

Please answer the following questions:

1. A methane molecule ( $\text{CH}_4$ ) is an example of a covalent bond because \_\_\_\_\_.
2. Ionic bonds form between what types of elements?
3. Covalent bonds form between what types of elements?
4. Which of the below elements will most likely form an Ionic Bond?
  - a. P and O
  - b. S and O
  - c. Ca and Cl
  - d. Ne and Cl
5. How many atoms are in  $\text{CaCl}_2$ ?
6. When Calcium forms a bond, what will occur?
7. Which of the below elements will most likely form a Covalent Bond?
  - a. Na and Cl
  - b. Al and Mg
  - c. H and O
  - d. K and Na
8. The force that holds two atoms together is called a \_\_\_\_\_.
9. How many electrons does chlorine need to gain in order to have a full outer shell?
10. A charged Particle is called an \_\_\_\_\_.