

# Electron and points essay sample



**ASSIGN  
BUSTER**

Insert completed data tables for each part of the lab. Be sure that the data tables are organized and include units when necessary. 1. Melting Point (4 points)

2. Conductivity (4 points)

Part II: Conclusion

Answer the following questions in your own words, using complete sentences. 1. Based on your observations in the lab, categorize each unidentified compound as ionic or covalent. Explain in one or two sentences why you categorized the compounds the way that you did. (5 points)

2. Explain, in your own words, the differences between ionic and covalent bonding that account for the differences in their melting points. (4 points)

3. In order to conduct an electrical current, a substance must have charged particles (ions or electrons) that are free-moving (able to move about throughout the sample). a. Why do you think ionic compounds are not able to conduct electricity as solids, even though they can as liquids and in solution? (2 points)

b. Based on your research and observations, why do you think pure (distilled) water does not conduct electricity but tap water usually does? (2 points)

question.

1. Which type of compound usually has higher melting points: ionic compounds or covalent compounds? What is the reason for this difference in melting points? (3 points) 1. Do ionic compounds conduct electricity as: (3 points)

1. Solids?

2. Liquids?

3. Aqueous solutions (when the ionic compounds are dissolved in water)? 1.

Do covalent compounds conduct electricity as: (3 points) 1. Solids?

2. Liquids?

3. Aqueous solutions (when the covalent compounds are dissolved in water)?