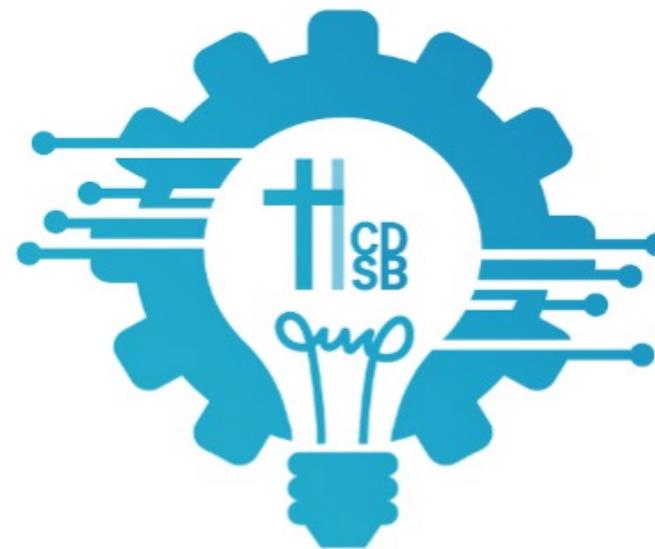


JUNE 16th , 2021



ELEMENTARY SKILLS DAY

Intermediate Eco Challenge

MS. FAMIGLIETTI'S GRADE 7 CLASS
Representing St. Nicholas!



We began the day by learning about the “Ontario Skills Competition”

Ontario skills is a yearly competition for students in GR. 4-12 which promotes the skilled trades and technology.

In the past years, we have attended a **Halton Skills competition** where teams from our board compete to earn a spot at the **Ontario Skills Competition**.

Thank you, Veronika, for getting us excited!

She is a high school student in our board and won GOLD for Landscape Design category at the Ontario Skills competition!



Veronika watch out! I think we could have some future competitors in my class.....





The Intermediate Eco challenge requires students to build or create something that can help our environment. This challenge requires students to display knowledge and creativity.

OUR CHALLENGE:

Use materials around your house to design and construct a solar powered oven that can cook an egg.



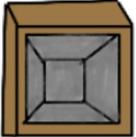
Some students didn't have these, but we got creative and worked with what we had!!



Suggested Materials:
Recyclable materials found at home such as cardboard, string, aluminum foil, newspaper, popsicle sticks, toothpicks, felt, egg cartons, eggs

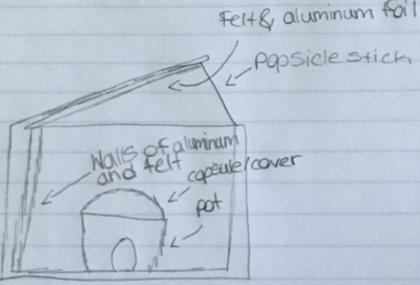
We started by planning out and designing our models!

Tessa and Chloe

Material:	purpose:	diagram:
cardboard	base of the oven	
aluminum foil	reflecting the sun/insulator	
toothpick	hold up the flap of the oven	
plastic wrap	to cover the opening	

Material: Cardboard purpose: A base for the oven.
 Felt purpose: An insulator to trap heat.
 Hot glue purpose: To stick things and hold things together.
 Aluminum foil purpose: To reflect light onto the egg.
 Popsicle sticks: To hold things in place.

Design



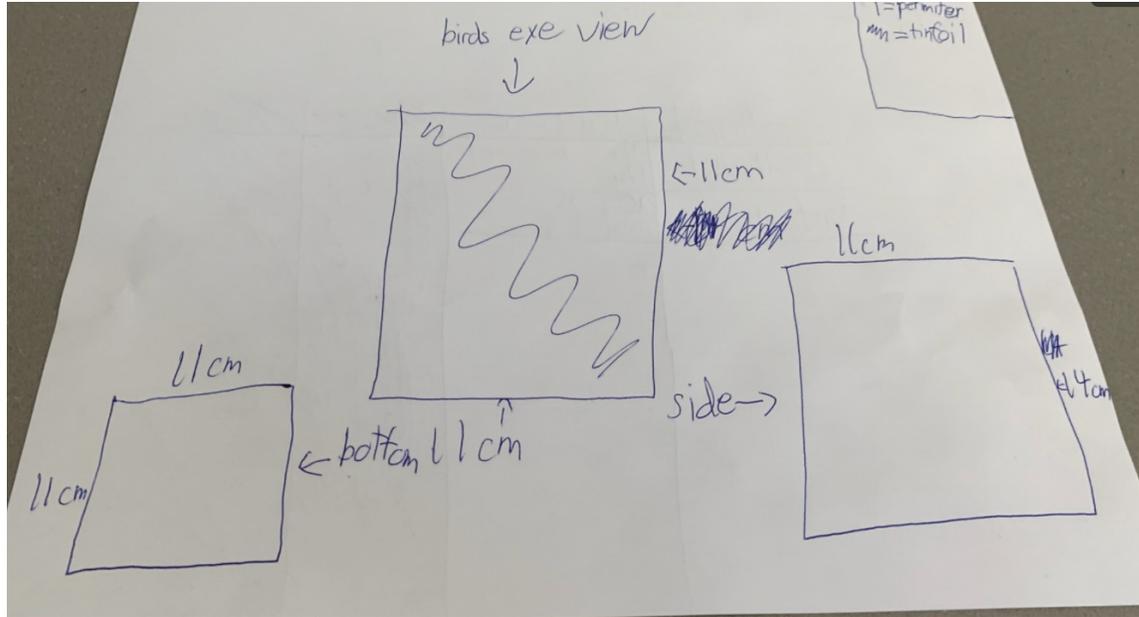
In the box, the felt will act as an insulator, trapping heat. Once the sunlight



