Dec. 16. 2025

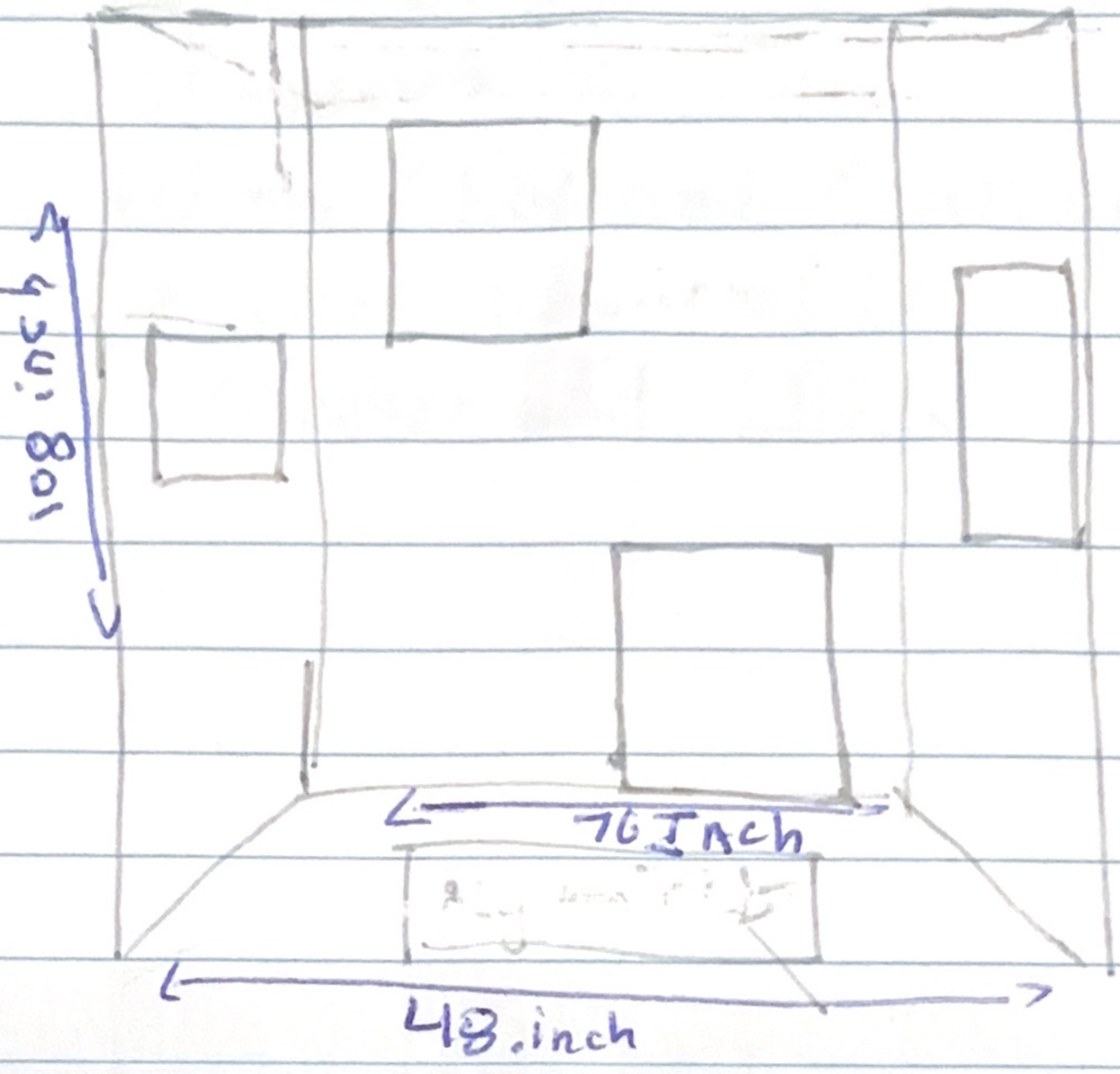
Science Fair ~~Progect~~ Project log book

I ~~Fuige~~ figured out my sciencefair project name. Building a Fruit and Vegetable battery.

But today I could not enter Google Classroom. looks like I need the classroom code to login.

Dec. 17, 2025 Revise my Question!

What different types of fruits and Vegetables produce more energy?



