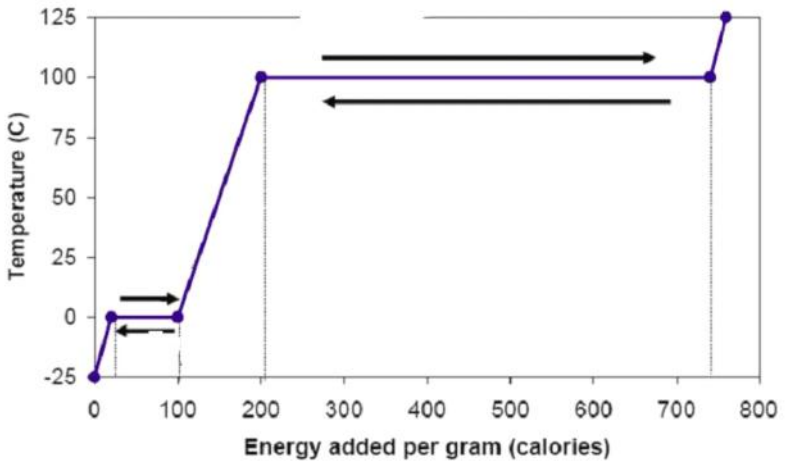
EARTH SCIENCE
Fox Lane High school

Name:_____Date: _____

Phase Change Diagram



Properties of Water

Heat energy gained during melting	334 J/g
Heat energy released during freezing	334 J/g
Heat energy gained during vaporization	2260 J/g
Heat energy released during condensation	2260 J/g
Density at 3.98°C	1.0 g/mL

ESRT

1. During the phase change, temperature Stays the same What's changing, is the energy gained or released.
2. Which phase change process requires the most energy gained? L → g evaporation 2260 Joule
3. Which phase change process requires the least amount of energy gained Melting s → L 334 Joule
4. Which phase change process releases the most amount of energy? Condensation g → L 2260 Joule

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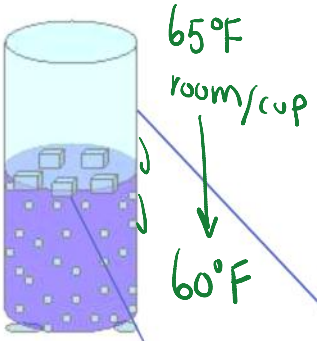
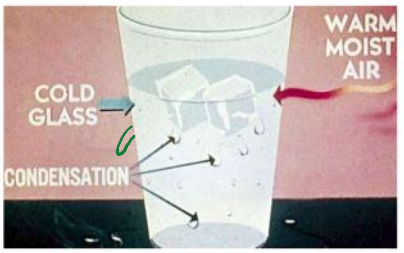
5. How do we increase the rate of evaporation of that beaker of water in the animation?
(1) increase temperature (2) Windy Condition
(3) increase surface area

6. What makes water reverse its process from evaporation? What causes condensation to start?
air temp must cool to dew point a point where condensation can start

7. Examples of condensation in nature are: (1) rain (2) Fog (3) cloud
Example of sublimation in nature: S → g ice/snow evaporating
Example of vaporization in nature: L → g

UNDERSTAND CONDENSATION





ice is melting by taking the energy from the cup

the cup is decreasing temp until Condensation (g→L) starts that temp is the dew point