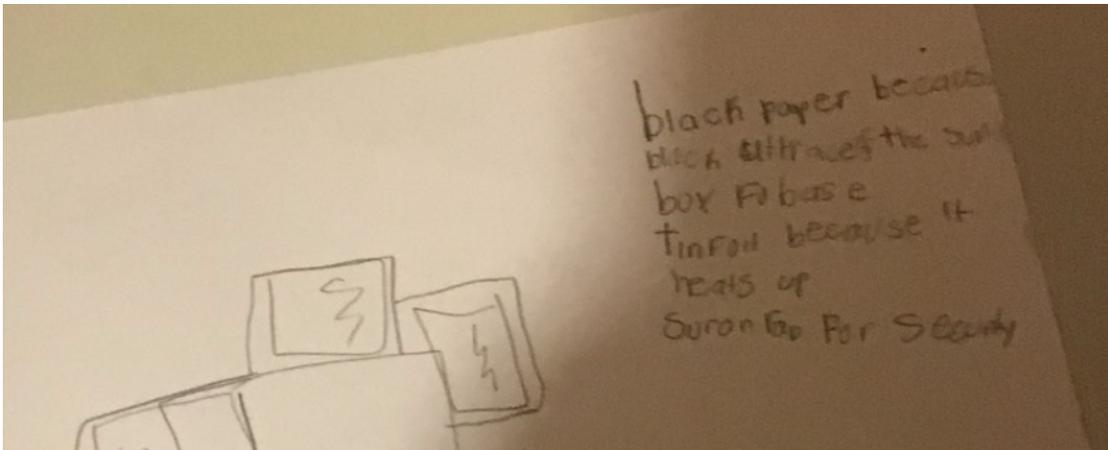
Valentina

Aurora

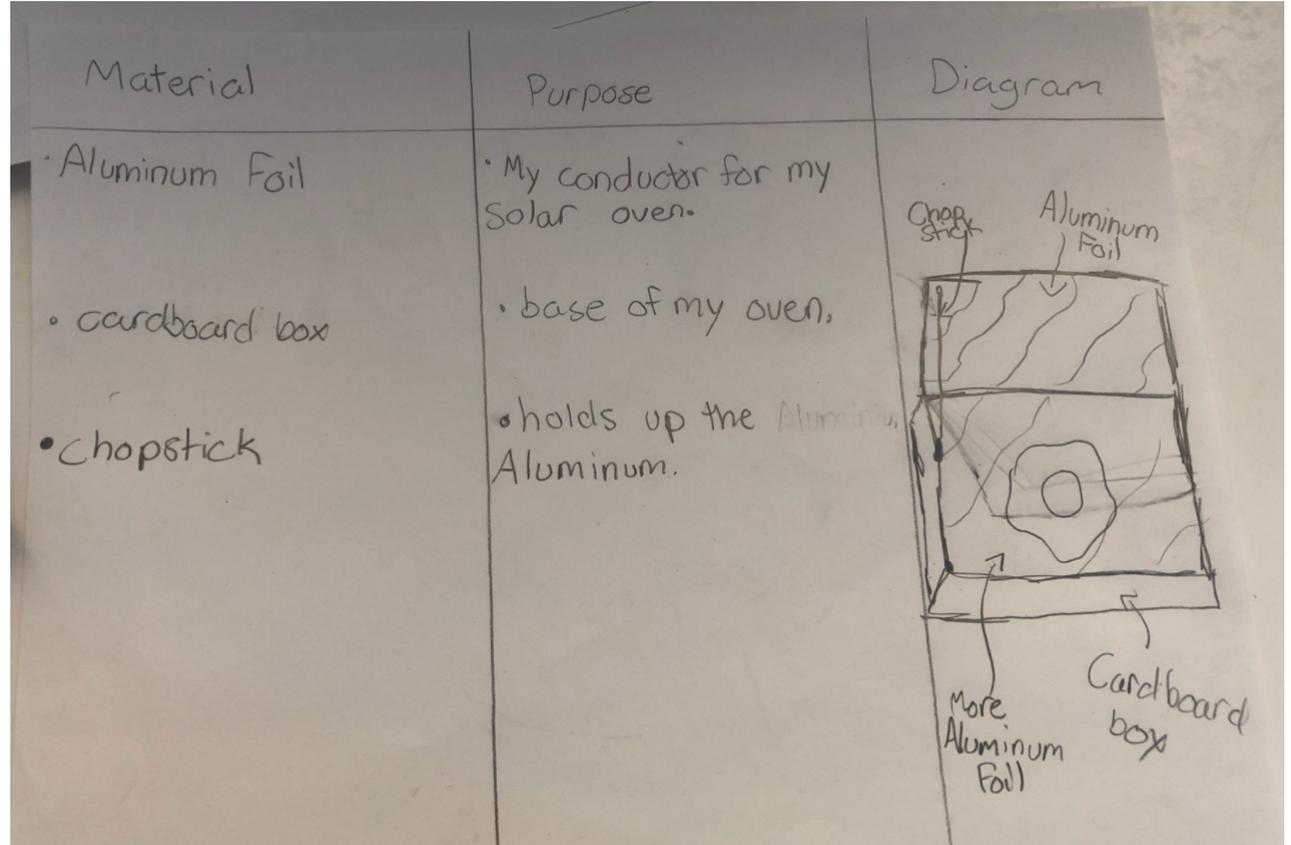
William



Teggy

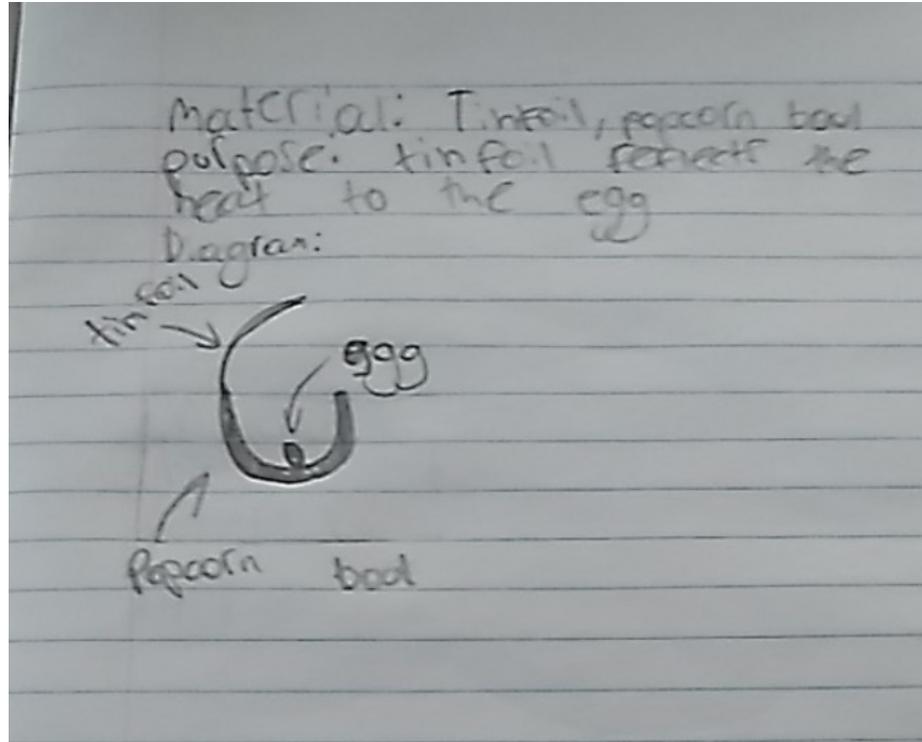


Jillian

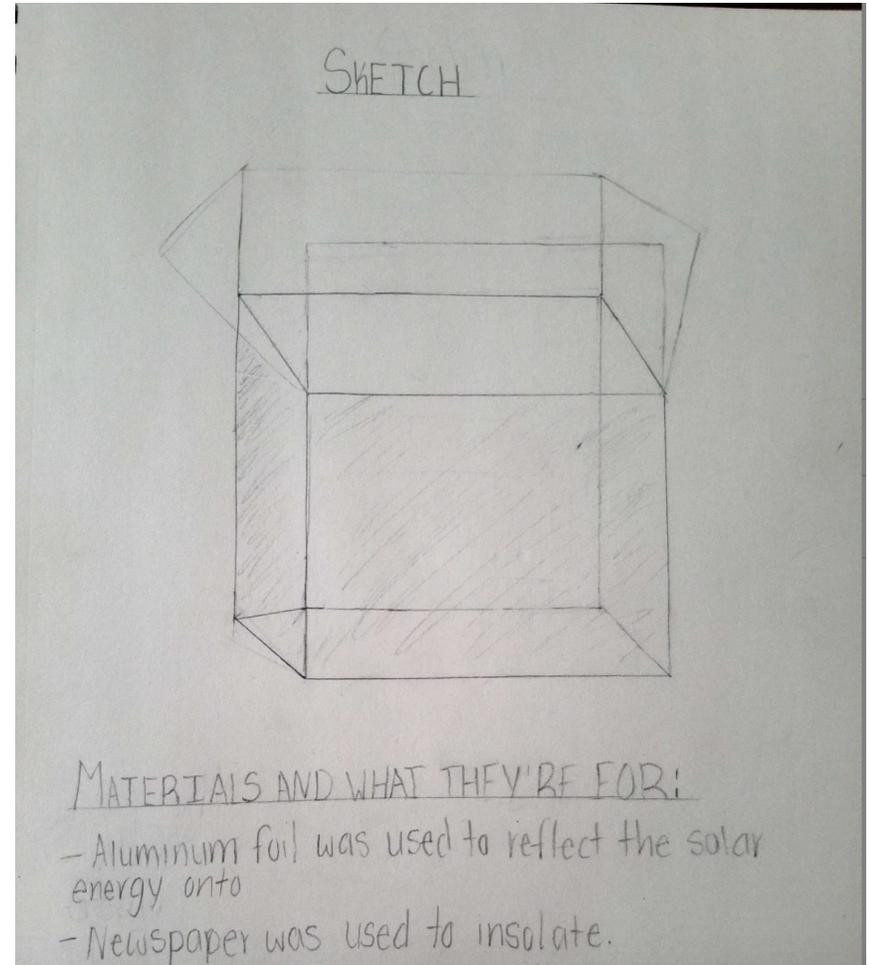


Material	purpose
Cardboard	this purpose is to be the base part for the oven, and help build structure for the oven.
Aluminum foil	this is to get energy from the sun and help heat up the oven to cook stuff on it.
tape	this is to hold the oven together so it doesn't break or fall apart.

