NAME:_____ DATE:_____

COOLING CURVES

Cooling Curves

If the temperature of a gas is measured at intervals as it is cooled and changes state to a liquid and then to asolid, and the temperature is plotted on a graph against time a cooling curve is obtained. Figure 3 shows thecooling curve of a water.

1. Answer the questions below based on the cooling curve in the Figure 1 graph below.

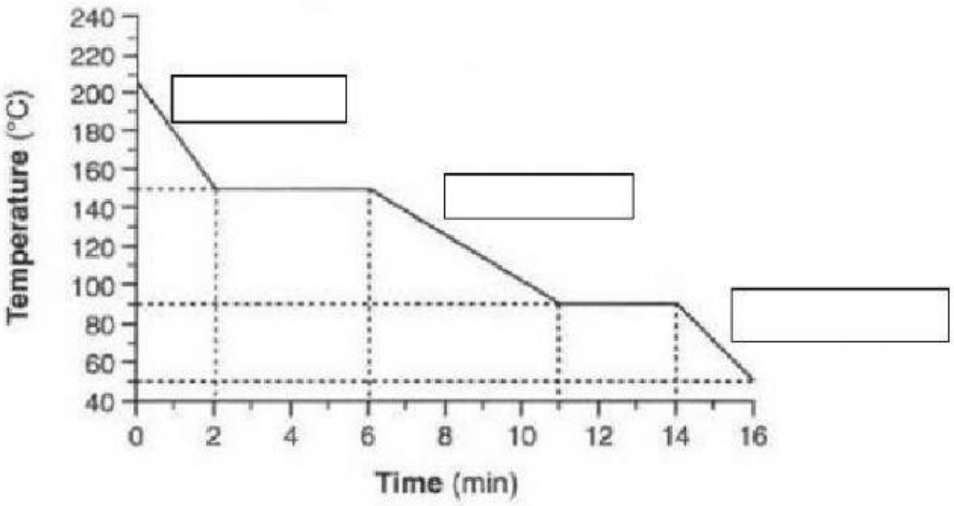


Figure 1: Cooling Curve

a) What is the freezing point temperature of the substance? _____ °C

b) What is the boiling point temperature of the substance? _____°C

c) What is the melting point temperature of the substance? _____°C

d) On the graph above, **drag** the words GAS LIQUID SOLID to label the graph.

e) State the time period where the substance is a solid._____minutes

f) State the time period where the substance is a liquid._____minutes

g) During which time period would the substance possess kinetic energy?_____ minutes

LIVEWORKSHEETS