



Portable solar cooker





Ask

<u>Criteria</u>

- If it cook a s'more
- If it can cook in under five minutes
- Has to be portable



- <u>Time</u>: created and tested by January 22nd
- <u>Materials/Money</u>: ten dollars\$
- Fifty% percent has to be made of recycled materials



What problem am i trying to slove?

My problem in the world is that a lot of people can not afford a lot of nice things or have no food. My problem is that people want food. Yeah there are a lot of charities out their, but the problem is how are they going to cook the food? That's why I am going to make a cheap portable sun cooker so they can eat their food nice and warm!

Imagine



Step one: put all the tin foil on the spots were they have to go Step two: put tin foil on the bottom Step three: place placy glass on

the top Final step add black tape around

the box to keep heat in

Research

https://www.nationalgeographic.com/peo ple-and-culture/food/the-plate/2015/08/ 04/want-to-cook-sustainably-go-solar/

https://www.solarcookers.org/





Test

I changed my variable because the marshmallow wouldn't melt so I recorded how long it took to melt the chocolate (remember this was a winter sun 44f)

Variable I am measuring:	Trial 1	Trial 2	Trial 3
Seconds it takes to melt the chocolate	6min	5:16sec	5:36sec

Improve

On this day it was Cooler than it was yesterday (36F) It never even melted!

Variable I am measuring:	Trial 1	Trial 2	Trial 3
Seconds it took to melt the chocolate	We checked it a 4:30	6:00	16:00

Improve

What steps did I take to improve the solution

The steps I took to make improvements was that I found a black plate to make it heat up.

How did I use my test results to make changes?

I use my test results to make me have an idea that I

needed more heat so I added a black plate

<u>What other ideas do I have for improvement, if I were to</u> <u>attempt this design again?</u> I would add some black paper or something dark to help keep the heat inside better