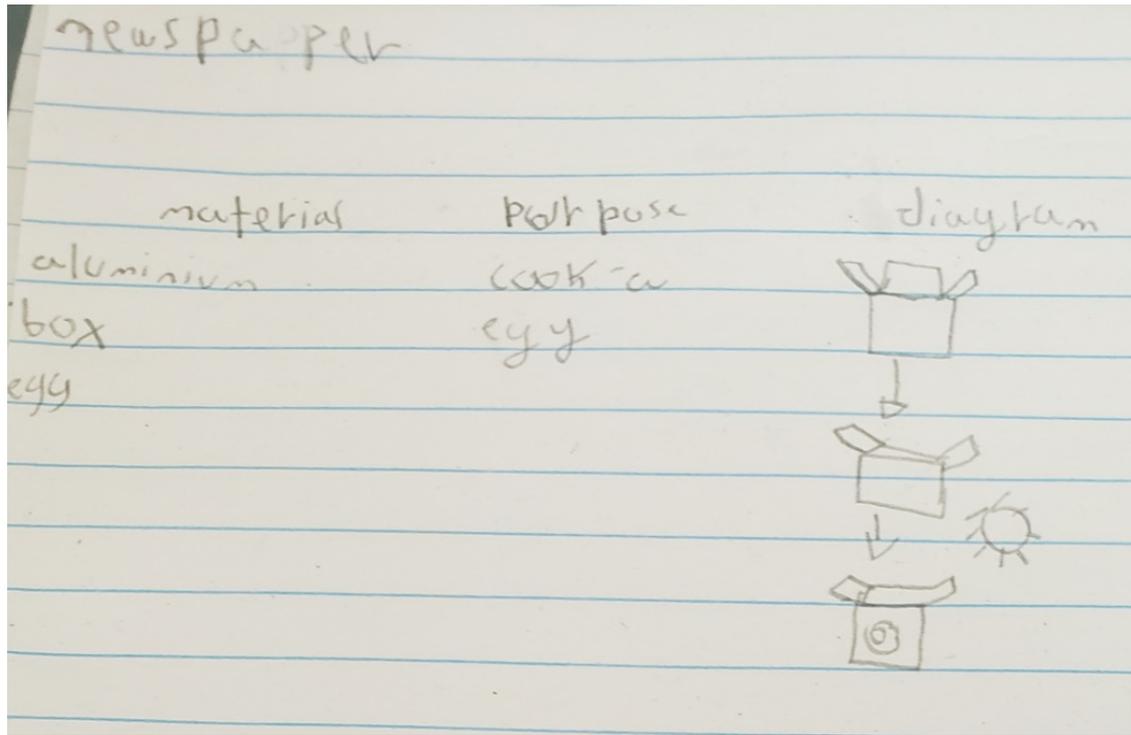
Alyssa



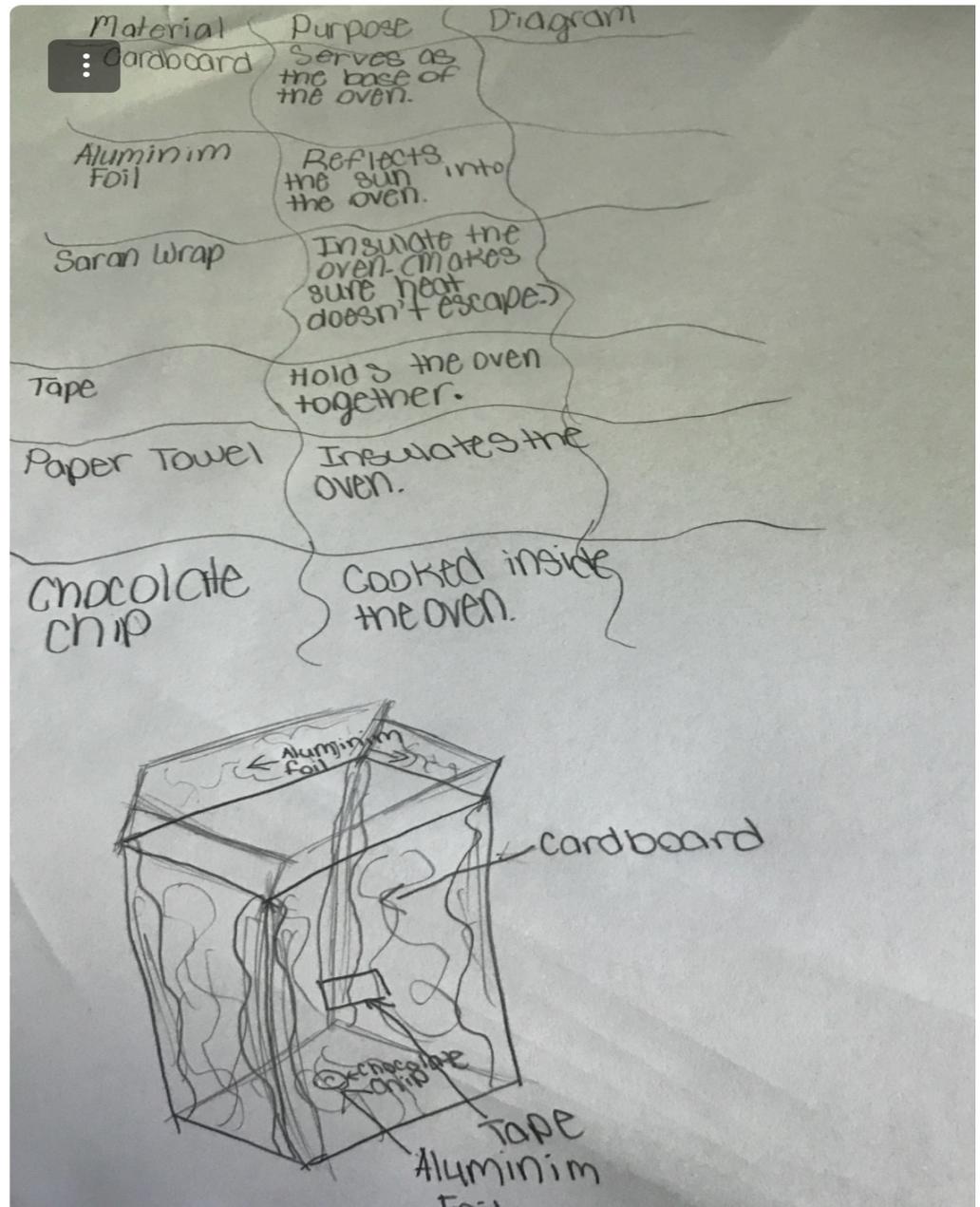
Miguel



Jeovhana and Julyana