Jan-2-2026

Grade. 5. Science Fair

Materials

- Lemon, Apple, potato ☐
- Copper penny ☐
  or sheets
- Zinc nails ☐
  or sheets
- Wires (Red and Black colored)
  (Aligator Clip wires) ☐
- Mutimeter ~~and~~ or LED ☐

Jan. 3. 2026 Science Fair

~~I will~~ Wait, Wait, Wait!
I got a new idea! My new project
will be "The Biomass Electricity
Experiment." I got all my materials
Soooo, I think I will be good!

Titles: Power from Peels
or
Biomass Electricity

Jan. 4. 2026 Science Fair

I wrote a document on my New experiments. (All by myself.) Tomorrow I should ask Mrs. Harris if I can change my projects and rechecks my project Question! If she says Yes, I can stand on Tuesday.

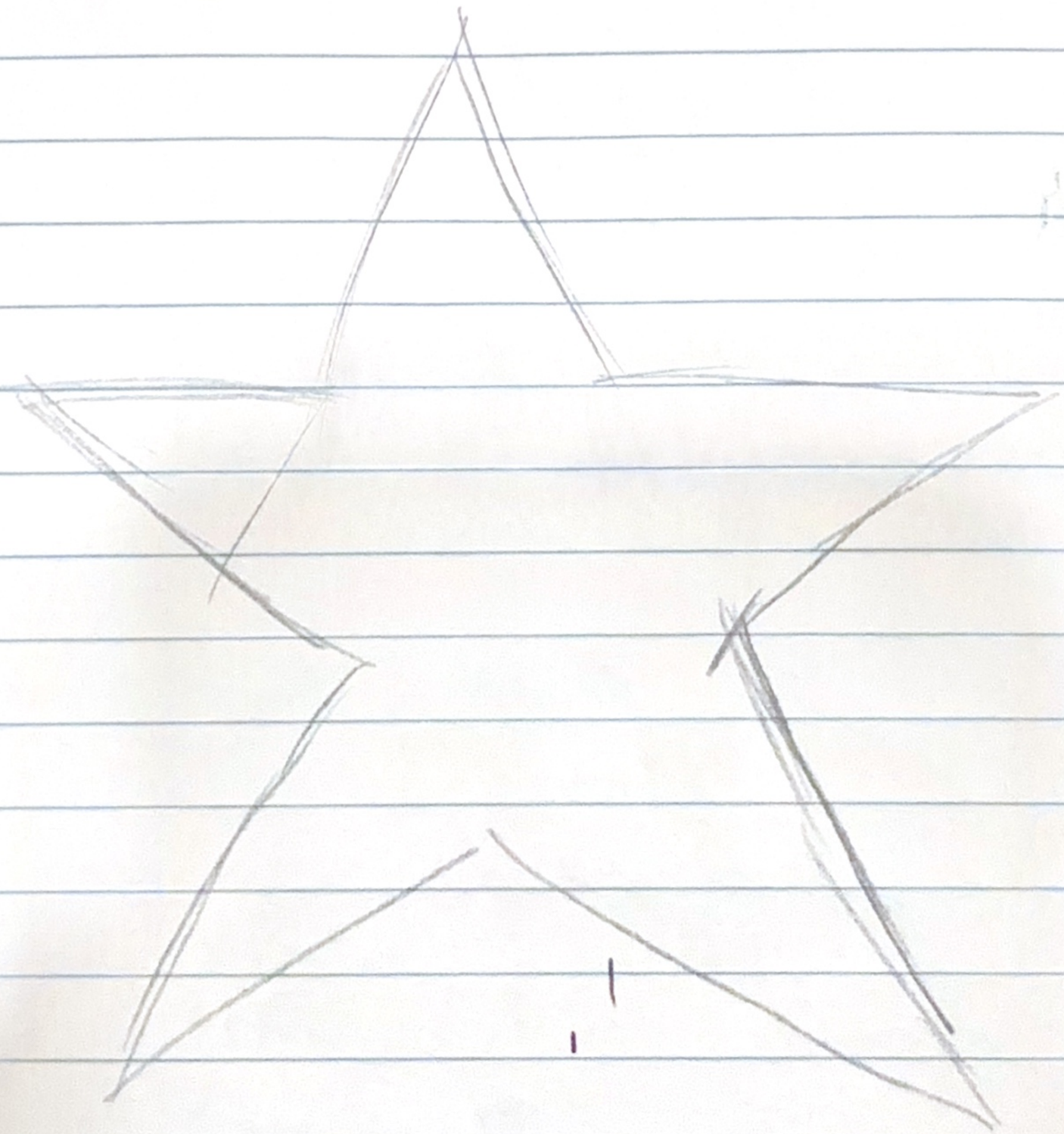
Materials For New projects.

