

# science fair ♥

Oct. 20 2025

ask question that you don't know  
observe take guesses commit to cheat  
form, next week commit to stuff. don't  
do it at school on students. no shining  
flashlight in eye see if stuff walk  
straight. nothing in a pro create. do  
experiment. nothing easy. no animal  
testing. something you can't just answer.  
something you are interested.

Oct. 27 2025 talking about research use  
google scholar not google. google has AI  
response. scholar has real answers that  
scientists actually said and proved. don't  
use wikipedia coz anyone can add if u are  
scroll down down down.

# What I'm doing

Experiment on farts called  
Stumache in a bottle based  
on an book about farts facts  
which animal has most gas with  
surten foods

Start



Starting date: Nov. 14 2025

I started with drawing the things I am going to test which is dog, human, cow and a bunny!

The main question is who will produce more gas, with what food?

- my guess: the cow or human, because I don't usually see dog's or bunnies fart that often.





I started from choosing a bottle

I think 500 milliliter water bottle is gonna be enough to produce realistic gas.

I marked each bottle as an animal I drew: cow, horse, bunny, dog and human empty stomach too

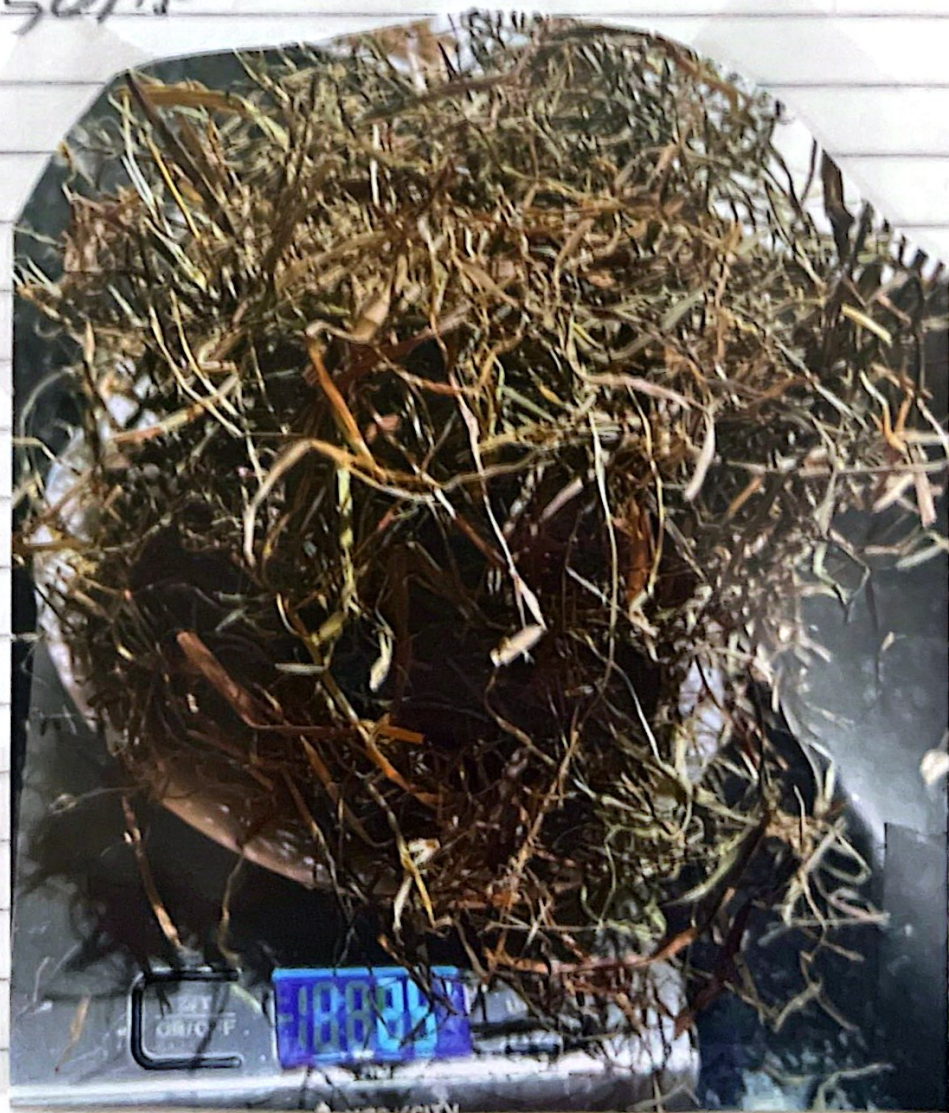
I started by warming up some water and preparing the sirtin food: cow lettuce bunny: carrot and leaves grass dog: dog food human rice horse: hay empty stomach: nothing

