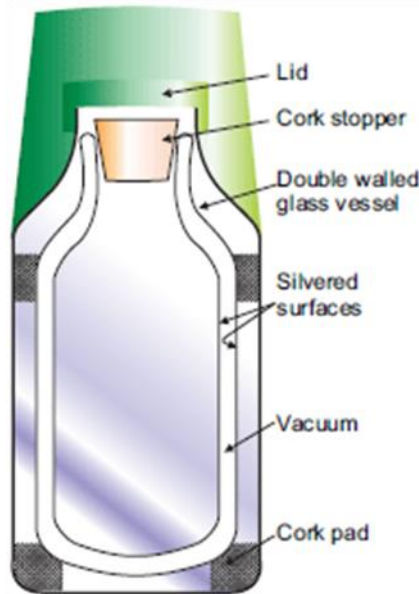


# Work Sheet “Heating and Cooling”

## (Class 8 Science)

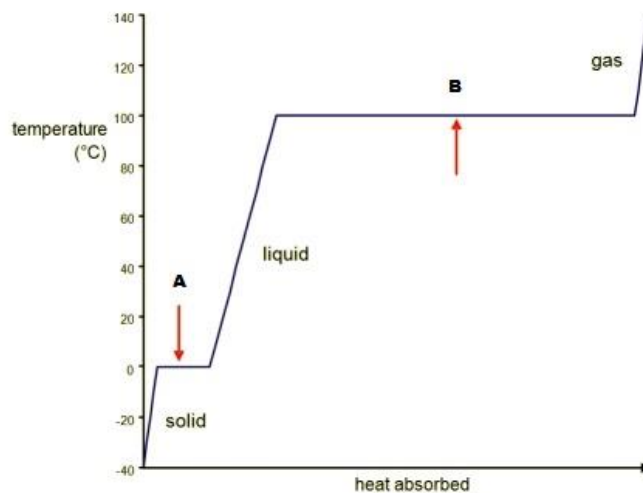
Q.1: Examine the thermos flask.



It has a thick stopper, double walls which are evacuated, and the vacuum bottle is silvered on the inside. Explain how this keeps drinks either hot or cold. What is the importance of each part of flask?

Q.2: A farmer is stringing a wire fence in the middle of the day. He makes it nice and tight so that his cows can't push through it. That night all the wires break. Why?

Q3: The graph below shows the heating curve of water. Use the graph to answer the following questions of water:



a. What is happening at point A & B?

- b. What is happening to the energy being absorbed from the heat source at point **A& B**?
- c. What phase change is taking place at point **A& B** respectively and Why ?

**Q.4:** Choose the correct answer from given options:

- a) Which of the following is the best definition of thermal expansion?
  - i. An object increasing in size due to increase in temperature
  - ii. Molecules moving faster
  - iii. An object decreasing in size due to increase in temperature
  - iv. An object never changing in size
  
- b) A steel spoon in hot soup bowl becomes warmer due to:
  - i. Conduction
  - ii. Convection
  - iii. Radiation
  - iv. Thermal expansion
  
- c) The temperature at which a substance changes from a gas to liquid is called the \_\_\_\_\_
  - i. Vaporization point
  - ii. Melting point
  - iii. Freezing point
  - iv. Condensation point
  
- d) Cooking utensils are a good example of:
  - i. Conduction
  - ii. Convection
  - iii. Radiation
  - iv. Convection and Radiation
  
- e) Convective current only occurs in \_\_\_\_\_
  - i. Solids
  - ii. Liquids
  - iii. Gases
  - iv. Liquids and gases both