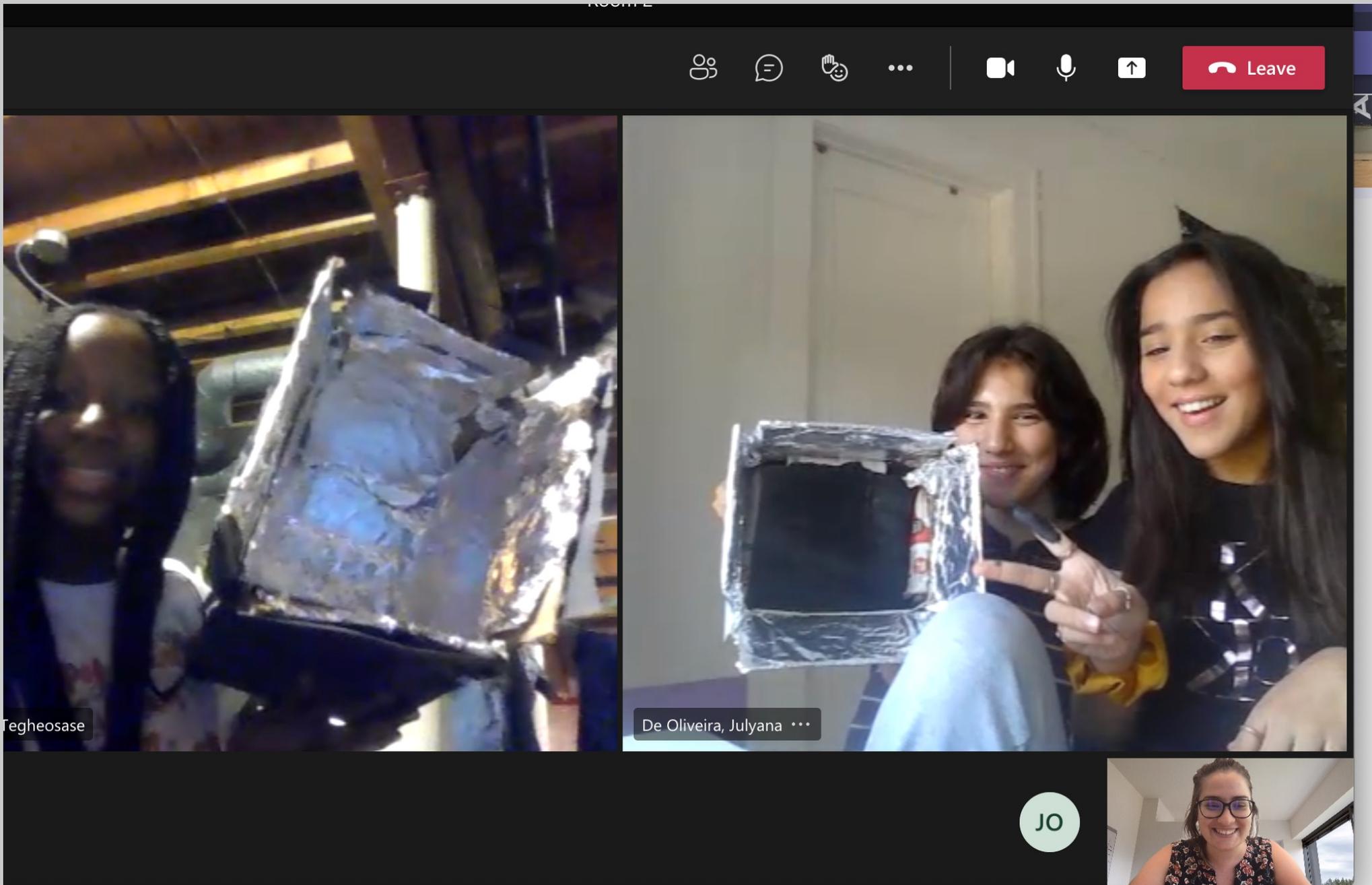


Martin



Elizabeth

Then we started to build our solar ovens!!



