1. Which of HCl or NaCl is likely to have the higher normal boiling point?

a. NaCl

b. HCl

c. They are same

Explain your choice below.

2.The temperature of a sample increases at its boiling point until all the liquid has been vaporized.

a. False

b. True

3. Arrange the molecules H2O,NH3, Ar, NaCl in order of expected increasing boiling points.

4. What is responsible for the abnormally high melting and boiling points of water?

a. covalent bonding

b. hydrogen bonding

c. ionic bonding

d. dispersion bonding

5. Which of the following molecules would be expected to have the lowest boiling point?

a. C2H6

b. CH4

c. C16H34

d. C8H18

e. C12H26

6. The amount of heat required to melt 1 g of a substance is called the \_\_\_\_\_ of the substance; the amount of heat required to melt 1 mole of substance would be called \_\_\_\_\_ of the substance.

a. molar heat of fusion; heat of fusion

b. heat of fusion; molar heat of fusion

c. heat of combustion; molar heat of combustion

d. molar heat of combustion; heat of fusion

7. Based on the strength of intermolecular forces, which would you expect to have the highest boiling point?

a. BaI2

b. NH3

c. NF3

d. C4H8

e. C2H6

8. Which of the following would you expect to boil at the lowest temperature?

a. PCl3

b. KF

c. C8H18

d. C3H6

e. CH4

9. Which of the following compounds would you expect to have the highest melting point?

a. MgCl2

b. SrO

c. SrCl2

d. CaO

e. KCl

10. Which of the following would you expect to have the highest heat of vaporization?

a. CH4

b. C8H18

c. NH3

d. NaF

e. BCl3

11. Place the compounds C2H6, CH4, H2O, HCl, KCl in order from lowest to highest boiling point.

a. CH4, H2O, C2H6, HCl, KCl

b. C2H6, CH4, H2O, HCl, KCl

c. CH4, C2H6, HCl, H2O, KCl correct

d. KCl, HCl, C2H6, H2O, CH4

e. KCl, H2O, HCl, C2H6, CH4

f. CH4, C2H6, H2O, HCl, KCl

Key

1. NaCl

2. False

3. Ar, NH3, H20, NaCl

4. B

5. B

6. B

7. A

8. E

9. D

10. D

11. C