Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Partner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Solar Oven Experiment Rubric

In this experiment, you will use solar energy to make a pizza box oven! Now here’s the question: who will be able to make the best, hottest oven of them all?

Investigate one of these questions to help you design the best pizza box oven EVER:

1. Does an oven’s color – black, gray, or white – affect its internal temperature?
2. Does the angle of the lid affect the internal temperature?
3. Does adding aluminum foil on the side affect the internal temperature?
4. Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

solar oven.tiff

Get ready to start cookin!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project Element** | **Points Earned** | | | |
| ***Experimental Design***   * Effort was shown to control as many variables as possible * The experiment is designed to answer a scientific question * Independent and Dependent Variables were clearly labeled | **1** | **2** | **3** | **4** |
| ***Group Collaboration***   * Each member’s ideas were listened to by the group * All members had an equal understanding of the experiment * All members actively participated (one member did not carry the group) | **1** | **2** | **3** | **4** |
| ***Solar Ovens’ Construction…***   * Building instructions were followed * Obvious care went into their construction * The groups’ ovens successfully held up for the whole experiment | **1** | **2** | **3** | **4** |
| ***Data Collection***   * Data was collected in a reliable and accurate fashion * Data was recorded on a data table or data chart | **1** | **2** | **3** | **4** |