1. Define an ionic bond.
2. How do ionic bonds fulfill the octet rule?
3. What are the properties of an ionic compound?
4. Why is an ionic compound neutral even though it is made up of cations and anions?
5. Which of the following would be able to make an ionic bond?
   1. Cl, Br
   2. Li, Cl
   3. K, He
   4. I, Na
6. Which of the following compounds would be ionic?
   1. H2O
   2. Na2O
   3. NH4Br
   4. CaSO4
   5. SO2
   6. CH4
7. Under what conditions are parentheses included in ionic formulas? What about roman numerals?
8. What is wrong in the following formulas?
   1. BeCl4
   2. V3N3
   3. Na6O
   4. CaCN2
9. Write the formulas and names for the following when they combine.
   1. K and S
   2. Ca and N
   3. Na and I
   4. Mn (III) and O
   5. Al and SO32-
10. Write the formulas for the following:
    1. Beryllium chloride
    2. Strontium oxide
    3. Chromium (III) nitrate
    4. Calcium acetate
    5. Iron (II) hydroxide
    6. Platinum (I) arsenide
    7. Magnesium carbide
    8. Copper (II) sulfite
11. Write names for the following:
    1. (NH4)3PO3
    2. Ni(NO3)3
    3. NaClO3
    4. Y2Te
    5. Cs2(SO4)
    6. BaI2
    7. WCrO4
    8. Li3BO3