am curious if a balloon  
is gonna explode

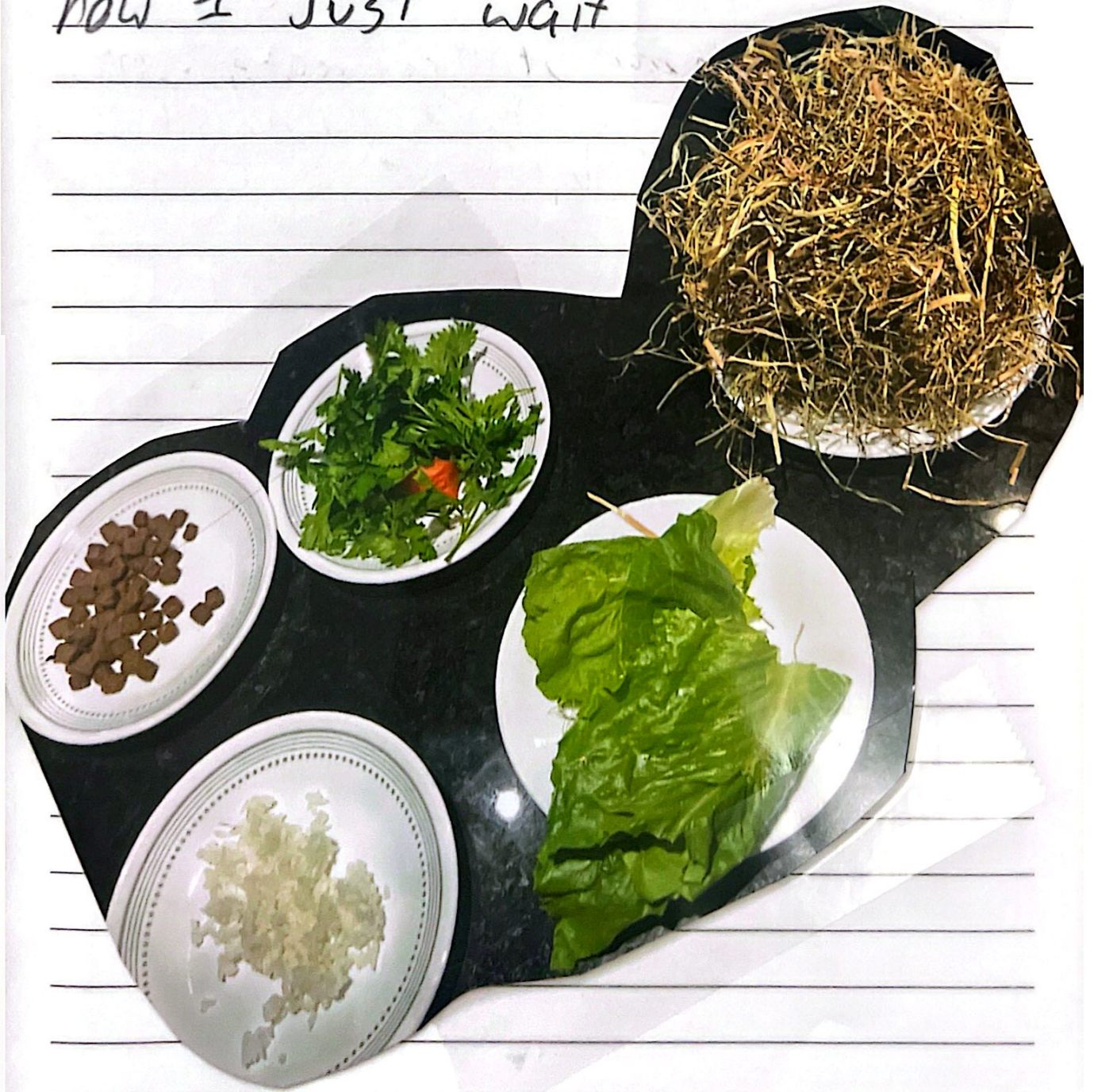
25 gram of each food

I did not know 25 gram of hay  
is so much!

all of them are staying flat  
except dog and empty stomach. they  
are going inwards for some  
reason!



I did 25 gram of each food to make the food bacteria I mixed 2 tea spoons of sugar 1 tea spoon of yeast and 200 millileters of warm water. I added 30 millileters into each bottle. I put balloons onto and now I just wait



Day 2: Nov. 15 2025

the horse, empty stomach and dog deflated I am thinking it might be cause the air escaped so I am going to put on new balloons on all of them. We are gonna put more sugar in it to wake up yeast and a teaspoon of hot water.

looks like all the balloons are growing except for the horse which is weird cuz it has the most hay





151 B



	day 1
Bunny	23cm
Cow	21cm
Dog	22cm
empty stomach	15cm
girl	26cm
horse	19cm

# Number 2#

failed I think it  
failed cuz ~~I~~ didn't put  
enough ~~water~~ water. I need to  
add more water and make  
it room temperature not boiling hot!  
~~It~~ will need to use different  
balloons cuz the air is escaping.



