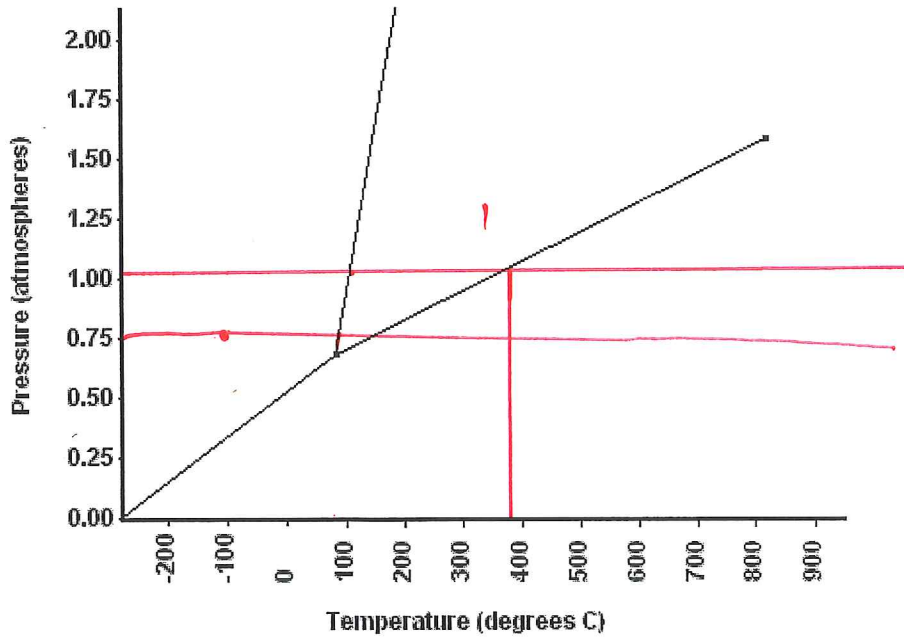


Phase Diagram Worksheet

Refer to the phase diagram below when answering the questions on this worksheet:



- 1) What is the normal freezing point of this substance? 100°C
- 2) What is the normal boiling point of this substance? ~400°C
- 3) What is the normal freezing point of this substance? 100°C
- 4) If I had a quantity of this substance at a pressure of 1.25 atm and a temperature of 300° C and lowered the pressure to 0.25 atm, what phase transition(s) would occur?
Boiling (Vaporization)
- 5) At what temperature do the gas and liquid phases become indistinguishable from each other?
800°C
- 6) If I had a quantity of this substance at a pressure of 0.75 atm and a temperature of -100° C, what phase change(s) would occur if I increased the temperature to 600° C? At what temperature(s) would they occur?

Melting ~80°C
Boiling (Vaporization) ~150°C