Biochem 1a Name:

Also write your name on the other side of this page.

True or False

* 1. The entropy of the universe is conserved. [T / F]
  2. The enthalpy of the universe is conserved. [T / F]
  3. The energy of the universe is conserved. [T / F]
  4. When a cup of hot coffee cools to room temperature the entropy of coffee increases. [T / F]
  5. The enthalpy of condensation provides information on molecular interactions in the liquid phase [T / F].
  6. Biology violates the second law of thermodynamics. [T / F]
  7. When an ice cream cone melts on a hot day in Phoenix the entropy of the universe increases [T / F].
  8. A system with a larger number of available states (or microstates) has greater entropy [T / F].
  9. The free energy of the universe is conserved. [T / F]
  10. For a spontaneous process, DG < 0. [T / F]
  11. For a spontaneous process, DS (of the universe) < 0. [T / F]
  12. For a system undergoing a spontaneous process, DS (of the surroundings) < 0. [T / F]
  13. For the hydrolysis of ATP in a cell, DG < 0. [T / F]
  14. If you cannot observe change over time, then a system is at equilibrium. [T / F]