Name: _____ Class: _____ Date: _____

Chemthink: Ionic Bonding

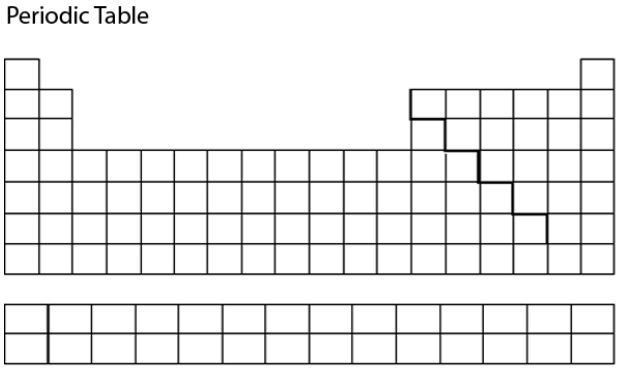
http://www.simbucket.com/simulation/chemthink-ionic-bonding/

1. What happens when you bring two negatively charged ions close together?

2. What happens when you bring a negative and positively charged ion together?

3. In order to build an ionic compound that will stick together, you need both a _____ ion and a _____ ion.

4. Shade in the atoms on the periodic table that will form positive ions. Shade in (with a different color) the atoms that will form negative ions. Make sure you leave the noble gases blank!

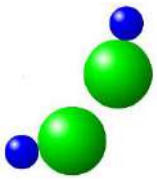


5. Before becoming ions, the sodium atom is (larger / smaller) than the chlorine atom.

6. Sodium (gains / loses) an electron. This gives it a (positive / negative) charge.

7. Chlorine (gains / loses) an electron. This gives it a (positive / negative) charge.

8. This diagram represents two newly-formed formula units of NaCl. Draw the arrangement they form together. Label the sodium ions as Na+ and the chlorine ions as Cl-.



9. What is the ratio of sodium-to-chlorine atoms in the sodium chloride crystal?

10. What is the ratio of calcium-to-fluorine atoms when calcium fluoride makes a crystal?