



## Solar Energy in the Classroom Activities

1. INTRODUCTION TO SOLAR ENERGY
  - a. Solar energy role playing games
  - b. Energy challenge game
2. VARIABLES AFFECTING SOLAR ENERGY POTENTIAL
  - a. The effect of solar collector materials on solar energy potential
  - b. The effect of PV size on solar energy potential
  - c. The effect of solar panel positioning on solar energy potential.
3. SOLAR ENERGY STORAGE
  - a. Storing solar energy in batteries
  - b. Hydrolysis: storing solar energy in water
4. PRACTICAL USES OF SOLAR ENERGY
  - a. Heating our homes with solar energy
  - b. Cooking our food with solar energy
  - c. Distilling water with solar energy
  - d. Powering household appliances with solar energy
5. THE COST OF ENERGY USE IN OUR HOMES
  - a. Determining energy use and the cost of running common household appliances
  - b. Utility bill paying game
6. ENERGY CONSERVATION
  - a. Compact Fluorescent Light (CFL) Demonstration
  - b. Energy Conservation in Our Homes
    - i. Home energy survey
    - ii. Creating an energy efficient home
    - iii. Becoming an energy saver star
    - iv. Smart buying behavior
    - v. Family home energy quiz (on-line)
    - vi. Energy hog (on-line interactive game)