

1. What is a valence electron?
2. What is a chemical bond?
3. Write the number of valence electrons in each of the following.
  - a. Carbon
  - b. Bromine
  - c. Magnesium
  - d. Arsenic
  - e. Aluminum
  - f. Potassium
4. Draw the electron dot diagram for each of the following.
  - a. Nitrogen
  - b. Calcium
  - c. Sulfur
  - d. Neon
  - e. Chlorine
  - f. Cesium
5. How does an ionic bond form?
6. Use electron dot diagrams to show how sodium and oxygen form an ionic bond.
7. Use electron dot diagrams to show how aluminum and chlorine form an ionic bond.
8. Use electron dot diagrams to show how strontium and nitrogen form an ionic bond.