10:56 a.m.
at you are ...



Solar ovens complete!



Tessa and Chloe!



Jillian



Valentina



Alyssa

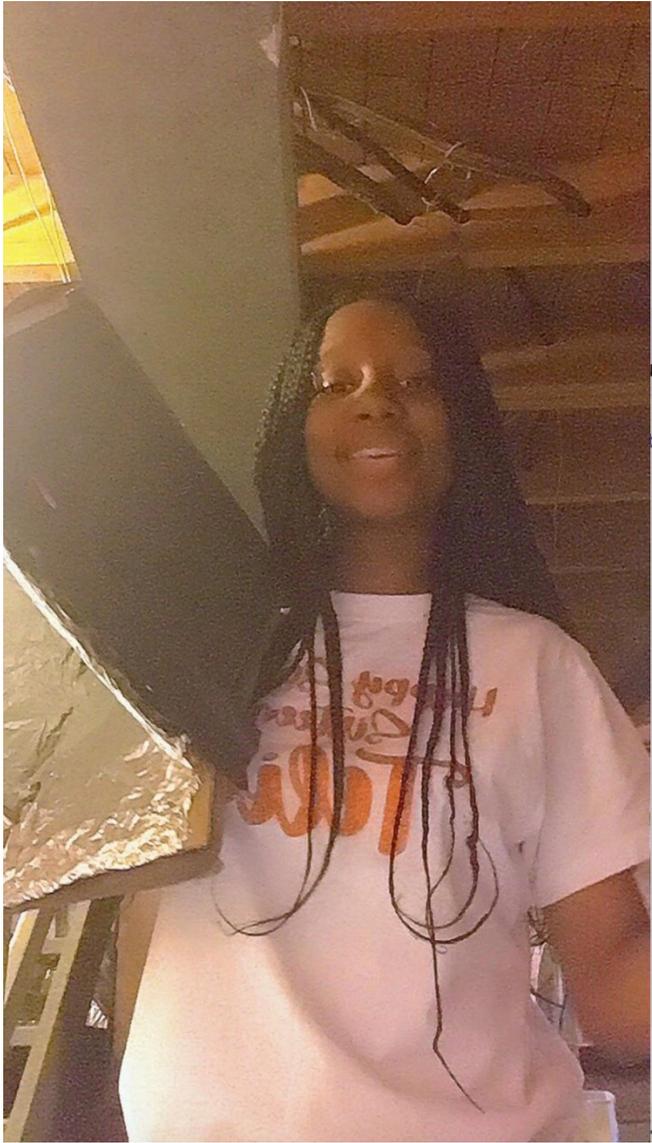


Elizabeth





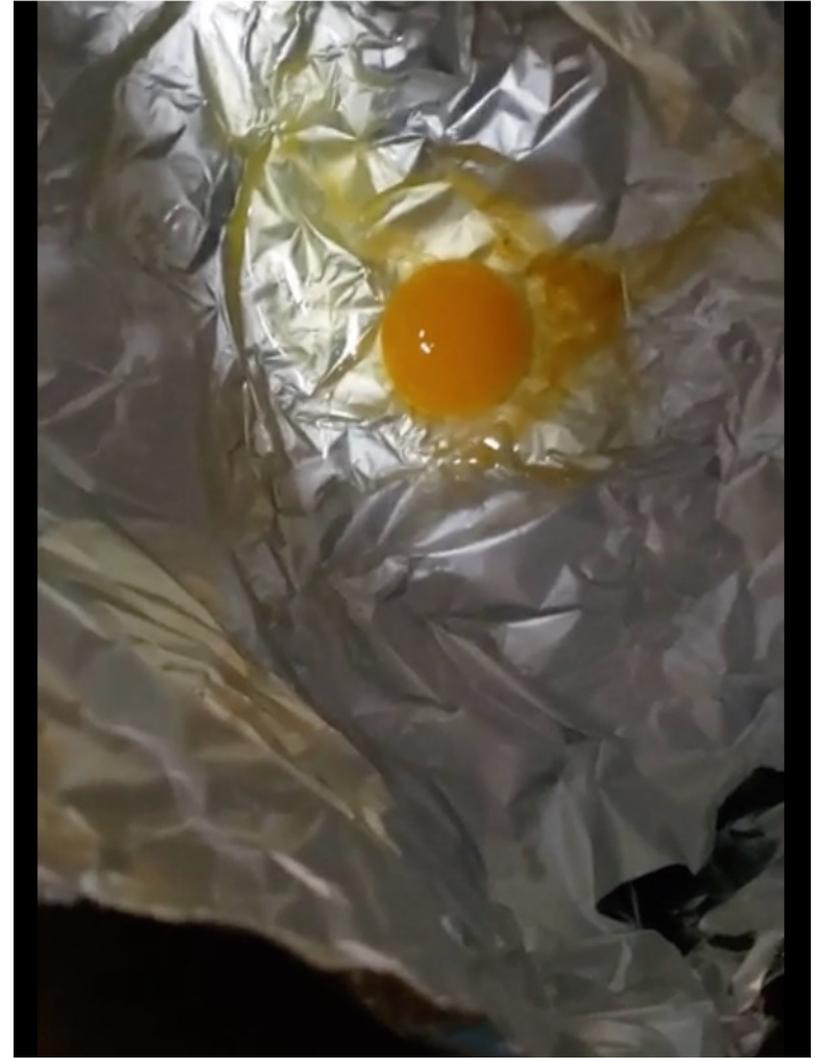
Max, Luiz , and Austen



Teggy



Aurora



Martin

But will they work?

