Marks 3

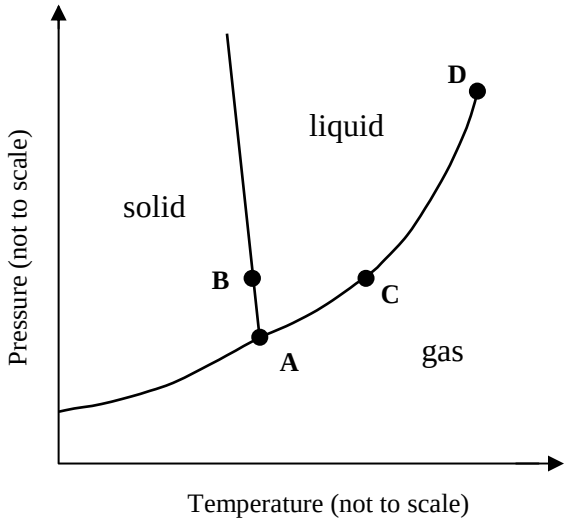
- The figure below illustrates the phase diagram for water. The points on the diagram correspond to:

  A: Triple point (0.0098 °C, 0.610 kPa)

  B: Normal melting point (0 °C, 1.01×10^2 kPa)

  C: Normal boiling point (100 °C, 1.01×10^2 kPa)

  D: Critical point (374.4 °C, 2.18×10^4 kPa)



Describe all of the phase changes that occur when water at 1.01×10^2 kPa is slowly warmed from –20 °C to 200 °C.

Describe all of the phase changes that occur when water at 0 °C is slowly compressed from 0.500 kPa to 1000 kPa.