Ch 4-2: What is a compound? Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Basic Physical Science Notes S2 2019

Key Terms:

1. Chemical bond: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Molecule: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   EX:

Fill-in-the-blank Ch 4-2:

1. A compound is made up of two or more \_\_\_\_\_\_\_\_\_\_ .
2. Sugar, C6H1206, is made up of \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The properties of a compound are \_\_\_\_\_\_\_\_\_\_ from the properties of the elements that form it.
4. A \_\_\_\_\_\_\_\_\_\_\_\_\_ is the smallest part of a substance that has all the properties of that substance.
5. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the force of attraction that holds atoms together.
6. Using heat and electricity can \_\_\_\_\_\_\_\_\_\_\_\_\_\_ a compound into the elements that make up the compound.

Short Answer Ch 4-2:

1. How are the elements that form the following compounds different from the compound they form?
   1. H2O
   2. NaCl
   3. C6H1206
2. Health and Safety Tip: The compound carbon monoxide (CO) is a deadly gas. It is difficult to detect, because it is odorless and colorless. Carbon monoxide can be produced by the incomplete burning of fuels in cars and in heating furnaces. If it is inhaled in small amounts, it can cause people to feel sleepy. If it is inhaled in large amounts, it can cause death. Why do you think having a carbon monoxide detector in your home is a good idea? Do you have one in your home?

Stats: Each year, more than 400 Americans die from unintentional CO poisoning not linked to fires, more than 20,000 visit the emergency room, and more than 4,000 are hospitalized.

Ch 4-5: What is an ionic bond? Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Ch 4-6: What is a covalent bond?  
Basic Physical Science Notes S2 2019

Key Terms:

1. Valence electron: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Ion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   EX:
2. Ionic Bond: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Covalent Bond: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fill-in-the-blank Ch 4-5:

1. Electrons have a \_\_\_\_\_\_\_\_\_\_ electrical charge.
2. When an atom loses electrons, it becomes a \_\_\_\_\_\_\_\_\_\_\_\_\_ ion.
3. An \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ forms when one atom takes an electron (or electrons) from another atom.
4. Particles with opposite electrical charges \_\_\_\_\_\_\_\_\_\_\_\_\_ each other.
5. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the force of attraction that holds atoms together.

Short Answer: Complete the T-Chart to compare and contrast the two types of chemical bonds.

IONIC BONDS BOTH COVALENT BONDS