# Attempt #3

I'm trying to find a way to do this without the gas running away. So I got Helium quality balloons. I will put double balloon on all of them so the air won't run away and I will seal it really hard. I got glass bottles. I need to increase the amount of food so the yeast has more to eat! to increase it I cutted the food in smaller portions and ~~and~~ I will add two table spoons of sugar. I will increase water to 300ml and use warm water not hot 40°C.



~~When~~ I came back after 2 hrs and saw that the balloons are like the size of my head! So I decided that I'm gonna measure them every 2 hrs!

I reseted the empty stomach because I found a hole in it.



	2 hours	4 hrs later	5:35 PM	6:27 PM	12:38
cow	46cm	45cm	<del>2</del> cm 49	49cm	
horse	45cm	52cm	<del>22</del> cm 54	53cm	
puppy	38cm	<del>51cm</del> <sup>41cm</sup>	18cm 49	51cm	
dog	<del>4</del> cm	53cm	<del>53</del> cm 54	53cm	
girl	43cm	53cm	<del>53</del> cm 54	53cm	
empty stomach	<del>16</del> cm	16cm	<del>12</del> cm 33	40cm	

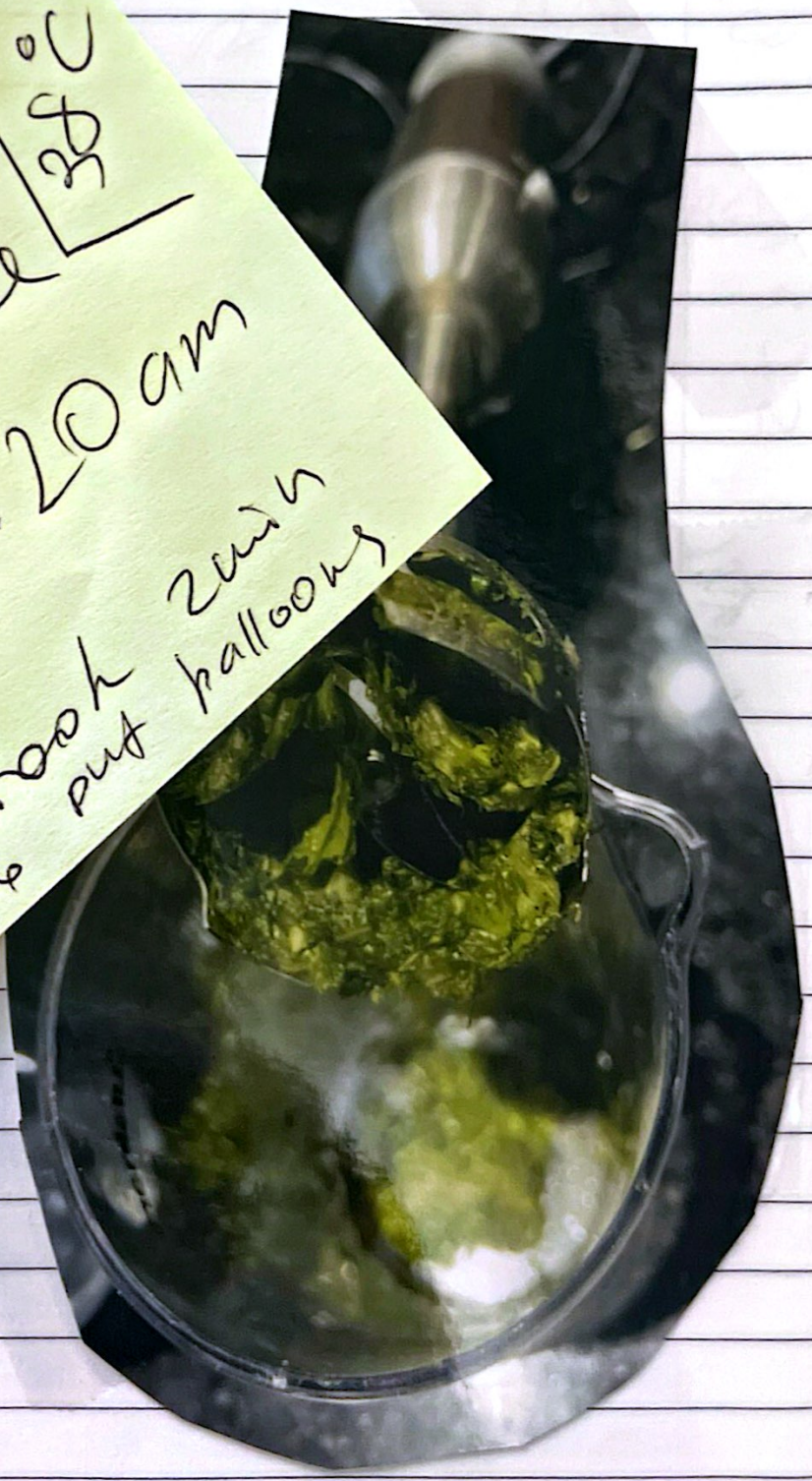
restant

Start  
time

38°C

10:20 am

to  
hook  
put  
balloons



# Attempt #1 Last

I'm gonna measure every

15 min to finally get the graph to understand what food makes most CO<sub>2</sub> gas I cut all the foods very very tiny to generate more sugar for the yeast

