questions:**

1. **What happened to the bonds between the molecules when a substance melted?**
2. **Did all compounds melt at the same temperature? Explain your answer.**
3. **Complete your data table by classifying each substance. Explain the logic you used to classify your unknown substances. (melting point, solubility, conductivity)**
4. **What are the differences in properties between ionic and molecular compounds?**
5. **The solutions of some molecular compounds are good conductors of electricity. Explain how this can be true when ions are required to conduct electricity.**

**Conclusion:**

**Restate your results. Explain why we used all three tests. Use your table with the properties of ionic and covalent compounds to justify.**