Write a hypothesis: How long do you think it will take for your egg to cook?

"I think it'll take
20-30 minutes"-
Aurora

"I think it'll take
20-30 minutes"-
Elizabeth

I think my egg will take 25 minutes
to cook in my solar oven.- Ms. Famiglietti



"I don't think
it'll cook" -
Miguel

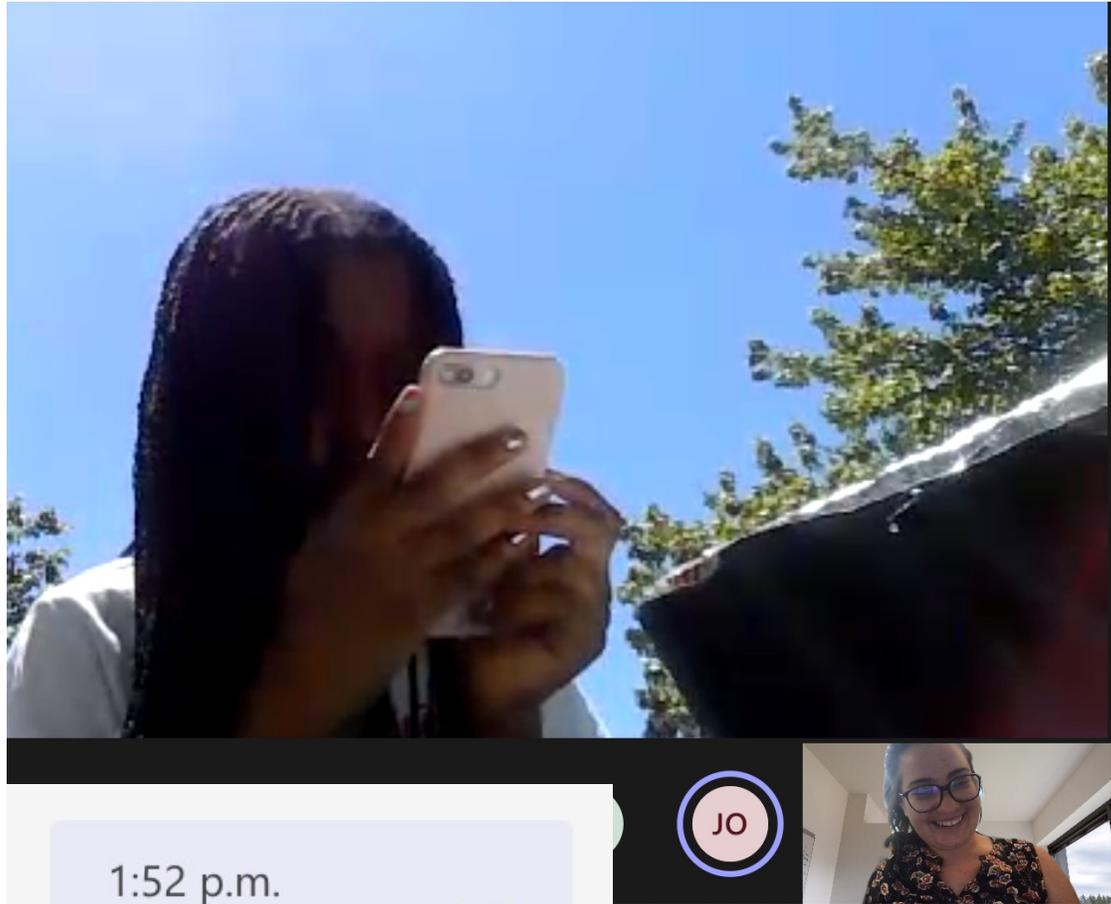
"45 minutes" - Chloe

"30 minutes" - Jillian

"20 minutes"-
Alyssa

"35-45 mins" -
Jeovhana

How long did it take for your egg to cook?



“I think it actually got less cooked...”

“It’s been 1 and a half hours...”- Austen

“Hopefully, it’ll be ready at the 2 hr. mark”
- Elizabeth

“It’s half cooked but I would not eat this egg”
- William

“Can we eat it , I’m hungry”- Miguel

“Aw man it didn’t cook” = Aurora

1:52 p.m.

Teggy look up 😊

JO

We had to be very patient....

The results are in!



1:55- The egg was first put in the solar oven.



2:15 - The egg started to warm up.



2:55 - The egg was boiling hot.



3:30 - We cracked the egg and saw that it started to harden.



4:00 - The egg whites started to leak out from the shell, so we knew it wasn't fully cooked.



