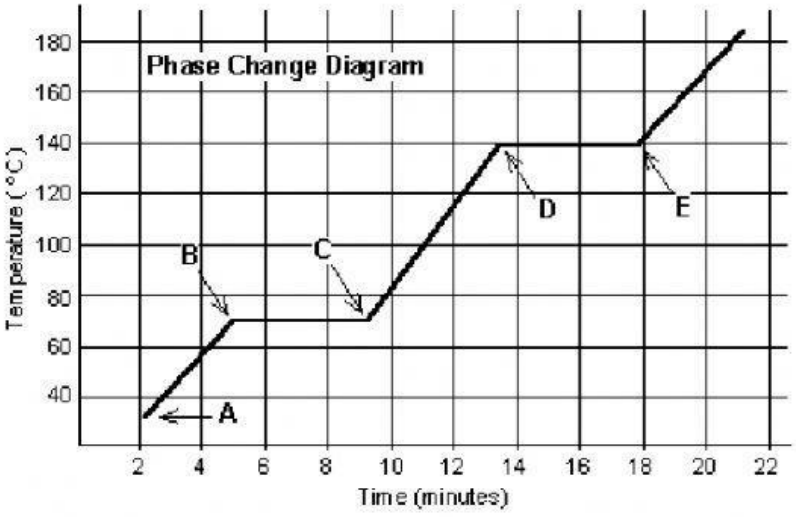
LIVEWORKSHEETS

NAME:_____ DATE:_____

HEATING CURVES

1. Use the graph in figure 1 below to answer the following questions.



a. At **point A**, the beginning of observations, the substance exists in a _____ state. Material in this phase has a _____ volume and shape. With each passing minute, _____ is added to the substance. This causes the molecules of the substance to gain more_____ energy and hence_____ faster which we detect by a temperature rise in the substance.

b. At **point B**, the temperature of the substance is____°C and at Point C the temperature is _____°C. This first change in state is where_____ occurs as the temperature remains constant at the_____ point of the substance. The substance is now in the_____ phase. Material in this phase has_____ volume and_____ shape. The energy put to the substance between minutes 5 and 9 was used to convert the substance from a_____ to a _____.

c) Between 9 and 13 minutes, the added energy increases the temperature of the substance. During the time from **point D to point E**, the liquid is_____. By **point E**, the substance is completely in the _____ phase and has reached the_____ point. Material in this phase has _____ volume and_____ shape. The energy put to the substance between minutes 13 and 18 converted the substance from a_____ to a_____ state. Beyond **point E**, the substance is still in the _____ phase, but the molecules are moving faster as indicated by the increasing temperature.

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In summary:

From A to B, the material is in the_____state of matter

From B to C, the process of_____is taking pace

From C to D, the material is in the_____state of matter

From D to E, the process of_____is taking place

Anything after E is in the _____ state of matter.

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