

## Chemical Bonding

Name \_\_\_\_\_ Per. \_\_\_\_

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1. Compare and contrast ionic and covalent bonding.
2. Tell the difference between compounds and molecules.
3. When an atom loses or gains electrons, it is no longer called an atom but a(n) \_\_\_\_\_.
4. When a chlorine atom forms an ion by \_\_\_\_\_ one electron, the name of the ion formed is \_\_\_\_\_.
5. What is the charge on an ion of calcium? \_\_\_\_\_ (Give the sign and the number.)
6. Look at the periodic table and find the elements that would bond with calcium in a one-to-one ratio.
7. Ionic compounds form between metals and \_\_\_\_\_.
8. What is a “pool of electrons” as in metallic bonds?
9. Describe the effects that metallic bonding has on the properties of a metal.
10. When non-metals share electrons it forms a \_\_\_\_\_ bond.
11. What is the name of for the smallest piece of a compound that forms from covalent bonds? \_\_\_\_\_
12. Draw an electron dot diagram of a water molecule. Circle the shared electrons.