Name _____ Date _____ Period ____

7.2 Phase Diagrams (S) Notes

Atmospheres (Atms)
Unit for Pressure.
1 atm = Earth's air pressure at sea level

Phase Diagram

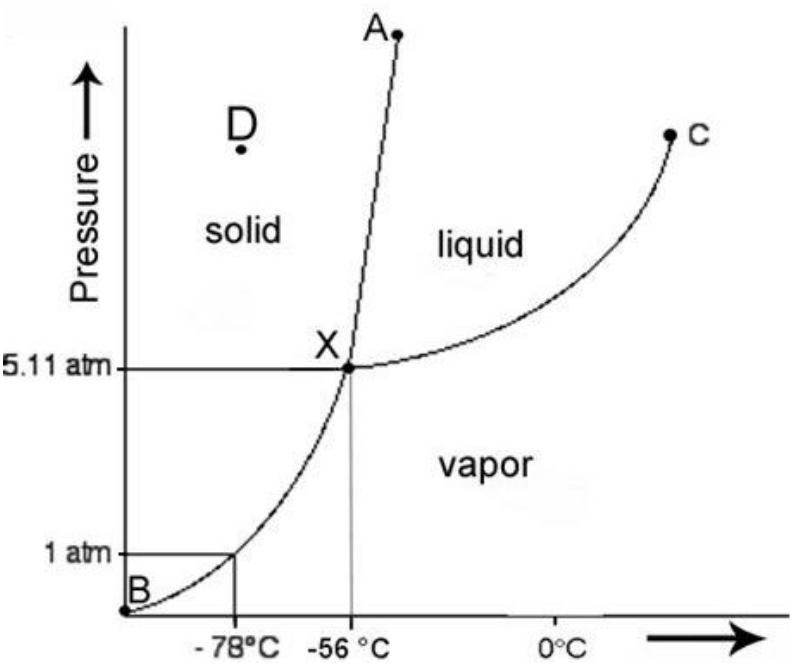
Important Parts

Triple Point

Super-critical Fluid

Critical Point

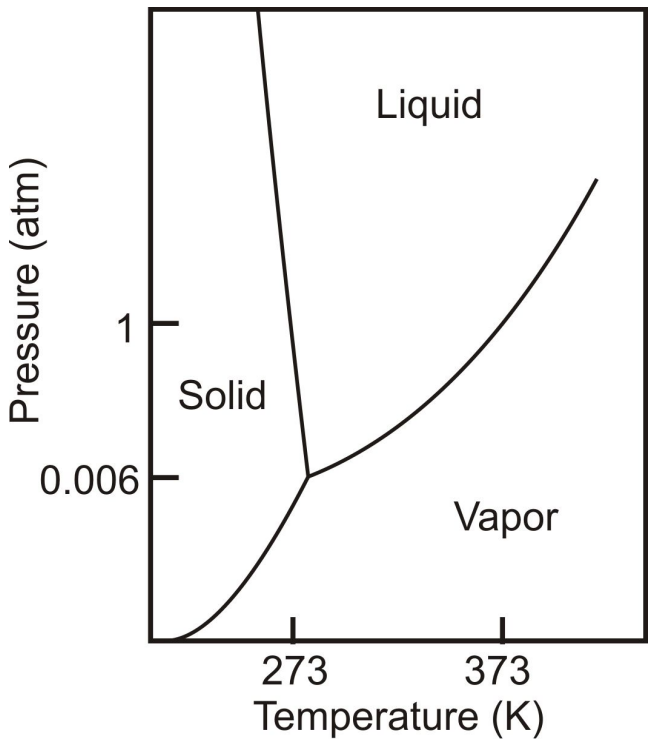
Equilibrium



Example/Practice
Diagram 1:
Start at 3 atm, -78 °C.
Increase temperature, what happens?

Start at -50 °C, 1 atm.
Increase pressure, what happens?

Why water is special:



Example/Practice

Diagram 2:
Start at 1 atm, 200 K.
Increase temperature, what happens?

Start at 0.5 atm, 273 K.
Increase pressure, what happens?

Name _____ Date _____ Period ____

More Practice

Diagram 3:

Find the triple point.

Start at 1 atm, 25 °F.

Increase temperature, what happens?

Start at 100 atm, 200 °F.

Decrease pressure, what happens?

What phase is the substance at room temperature?

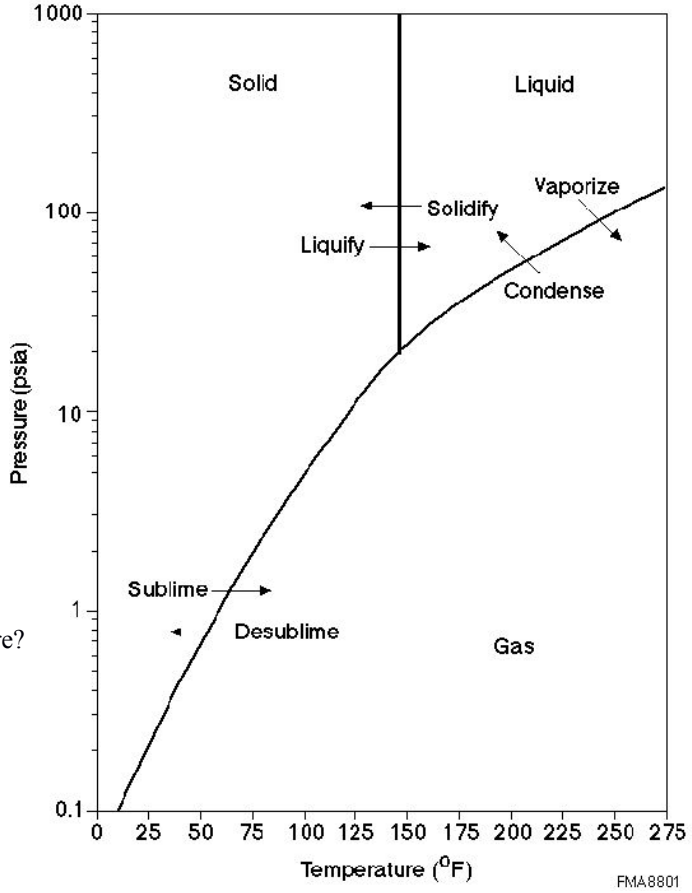


Diagram 4:

What phase is the substance at room temperature?

What's the triple point?

What's the critical point?

Start at 100 atm and 150 K.

Heat up the substance, what happens?

Start at 300 atm, 225 K.

Depressurize (lower the pressure on) the substance, what happens?