- Copper sheet
- Zinc sheet
- Fruits pulp (or)
- Fruits compost
- Aligator clip wires
- Multimeter and LED
- Paper cups
- Aluminium foil
- Toothpicks
- capacitors

Jan 05 2026.

Power from Peels?

- Hey yall! Today when I was in school I asked Mrs. Harris if I would change my question. She said sure but I will have to wait until tommorow for the science Fair meeting to revise it.



Jan 6 2026

Today I asked Mrs. Harris if I can change my Question and she helped me revise it

"How much voltage do certain Fruits produce?"

Types/amount of

Jan 9 2026

I got all my items ready! (Except the trifold.)

- [ ] Molbi meter
- [ ] Bread Board
- [ ] Copper / zinc sheets
- [ ] Aligator Clip wires
- [ ] LED
- [ ] Capacitors

Jan 12 2026.

I read about my things for the experiment.
and I printed the papers

I also learned what variables are!

Independent variable: I F I change the fruit, the voltage increases and decreases by the acidity of the fruit.
(What I change)

Dependent variable: I don't change the Fruit but I keep it the same and measure the voltage by the acidity of the fruit.

(What I measure)

I changed the Dependent variable. The value of the voltage varies from fruit to fruit (Independent variable)

Jan. 15. 2026

Data table Example

Voltage From different Fruits

Fruit	Trial 1(V)	Trial 2(V)	T3(V)
Orange Pulp w/peel (no juice)	0.87	0.88	0.89 0.90
Orange pulp w/peel & juice	0.80	0.80	0.80

Jan. 20. 2026

Today I am going to test the voltage of the whole orange but I ~~took~~ squeezed out the juice for trial one!

Fun Fact: When I took out the copper and zinc sheets and measured the Orange with pulp and peel, (No juice) there was still a bit of voltage! 0.11

But how!: The copper and zinc sheets are insulators and when I checked the voltage it was high. But the fruit it self has electricity in itself so it produced very little but some energy.

What is that!: Insulators and conductors and very opposite things. ~~Insulators~~ conductors like copper and zinc sheets build energy. while Insulators on the other hand like wood and cardboard stops and block the energy that is passing through.

Jan. 25

Today I changed things up a bit.

I took 10 mini oranges no juice,
1 Big orange with juice, Another Big orange no juice
2 lemons with no juice and 1 apple no juice.
I have to reprint papers For my exp

Data Table

S No.	Fruit Pulp	Voltage
1.	1 Big Clementine w/o juice	0.81
2.	1 Big Clementine w/ juice	0.88
3.	2 Lemons w/o Juice	0.820
4	10 mandarines w/o Juice	0.88
5	1 Ambrosia Apple w/o Juice	0.95

Jan. 30. 2026

I figured what my hypothesis [redacted] will be!
I also got my trifold! [From Staples]

Hypothesis: Does the thickness and concentration of fruit pulp affect the voltage produced by fruit batteries apart from acidity?

- Fruit acidity influences voltage production
- pulp thickness and concentration may also change how much voltage is generated.

I also figured out my conclusion and everything else but its a suprise!

Feb. 2. 2026

I also figured out my amazing Introduction.

Introduction: Did you know that fruits can produce electricity? Electricity is created when electrons move from one place to another. This usually happens in batteries or power plants. But some fruits can also produce electricity because they contain natural acids and liquids that allow a chemical reaction to happen between 2 metals. This is a fruit battery. I wanted to investigate whether acidity alone affects voltage by comparing different fruit pulps and measuring their ability to power red and green LEDs. This project also highlights the potential of using Fruit waste as a renewable energy source.

