# Solar Oven S'mores



## By Xavier Nevarez

#### Purpose

The purpose of this project is to use energy from the sun to make s'mores by heating the chocolate and marshmallows.



## Research

If it's a hot day it will cook faster but if it's a cool day it will not cook fast at all. The sun's heat does not cook your food In the solar oven. Instead the sun's rays change into heat energy to warm up food. The tin foil reflects the sun's rays into the pizza box and the saran wrap keeps the heat inside.

### Hypothesis

I think that the solar oven with the black paper will cook faster than the one with white paper because it absorbs more light.



#### **Materials**

- 2 pizza boxes
- tin foil
- saran wrap
- tape
- chocolate
- graham crackers
- marshmallows
- black paper
- wooden skewer or stick
- glue
- scissors
- white paper
- markers







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#### Procedure

- 1. First, I cut a square into the lip of the pizza box.
- 2. Then, I put the paper on the bottom of the box.
- 3. Next, I taped the tinfoil under the lid.
- 4. Then, I put the saran wrap on the other lid.
- 5. After that, I put a piece of paper on the lid and drew a picture
- 6. I put the graham crackers, marshmallows and chocolate inside the oven.
- 7. I put a stick to hold the lid.
- 8. I placed the solar oven in a sunny spot on the driveway.
- 9. I waited and checked to see if the chocolate melted.
- 10. I ate the s'mores.

## Data

## It was 77 degrees outside. I cooked it for almost 2 hours. I set the box towards the sun.





## Results

I noticed that the chocolate in the oven with the black paper melted slightly more than the one with the white paper. The solar oven melted the chocolate and marshmallows. I loved the smores they

were amazing.





#### Conclusion

In conclusion the solar oven used energy from the sun to melt the chocolate and marshmallows. It actually worked. I learned that we can use the sun's energy to heat food. Black paper took in more heat than the white paper. Now I want to try heating a pizza in my solar oven.

