

## Sound & Light

## Solar Cookers Initial Design Log (4/18)

Name \_\_\_\_\_ Log #: \_\_\_\_\_

I. Drawing: (**Label materials**; probably need two views to make it clear.)

**II. Energy Transformation**

- A. What type of energy goes into a solar cooker?
  
- B. What type of energy does this change into?

**III. Interactions Between Waves and Matter**

- A. What materials are EXCELLENT at reflecting light waves?
  
- B. Explain why one would want some light rays reflected in a solar cooker.
  
  
  
  
  
  
  
  
  
  
  
  
  
- C. What materials are EXCELLENT at absorbing light waves?
  
  
  
  
  
  
  
  
  
  
  
  
  
- D. Explain why one would want light rays absorbed in a solar cooker.

**III. Interactions Between Waves and Matter cont'd**

E. What materials are EXCELLENT at transmitting light waves?

F. Explain why one would want light rays transmitted in a solar cooker.

**IV. Analyzing and Interpreting Data**

A. Describe the data you collected that allows you to compare this cooker design with your redesign. (i.e. Did you measure its temperature with a thermometer? Did you time how long it took something inside to melt or soften?)