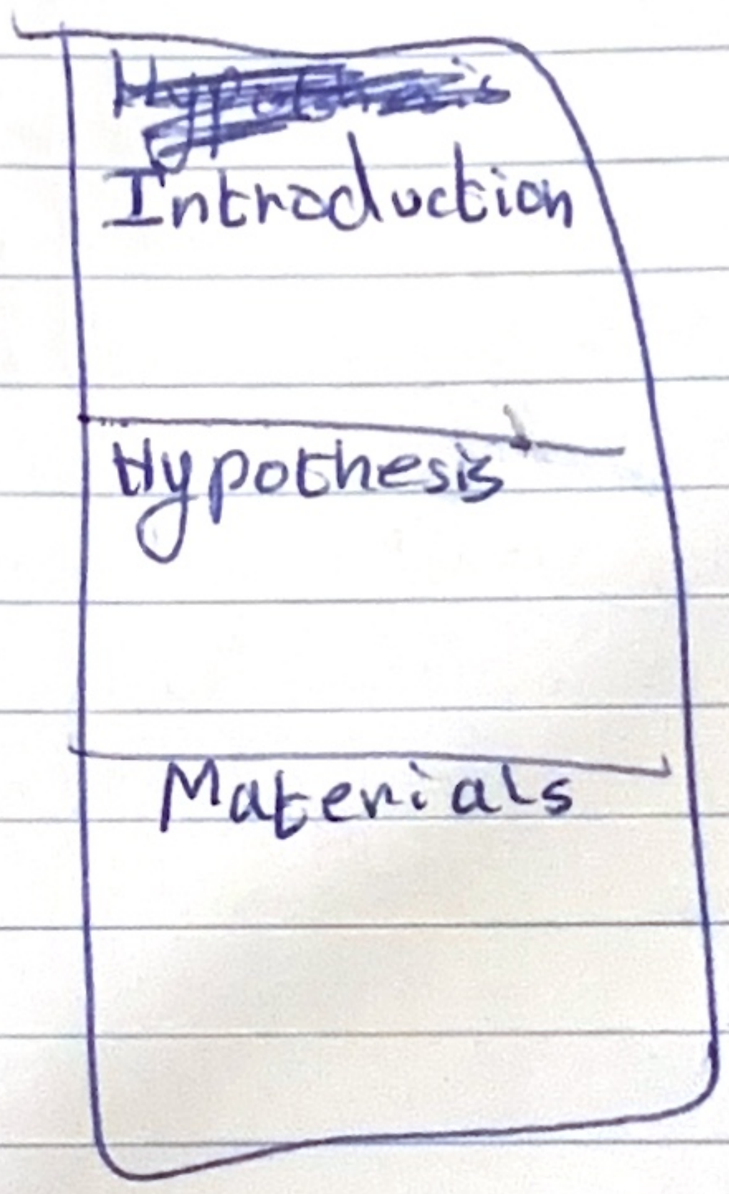
Feb. 3, 2026

Whith my Trippld I made 3 sections on the left panel

1section: Introdubion

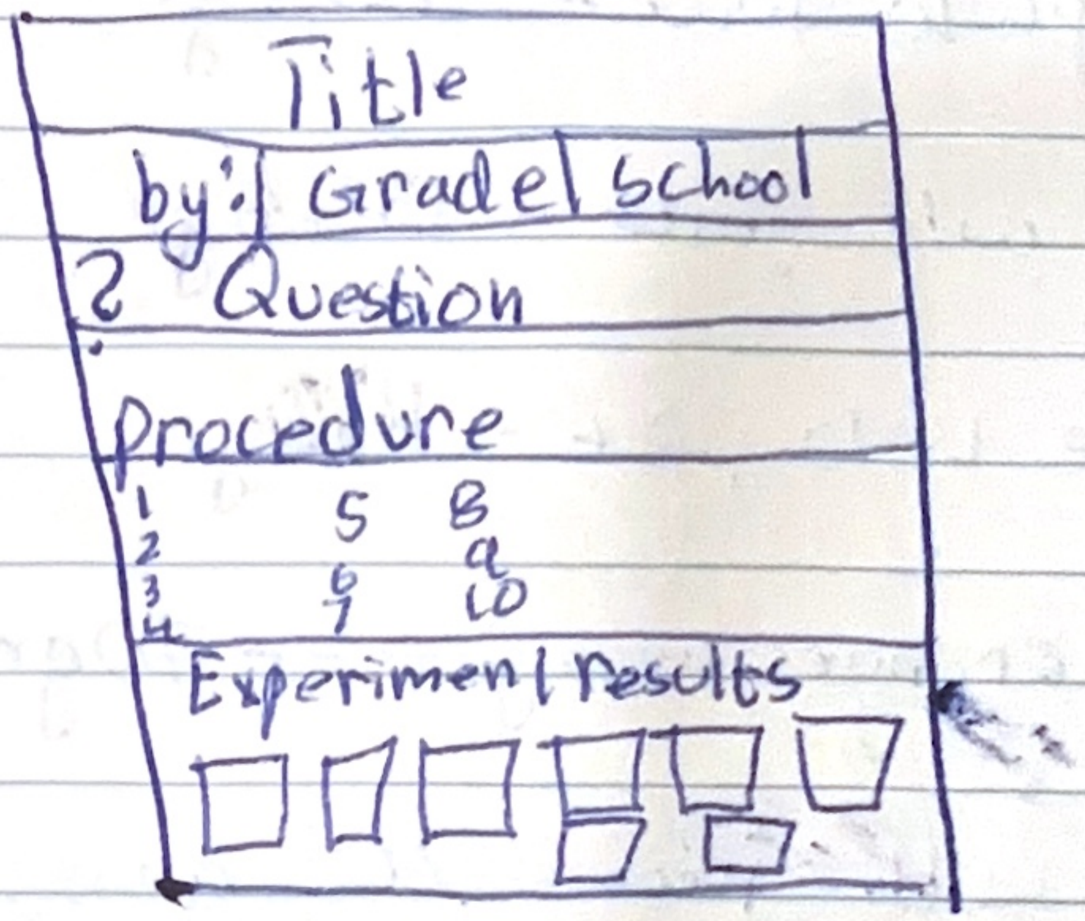
2section: Hypothesis

3section: Materials



Feb, 4, 2026

Today I finished my middle pannel of my tripold.



Feb, 6, 2026

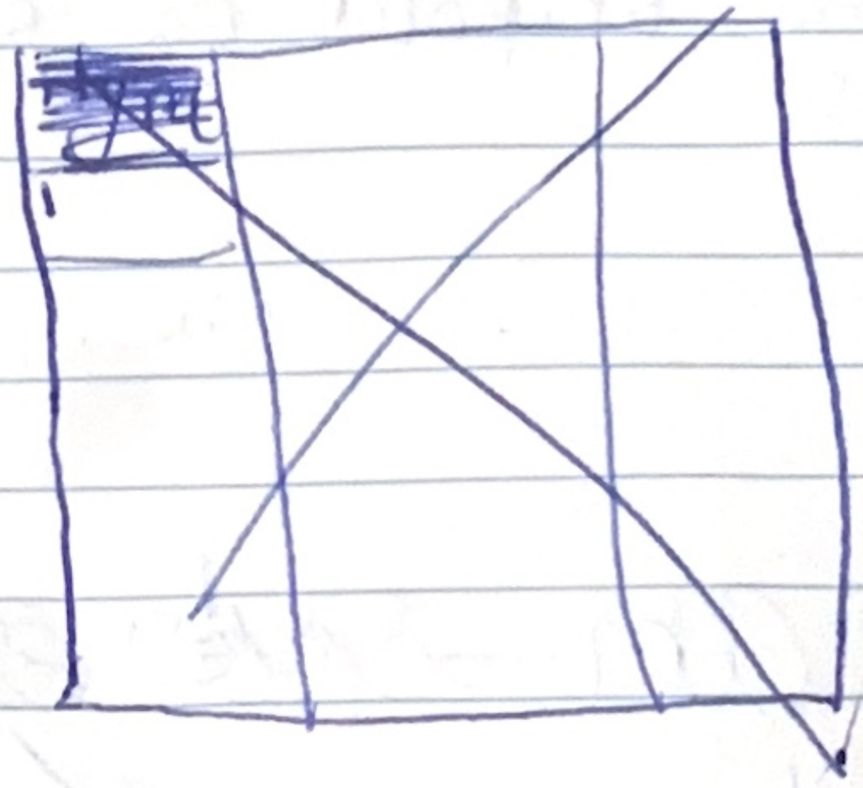
I mesured the dipperents fruit sorces in grams

* weight of the cup - 7.2 gr

1. Apple pulp w\o juice - 92.8 gr
2. 2 Lemon w\o juice - 135.8 gr
3. 1 orange w\o juice - 180 gr
4. 10 small oranges w\o juice - 70 gr
5. 1 orange with juice - 208 gr

Feb, 7, 2026

Today I finished my whole Tripold!



Hypothesis

Introduction

Title

by | Grade | School

Question

Procedure

1
2 5
3
4 6 9
7 10

Analysis

Conclusion

Hypothesis

Materials

Experiment

large scale
Bio-energy

~~9~~ 9-11
Feb, ~~20~~, 2026

I colored every thing on my brifold! I also brough my brifold to school!

I am soo ex-nervous!
↙
Cexcited/nervours!

Feb, 13, 2026

Ms. Harris posted a list o questions that the judges might ask. So I went through it!

Feb, 15, 2026

With all the effort I put
I took a bredk!

Feb. 20, 2026

I figured out my speech!

Feb. 23. 2026

I got to pratice my projects with all the Gracios in the school!

Feb. 24, 2026 Science Fair...

I got to present to 3 judges!