



The Third Grade is harnessing the power of the sun to cook up some delicious snacks! Please check off the type of solar cooker (one) and type of snack (one) that your child has permission to use for this project. All solar cooker boxes and the food to be cooked will be brought in from home. *PLEASE DO NOT SEND IN ANY SUPPLIES/FOOD AT THIS TIME...MORE DATES AND INFO TO COME!*

Solar Cooker Design

Snack to be Cooked

___ pizza box

___ nachos

___ shoe box

___ apples

___ my own design

___ s'mores

Please return this form by Thursday June 5th

Student's Name _____

Parent Signature _____

The Solar Cooker Design Challenge

The sun is the ultimate renewable energy source. Every day for about five billion years, the sun has poured out enormous amounts of energy. The Earth, orbiting at a distance of about 93 million miles from the sun, intercepts a tiny fraction of this solar energy. At the Earth's surface, incoming energy from the sun is absorbed by the land, water, and atmosphere, and converted into measurable heat. Most of the sun's energy is emitted as visible light. To harness the sun as a source of energy, we need to convert it from visible light into heat or electricity. You can harness the sun's energy to cook using a solar cooker!

Your Challenge:

Build a solar cooker! In class, you will make a solar cooker. Your challenge is to see if you can design and create a solar cooker that will cook your food (recipes will be provided). You will need to make a cooker that gets hot fast and keeps its heat.

Challenge Rules:

To keep our Solar Cooker Design Challenge safe, fair, and educational, please follow the rules.

- Solar cookers must be small enough that one student can carry and set-up the cooker independently.
- Since the purpose of the solar cooker is to encourage environmental awareness, the use of new store-bought materials is discouraged.
- To avoid safety hazards, please do not use glass, lenses, or mirrors when building your solar cooker.
- We need to be able to view the food from the outside of the oven while it is cooking.
- While you may ask for adult help with finding supplies, cutting materials, and testing your cooker, your design should represent your own work and thinking. Adults should only provide guidance and support; they should not do the project for you.

Safety Guidelines:

- Use extreme caution when cutting cardboard boxes and other materials for your cooker. Ask an adult to help you with cutting.
- Use sunglasses when working with reflective/shiny materials in sunlight.
- Solar cookers can get very hot! Use oven mitts to prevent burns when testing your cooker. Have fun!