

**Solar Oven
Final Project Grading Rubric**

Criteria	← Achievement →		
↓	Meets or Exceeds Expectations 80% - 100%	Approaching Expectations 70% - 79%	Below Expectations 69.9% or less
<p>2nd Parabolic Solar Oven Iteration (Whole group grade)</p>	<ul style="list-style-type: none"> - Oven has clearly been improved from its 1st iteration - Oven has a focal point or focal line with excellent potential for baking foods - Oven is parabolic in shape: it is clearly a paraboloid/parabolic trough - Overall appearance of the oven shows great attention to detail - The oven has evolved from sketches and digital renderings; has been built to the specifications of drawings, and is pleasing to the eye - The oven is clearly based upon mathematical calculations 	<ul style="list-style-type: none"> - Oven has somewhat been improved from its 1st iteration - Oven has a focal point or focal line with good potential for baking foods - Oven is parabolic in shape: it approximates a paraboloid/parabolic trough - Overall appearance of the oven shows attention to detail - The oven has evolved from sketches and digital renderings; has been built to the specifications of drawings, and is fairly pleasing to the eye - The oven is roughly based upon mathematical calculations 	<ul style="list-style-type: none"> - Oven has minimally been improved from its 1st iteration - Oven does not have a focal point or focal line - Oven is not parabolic in shape: it does not approximate a paraboloid/parabolic trough - Overall appearance of the oven shows little attention to detail - There is little evidence that the oven has evolved from sketches and digital renderings; it has not been built to the specifications of drawings, and is not pleasing to the eye - There is little to no evidence that the oven has been based upon

			mathematical calculations
Reflection (Individual grade)	<ul style="list-style-type: none"> - Individual reflection is 1.5 – 2 pages typed (d.s.) or hand written or its recorded duration is 4-5 minutes - Reflection delves into solar oven strengths, growth areas, & potential improvements and the experience of working on a team 	<ul style="list-style-type: none"> - Individual reflection is between 1 and 1.5 pages typed (d.s.) or hand written or its recorded duration is 3-4 minutes - Reflection delves into most of the following: solar oven strengths, growth areas & potential improvements and the experience of working on a team 	<ul style="list-style-type: none"> - Individual reflection is less than a page typed (d.s.) or hand written or its recorded duration is less than 3 minutes - Reflection delves into little of the following: solar oven strengths, growth areas & potential improvements and the experience of working on a team
Materials Team Member (Individual grade)	<ul style="list-style-type: none"> - Choice in materials was highly logical - Requests for materials were prompt and outlined their price and store location 	<ul style="list-style-type: none"> - Choice in materials was somewhat logical - Requests for materials were provided late yet outlined their price and store location 	<ul style="list-style-type: none"> - Choice in materials was illogical - Requests for materials were not provided or did not outline their price and store location
Schematics Team Member (Individual grade)	<ul style="list-style-type: none"> - Team includes four to six detailed drawings and two robust digital rendering - Printouts of digital renderings were taken from three perspectives 	<ul style="list-style-type: none"> - Team includes three to four detailed drawings and two digital rendering - Printouts of digital renderings were taken from more than one perspective 	<ul style="list-style-type: none"> - Team includes zero to three drawings and one or two digital rendering but they lacked detail - Printouts of digital renderings were taken from one perspective only
Coordinator Team Member (Individual grade)	<ul style="list-style-type: none"> - The coordinator clearly gave directives to his or her team members throughout the 	<ul style="list-style-type: none"> - The coordinator gave directives to his or her team members throughout the 	<ul style="list-style-type: none"> - The coordinator gave directives to his or her team members rather infrequently or

	<p>process</p> <ul style="list-style-type: none"> - The coordinator used nonviolent communication throughout the process and communicated clearly and respectfully with outside experts and the teacher - Synthesis of team members' thoughts was clear and thorough 	<p>process</p> <ul style="list-style-type: none"> - The coordinator primarily nonviolent communication throughout the process and usually communicated clearly and respectfully with outside experts and the teacher - Synthesis of team members' thoughts was incomplete 	<p>erratically</p> <ul style="list-style-type: none"> - The coordinator expressed needs rather violently and rarely communicated clearly and respectfully with outside experts and the teacher - Synthesis of team members' thoughts was not made or attempted
Recorder/Photographer Team Member (Individual grade)	<ul style="list-style-type: none"> - Thorough notes, observations, and mathematical calculations have been provided that document the build process and outline the final product 	<ul style="list-style-type: none"> - Somewhat thorough notes, observations, and mathematical calculations have been provided that document the build process and outline the final product 	<ul style="list-style-type: none"> - Notes, observations, and mathematical calculations that document the build process and outline the final product were sparse
Presentation of Project (graded under the 'Formal Critique' assessment)	X	X	X