Name:_____

Date:_____

Using Dot Diagrams to Represent Ionic and Covalent Bonds

1. Generally speaking, how do atoms with 1, 2, or 3 valence electrons interact with other atoms? Explain._____

2. For the following problem, use your notes and the model on page 24.
    a. Use the space below to draw dot diagrams of a lithium atom and a chlorine atom.
    b. Show the interaction between the electrons using an arrow.
    c. Show the resulting compound's dot diagram.

3. What kind of a bond is this? Explain._____

4. What is an ion?_____

_____

_____

5. What are the two ions formed from this bond? _____ _____

6. Explain what holds the compound described above together._____

_____

_____

_____

7. What kind of interaction would form an ion with a 2+ charge?_____

_____

_____

_____

8. For the following problem, use your notes and the models on page 31.
    a. Use the space to draw the dot diagrams for two atoms of chlorine.
    b. Show the bond that occurs using an arrow
    c. Show the resulting compound's dot diagram.

9. Do the same thing for two hydrogen atoms and an oxygen atom.

10. What force is holding this compound together?_____

_____

_____

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