Topic: Ionic and Covalent Compounds

Paraphrasing and summarising

A. Paraphrase the following text keeping in mind that:
   a. The length of your text should be approximately the same length as the original.
   b. The meaning of your text should be the same as that of the original.

"Several properties distinguish ionic compounds from covalent compounds. These may be related rather simply to the crystal structure of ionic compounds, namely, a lattice composed of positive and negative ions in such a way that the attractive forces between oppositely charged ions are maximized and the repulsive forces between ions of the same charge are minimized".
Huheey, J. E.; Keiter, R. L.; Keiter, E. A. *Inorganic Chemistry: Principles of Structure and Reactivity*, (4th ed.); HarperCollins: New York, 1993, p. 92.

B. Write a simple definition of an Ionic Compounds by using appropriate information from the following excerpt.

Excerpt 1
"Sodium chloride, an ionic compound, is a white solid with a melting point of 801 °C and a boiling point of 1465 °C. Hydrogen chloride, a covalent compound, is a colorless gas with a melting point of -115 °C and a boiling point of -84.9 °C. What accounts for such large differences in properties between ionic compounds and covalent compounds?
Ionic compounds are high-melting solids because of their ionic bonds… [A] visible sample of sodium chloride consists not of NaCl molecules but of a vast three-dimensional network of ions in which each Na+ cation is attracted to six surrounding Cl– anions and each Cl– ion is attracted to six surrounding Na+ ions. For sodium chloride to melt or boil so that the ions break free of one another, every ionic attraction in the entire crystal—the lattice energy—must be overcome, a process that requires a large amount of energy".
McMurry, J. E.; Fay, R. C. *Chemistry*, (6th ed.); Prentice Hall: Upper Saddle River, New Jersey, 2011, p. 219.