1. A heat lamp warms water in a glass by ...
   A. conduction
   B. convection
   C. radiative heating
   D. all of the above

2. A "light wheel" works by ...
   A. photon momentum imparted to the black vane sides
   B. light absorption by the black vane sides
   C. light reflection by the shiny vane sides
   D. convection

3. When you warm your hands by 3oC by rubbing them together, your hands are ...
   A. the system
   B. the surroundings
   C. both system and surroundings
   D. neither system nor surroundings

4. When you warm your hands by 3oC by rubbing them together,
   A. q = 0, w > 0
   B. q > 0, w = 0
   C. q > 0, w > 0
   D. q = 0, w = 0

5. When you warm your hands by 3oC by holding them near a flame, your hands are ...
   A. the system
   B. the surroundings
   C. the system and surroundings
   D. neither system nor surroundings

6. When you warm your hands by 3oC by holding them near a flame,
   A. q = 0, w > 0
   B. q > 0, w = 0
   C. q > 0, w > 0
   D. q = 0, w = 0

7. When you warm your hands by 3oC by holding them near a flame, compared to warming them the same amount by rubbing them together, the energy change is ...
   A. larger
   B. the same
   C. smaller
   D. more information needed

3/1/2009 6:39:41 PM
8 Aqueous solutions at the same temperature are combined, a reaction occurs, and the temperature of the combined solutions goes up. The water is ...
   A the surroundings
   B the system
   C neither

9 Aqueous solutions at the same temperature are combined, a reaction occurs, and the temperature of the combined solutions goes up. The reactants are ...
   A the system
   B the surroundings
   C neither system nor surroundings

10 Aqueous solutions at the same temperature are combined, a reaction occurs, and the temperature of the combined solutions goes up. The reactants and products are ...
   A the system
   B the surroundings
   C neither system nor surroundings