Part B: Classify each process by its individual effect on the entropy of the universe S.

Does not effect the S of the universe.

 A process run infinitesimally slowly at equilibrium and reversed to its original state

 Motion of a frictionless pendulum

 Evaporation of water from a cup

Increases the S of the universe

Solid and liquid water combined together at STP

 Ice melting to water above the melting point

 Isothermal expansion of a real gas

This is how I sorted the items in Mastering Chemistry. The program told me I sorted 2 out of 6 incorrectly.

The message Mastering Chemistry sent was:

A system in equilibrium has no net effect change on thermodynamics properties(?)

If you could sort them into the correct position I would greatly appreciate it. There was a third choice of a decrease but I believe that is impossible. Thank you for your assistance.