

electrons

molecules

How Elements Bond

positive

gaining

Chapter

covalent

negative

Directions: Correctly complete the following paragraphs using terms from the list below. Some terms may not be used, and some terms may be used more than once.

losing

protons

| loses e stable by 1 ions because the lorine readily 5 e attraction between so | y have more 3a | | | |
|---|---|---|--|--|
| ions because the lorine readily 5 | y have more 3a | | | |
| lorine readily 5. | aı | | | |
| e attraction between so | | n electron, forming | | |
| | | | | |
| | odium ions and chlo | rine ions forms | | |
| bonds. In sodium chloride, the ions are lined up in a | | | | |
| | | | | |
| e atoms become more | stable by sharing | | | |
| ; 10. | rather than | charged | | |
| onds in a molecule of o | oxygen are 12 | | | |
| while the bonds in a r | molecule of water ar | e | | |
| | bonds. | | | |
| he number of atoms of ea | ich element found in on | e unit of the compound. | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | nds in a molecule of while the bonds in a namber of atoms of ea | e atoms become more stable by sharing 10 rather than onds in a molecule of oxygen are 12 while the bonds in a molecule of water ar bonds. the number of atoms of each element found in on | | |

Directions: *Complete the following activity.*

20. Hydrogen combines with sulfur much like hydrogen combines with oxygen. Draw an electron dot diagram showing hydrogen combined with sulfur and write the chemical formula below.



electrons

How Elements Bond

nositive

Directions: Correctly complete the following paragraphs using terms from the list below. Some terms may not be used, and some terms may be used more than once.

losina

| electrons | losing protons | | positive | covalent negative |
|------------------------------------|---------------------|----------------------|-------------------------------|-------------------------|
| molecules | | | gaining | |
| random | gains | neutral | regular | ionic sharing |
| nonpolar | ions | loses | polar | |
| Elements in Group | 1 become more | stable by 1. | an | electron. These |
| elements form 2. | | ions because | they have more 3 | |
| than 4 | . Chl | orine readily 5. | | an electron, forming |
| a 6. | ion. The | attraction betwee | n sodium ions and chl | orine ions forms |
| 7 | bonds, In | sodium chloride, t | the ions are lined up in | . a |
| 8 | pattern. | | | |
| Unlike sodium and | l chlorine, some | atoms become me | ore stable by sharing | |
| 9 | , forming | 10 | rather than | charged |
| 11 | The bo | nds in a molecule | of oxygen are 12. | |
| 13 | bonds, | while the bonds in | a molecule of water a | re |
| 14 | 15, | | bonds. | |
| Directions: Next to eac | h formula, write th | ne number of atoms a | f each element found in o | ne unit of the compound |
| | | | , court cicincia round hij of | • |
| | | | | |
| | | | | |
| | | | | |
| 19. Carbonic acid, Fl ₂ | | | | |

Directions: Complete the following activity.

20. Hydrogen combines with sulfur much like hydrogen combines with oxygen. Draw an electron dot diagram showing hydrogen combined with sulfur and write the chemical formula below.

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