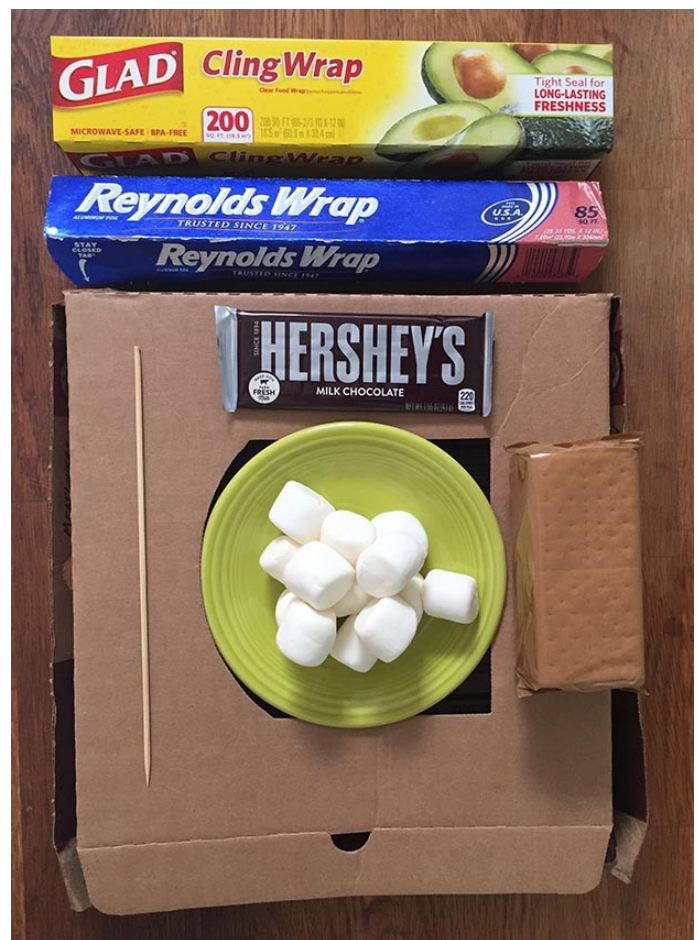


Hey guys! **Miss Leah** here. Have you ever heard the expression “It’s so hot outside you could fry an egg”? Well, for this **STEAM** activity, you’ll be making s’mores using a **solar oven!**

For this, you will need:

- An empty pizza box
- Aluminum foil
- Plastic wrap
- Black paper
- Scissors or a box knife
- A pencil or stick
- S’mores stuff!  
(graham crackers,  
chocolate bar,  
marshmallows)



## Before we get started...

This project will only work on a really **sunny** day. While you're outside, be sure to protect your skin by wearing sunscreen and standing in the shade as much as you can!



## Step 1

Use scissors or a box cutter to cut a flap in the lid of the pizza box. It might help to trace it out first before cutting.



**Caution: Have an adult help you with this part.**





## Step 2

Wrap a sheet of aluminum foil around the inside of the flap you just cut. Make sure the shiny side is showing. Lay a sheet of foil at the bottom of the box. The black sheet of paper goes over this.



**Helpful hint:** The foil might not stay on its own, so you may need to tape everything in place.

### Step 3

Assemble your s'more! Leave the top cracker off. Place your s'more on the black paper and lay a sheet of plastic wrap on top. Prop the flap of the oven up with the pencil (or any stick). Now let the sun work its magic...



**Helpful hint:** I recommend placing a thermometer inside the solar oven so you can actually see how hot it gets!



# TICK TOCK...



Your s'mores should start to melt after about half an hour. Keep in mind that the marshmallows will take longer to melt than the chocolate.

You can make all kinds of snacks in your solar oven, like nachos, peanut butter cups, flatbread pizzas, and cinnamon sugar apples.



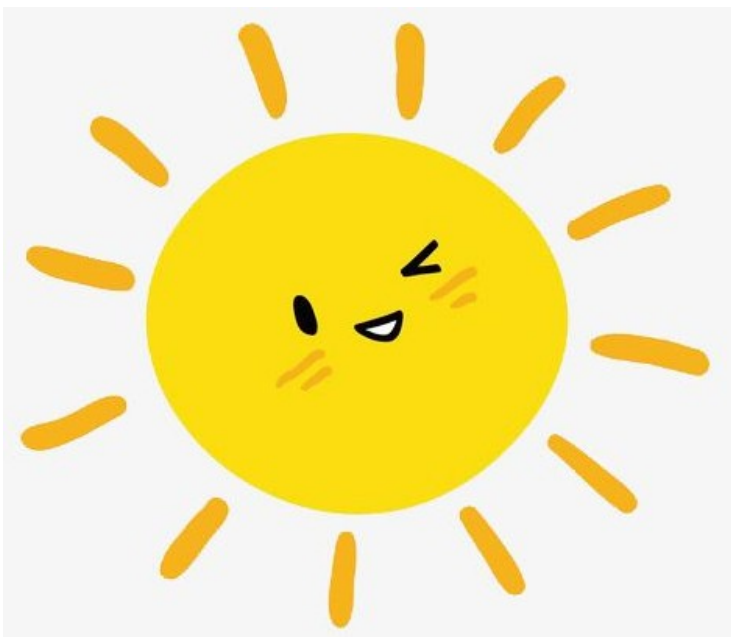
**Disclaimer:** I do not recommend trying to cook raw food in your solar oven.

# What's the **STEAM** behind it?

The star of this project is the aluminum foil. Not only does the foil **conduct heat**, it also has a high **reflective property**, which intensifies the light beaming down from the sun.

The sheet of black paper absorbs the sunlight and increases the temperature. The plastic wrap on top lets the sunlight pass through and traps in the heat.

With these working together, your s'more will be hot in no time!







# Ta-Da!



The s'mores are ready! Keep in mind that this oven can take a while to fully heat up, but the end result is so cool. I hope you had fun with this project. Stay tuned for more virtual events from the Fort Smith Public Library! Stay safe and well.



*Miss Leah*

