

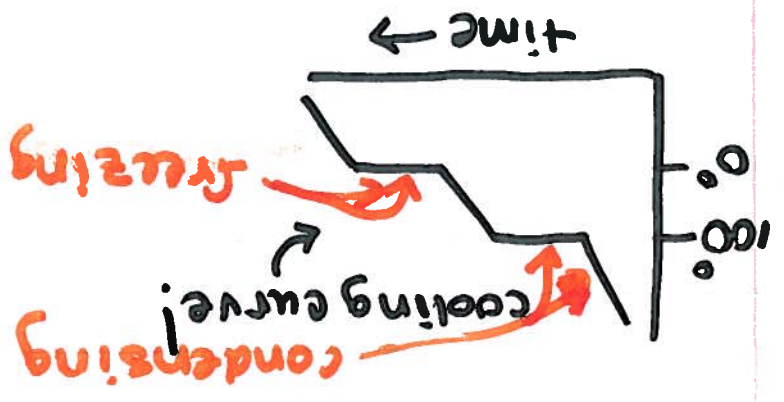
The SPECIFIC HEAT OF ICE is the heat used to make the molecules in the ice crystal move faster. They start vibrating more and break loose of the organized structure. This causes the temperature to increase, warming

The LATENT HEAT OF FUSION is the energy used to break the attractions between the ice molecules. This spreads them out. All the energy is going to the molecules being spread out, they do not move faster, therefore, the temperature does not go up, moving molecules

The SPECIFIC HEAT OF WATER is the heat used to make the water molecules move faster in liquid form. This causes the temperature to increase, warming

The LATENT HEAT OF VAPORIZATION is the energy used to break the attraction between the liquid molecules. This spreads them out, All the energy is going to the molecules being spread out, they do not move faster, therefore, the temperature does not go up, moving molecules

The SPECIFIC HEAT OF STEAM is the heat used to make the steam molecules move faster in the gas form. This causes the temperature to increase, warming



heating cooling

$Q = mc\Delta T$

states }  $c_{ice}$   
 $c_{liq}$   
 $c_{gas}$

$c = 5/g^{\circ}c$

phase changes

phase changes

$\Delta T = 0$

$Q = mL$

$L = \text{latent heat}$

L vaporization  
 L fusion

$L = 5/g$

Phase change

Shows us:

① phase changes  
 • melting/freezing  
 • vaporizing/condensing

flat

② heating cooling

/ sloped

