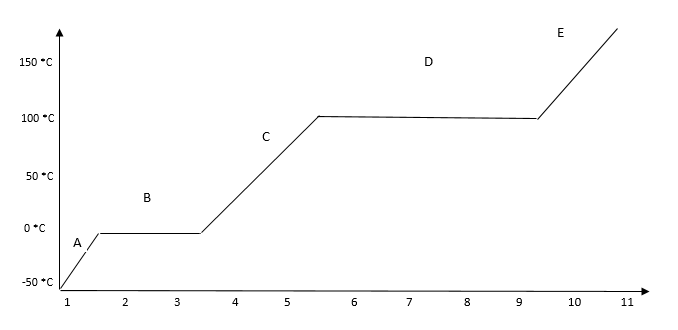
**Changes in Phases of Matter of Water Diagram**

Directions: While using the video in Schoology, complete the diagram below. Be sure to label the axes, each phase and phase change on the line, and draw a simple diagram. Your diagram should be similar to the videos.

1 a. In the diagram, what are the 2 possible phase changes occurring during “B”?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. What are the 2 possible phase changes occurring during “D”?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Now, knowing where the phase changes are from questions #1

a. T or F- During a phase change, the temperature will not change.

b. T or F- During a phase change, the heat energy will not change.

c. T or F- While in a phase (solid, liquid or gas), the temperature will remain constant.

d. T or F- While in a phase (solid, liquid or gas), the heat energy will remain constant.

3. Knowing that at the **very end of** **Area C it is liquid water** and **at the very beginning of area E it is gas vapor**

**a.** Do both liquid water and gas vapor exist at the same temperature? \_\_\_\_\_\_

b. At what temp does both freezing and melting occur? \_\_\_\_\_\_

4. If the temperature changes, can a solid still remain solid for a short time? \_\_\_\_\_\_\_\_

5. Is energy ***released (give off)*** or ***absorbed (taken in)***when a substance changes from a liquid to a gas?

*(circle the answer)*

6. Is energy ***released*** or ***absorbed*** during freezing?

*(circle the answer)*

7. What phase change did we observe when we used the dry ice? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_