Solar Oven Challenge and GreenLearning

GreenLearning hosts the annual Solar Oven Challenge every year in the month of May. Classes from Grades 3 to 12, as well as science classes and environmental clubs, usually participate in this activity for the chance to win prizes and gift certificates. For building a solar oven, teachers may use the solar oven construction plan provided at <u>re-energy.ca</u>, or the students can design their own plans. Please note that you can still use the resources provided to build your solar ovens, even if you decide not to participate in the competition.

The Process

- 1. Log on to <u>www.re-energy.ca.</u>
- 2. Click on Solar Oven Challenge and register for the next edition of the challenge once the registration link is live. Once you have registered, you will eventually receive an email with the submission entry forms, selection criteria, and links to additional resources.
- 3. Design/planning phase:
 - Download all the Solar Oven Challenge resource documents.
 - Conduct research to discover the different solar oven models and select one. Use the solar oven construction plan provided or create your own custom design.
- 4. Building phase:
 - Gather all the construction materials listed in the construction plan and use them to build a working model of a solar oven.
 - Take photos and videos of the process to accompany your entry submission.
- 5. Testing phase:
 - Select a hot afternoon that has clear, sunny skies with no wind or rain.
 - Set the solar oven outside at an angle with the opening of the oven directly facing the sun. Make sure
 that a thermometer is inside
 the baking chamber.
 - If the oven reaches 100 degrees Celsius, you can use it for heating foods. If it gets to temperatures of 175 degrees or higher, you can actually use it for baking.
- 6. Use the entry forms provided to write a detailed summary of your activity and submit it along with photos and/or videos of the entire process to jamila@greenlearning.ca for evaluation.
- 7. A panel of expert judges comprising of renewable energy professionals will evaluate all of the entries according to the selection criteria, and the winner(s) will be announced online at re-energy.ca in the month of June.



Green Teacher 117