**Partner: Carrie**

**Date of Lab: 4-25-2023**

**Comparing Ionic and Molecular Compounds**

**Analysis**

**Claim-Evidence-Reasoning**

1. Use your hypothesis as a claim- 1 sentence. Copy and paste it from your data document.
2. In the second sentence, complete and write the following:

We categorized \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as ionic compounds.

1. List the evidence in the evidence box (3 reasons minimum)
2. In the reasoning box, explain what evidence the compounds had in common and conclude why you chose these as ionic compounds
3. Repeat for covalent compounds.

**Ionic Compounds**

| **Claim**  **(5 points)** | **If a compound is hard but brittle, a high melting point, conducts electricity in solution, crystalline solids then it is an ionic compound.** |
| --- | --- |
| **Evidence**  **(10 points)** | **It has high melting points, when it dissolves it conducts electricity, it has strong bonds, and it crystallizes after a while to a crystalline solid.** |
| **Reasoning**  **(5 points)** | **Ionic compounds have strong bonds,they are both involved with bonded atoms and have melting points.** |

**Covalent Compounds**

| **Claim**  **(5 points)** | **If a compound has low solubility in water and has a low melting point, then it is a covalent compound.** |
| --- | --- |
| **Evidence**  **(10 points)** | **It has low solubility in water, low melting points, between nonmetals, bonds are not as strong as the ions, and they can be amorphous solids.** |
| **Reasoning**  **(5 points)** | **Covalent compounds have strong bonds, they are both involved with bonded atoms and have melting points.** |

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