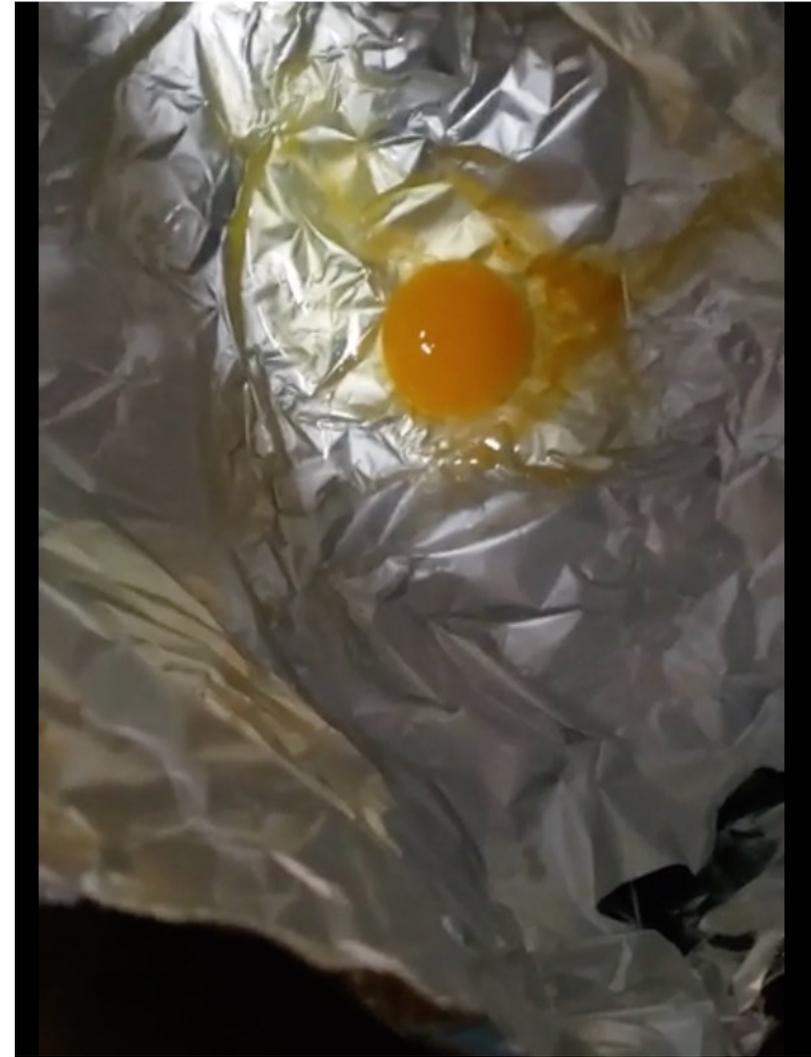
6:00 - Two hours had passed and the egg still hadn't cooked.



Elizabeth



Aurora



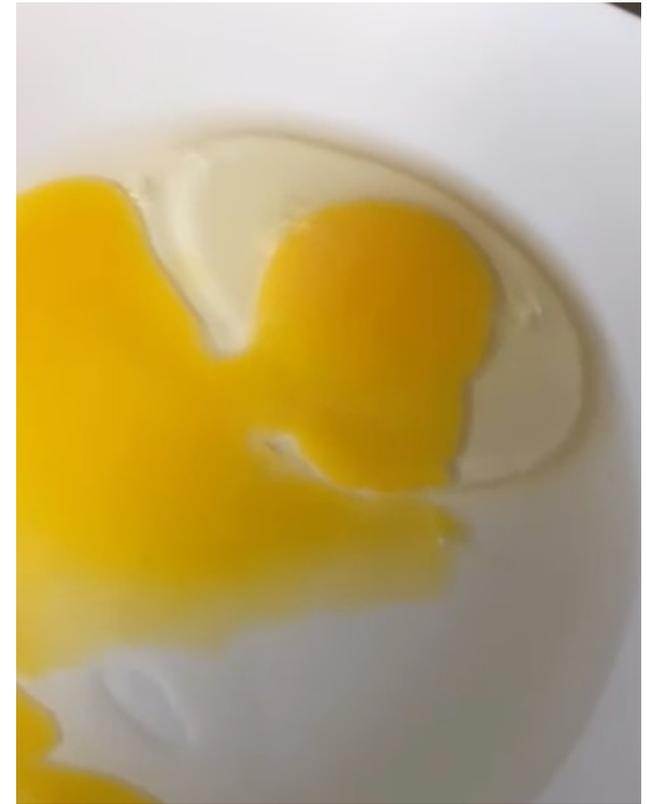
Martin



Valentina



And we only had one explosion!



Jillian

Reflecting on our designs...

(what were the strengths of our designs)

why some of our ovens didn't or took a long time to cook the egg

(what could we improve if we were to do it again)

The clear wrap helped keep the heat in and not escape.

If I could improve my design, I would put black construction paper on the bottom to help attract the sun.

If I was able to do the challenge again I would do it on a hotter day, and put it in a sunnier spot in my backyard.

I

2. I think the black fabric definitely drew attention to the egg, and the foil helped reflect the sun onto it.

3. I think we could have wrapped the plastic wrap more tightly, and I think we could have held the top flap up with a stronger support beam.

3. I think I could have used a smaller box and I also could have put black inside my box rather than outside the box.

Some of our ovens were a success , some of our ovens need some readjustments...



But overall, we learned, had some laughs, and a great day!