

Practice 4.2

Name _____

1. Write the numbers and kinds of atoms or ions contained in the following compounds:

a. NaCl _____

b. CO₂ _____

c. KBr _____

d. NH₃ _____

e. MgO _____

2. Explain why a substance with a network structure has a high melting point.

3. Determine whether the following are ionic or covalently bonded.

a. NaCl _____

b. CO₂ _____

c. KBr _____

d. NH₃ _____

e. MgO _____

4. Explain why solid table salt is a poor conductor of electricity, while salt water is a good conductor of electricity.

5. Explain why table salt does not melt easily.

6. Contrast ionic and covalent bonds.

7. Predict whether a gold ring would be a good conductor of electricity. What kind of bonds does gold have? How do these bonds explain gold's properties?

8. Show how the following compounds form using covalent bonds.

a. CCl_4

b. H_2S

c. PF_3

d. I_2

f. CH_4

g. CH_3OH