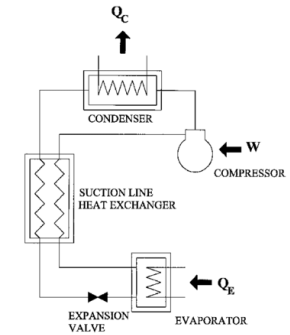


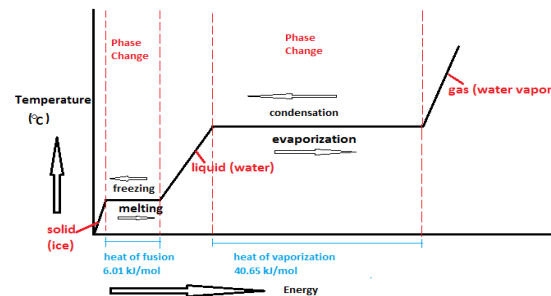
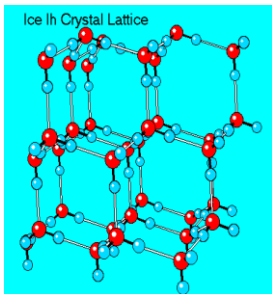
# Freezing Desalination Process Buoy (The ICE Machine)

By Matthew Sheets



## Freezing Desalination

- A proven technology that utilizes the properties of the phase change of water to a solid.
- When ice crystals form, they separate from contamination such as dissolved salts forming pure H<sub>2</sub>O crystals.



## Advantages

- Does not need disposable filters or semipermeable barriers found in reverse osmosis systems.
- Can be made to be extremely rugged to survive in the ocean.
- The technology is easier to repair in remote conditions as it uses more common components.