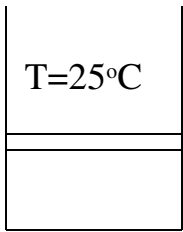
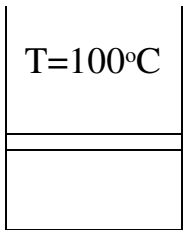


Phase Change of Pure Substances

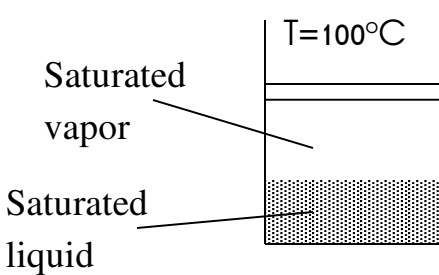
ex. Water at 1 atm of pressure



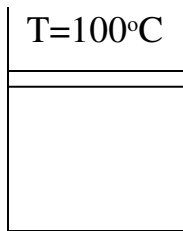
Not about to evaporate
Heat added \longrightarrow $T \uparrow$
Compressed liquid
phase



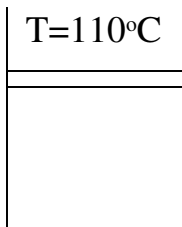
About to evaporate
Heat added \longrightarrow evaporation starts
Saturated liquid phase



Heat added \longrightarrow continues evap.
 T unchanged
Wet steam or
Saturated liquid-vapor mixture



All liquid evaporated
(*about to condense*)
Heat removed \longrightarrow *condensation*
Saturated vapor phase



Not about to condense
Heat added \longrightarrow $T \uparrow$
Superheated vapor phase