

**2 Vocabulary**

chemical formula	ionic bond	molecule	metallic bonding
subscript	covalent bond	polar covalent bond	

**A. WORD PUZZLE**

Complete each word puzzle with the correct vocabulary word. When the puzzle is complete, the letters in the boxes will spell out a word.

1. The bond that allows metal atoms to share their electrons with one another.

— [ ] — — — — — — — — — —

2. A pair of shared electrons between two atoms.

— — — — — [ ] — — — — — — — — — —

3. Uses chemical symbols to represent the atoms of the elements and their ratios in a chemical compound.

— — [ ] — — — — — — — — — — — — — — — —

4. A group of atoms that are held together by covalent bonds so that they move as a group.

[ ] — — — — — — — — — —

5. A covalent bond in which the electrons are shared unequally.

— — — — — — — — — — — [ ] — — — — — — — — — —

6. The force of attraction between positive and negative ions.

— — [ ] — — — — — — — — — —

7. A number written to the right of the chemical symbol and slightly below it.

— — — — — — — — — — [ ]

**BONUS WORD**

— — — — — — — — — —

What is the bonus word? How does it relate to chemical bonds and compounds?

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**B. WHAT IS THIS?**

Write the vocabulary word on the line that best fits each description.

8. In forming this, neither atom gains or loses an electron, so no ions are formed.

\_\_\_\_\_

Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

9. Most contain the atoms of two or more types of elements; the number of atoms can range from two to many thousands.

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10. Water molecules are an example of this bond because oxygen attracts electrons far more strongly than hydrogen does.

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11. HF represents one hydrogen atom attached to one fluorine atom.

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12. The atoms in this bond share the electrons equally in all directions and allow the electrons to move easily among the atoms.

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13. In general, this will form between atoms that lose electrons easily to form positive ions, such as metals, and atoms that gain electrons easily to form negative ions, such as nonmetals.

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14. Since there is only one atom of carbon in carbon dioxide, you don't need to use one of these for carbon.

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