

Name: _____ Date: _____ Per: _____

Ionic Bonding WebQuest

Part 1: Go to http://www.visionlearning.com/library/module_viewer.php?mid=55

Read the **Chemical Bonding** and **Ionic Bonding** sections, and answer the following questions:

1. Elements react with each other to form _____.
 2. What two elements is table salt composed of? _____ and _____.
 3. Who contributed to our knowledge of valence electrons? _____.
 4. What are the two types of bonding? _____ and _____.
 5. Briefly describe how an ionic bond forms:
-
6. Look at the picture of the **NaCl Crystal Schematic**. Explain why there is no such thing as a single molecule of salt:
-
7. Click the link [The reaction of sodium with chlorine](#) and watch through the video there. Briefly describe each of the steps involved with the reaction of sodium with chlorine.

Part 2: Watch the following clips on Ionic Bonding:

- <http://watch2video.net/ionic-bondmov-video-oRGtgkaGwKP.html>
- <http://www.youtube.com/watch?v=QqjcCvzWwww> (*ignore the covalent part*)
- http://www.mhhe.com/physsci/chemistry/animations/chang_7e_esp/bom1s2_11.swf (*you can click on the NaF ionic compound and see an animation on how it forms!*)

Part 3: Explore the link below. (*You can click on the elements and compounds in the video for extra info*)

http://content.tutorvista.com/chemistry_10/content/media/048_electro_bonding.swf

8. Describe how ionic compounds form:

Part 4: Take the quiz at the following website. Record your score here: ____ of 10.

http://www.softschools.com/quizzes/chemistry/ionic_bonding_formation/quiz893.html

Part 5: Dissociation of Salt (an ionic compound). Watch the following videos:

- <http://www.youtube.com/watch?v=EBfGcTAJF4o>
- <http://www.mhhe.com/physsci/chemistry/essentialchemistry/flash/molvie1.swf>

9. Go to <http://phet.colorado.edu/en/simulation/sugar-and-salt-solutions>

Use the simulation and explain how salt and sugar dissolve in water.