

Name _____ Date _____ Hour _____

Chapter 18 Bonding

P C U C H N T V V B S H M E R W T E R C
M R H H V K I T W P W X V U L A V E O Y
R N L E B X N A H U E I A A K I X V E S
Y C Y M M S O O G R H Q B P T J A C V E
Z I N I H I R F N X N W C A S L Z H I S
I O K C P Z C E P P G S G G E F H A T O
I D N A W D K A F I O E T N T B D R I L
K B P L N S Z N L S N L T Y D Q U G S M
D N O B C I N O I F N B A I T P Y E O U
K Z B O W Z D I E H O A V R N X E Z P S
B V C N M D C B M N K R R P Z T S L H Z
F J W D C X D A D K E F M T J Y A A S F
K P Z L M O L E C U L E V U K V R N I E
R A L O P A S O I I T Z R J L E K T H D
S L O J A M R P S K G D U S E A G Z R U

1. An ion's _____ is written as a superscript and can be positive or negative. For example: Mg^{+2}
2. A _____ is a connection between two elements.
3. In a _____ the number of atoms types of elements can be identified. For example, H_2O , has 2 hydrogen and 1 oxygen atom.
4. In a _____ electrons are shared between the elements.
5. Atoms can _____, _____, or _____ electrons to become more stable.
6. Any atom that has gained or lost electrons will form an _____.
7. Formed between metal and nonmetal atoms, an _____ is formed by the attraction of opposite charges.

8. The smallest piece of a covalent compound is called a _____.
9. When chlorine gains an electron from sodium it now becomes an ion with a _____ charge.
10. When sodium loses an electron to chlorine it becomes an ion with a _____ charge.
11. Covalent bonds can be _____ where electrons are shared equally between the two elements, or _____ where electrons are shared unequally between the atoms.
12. In the ionic bond between Magnesium and chlorine, magnesium _____ two electrons, one to each chlorine atom in the formula.