I measured 20 grams of each food

horse: hay

bunny: carrot broccoli bunny food

dog: dog food

girl: rice w/ meat

cow: lettuce

empty: nothing

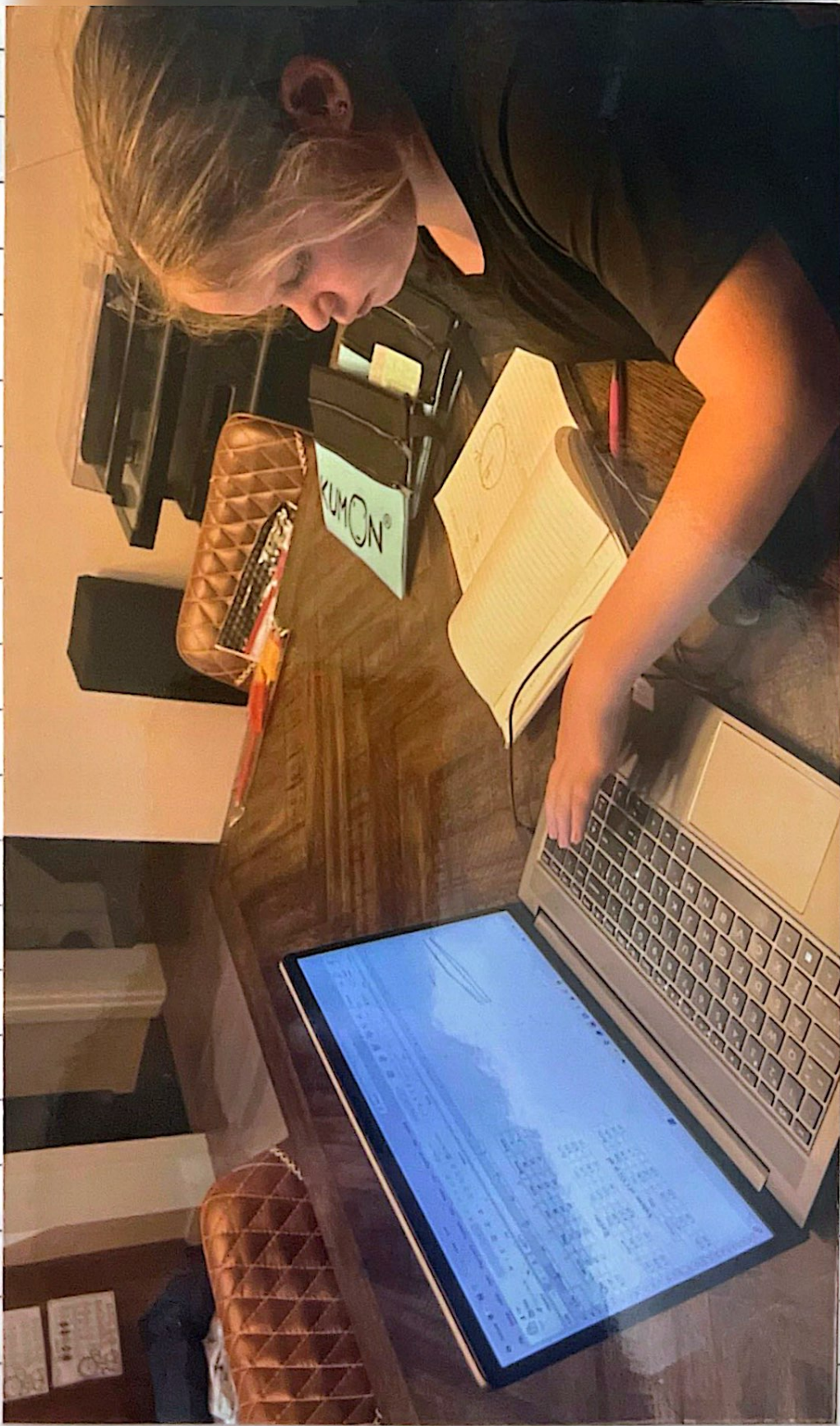
I added 200 milliliters of water 37°C with half spoon of sugar I activated yeast in a separated cup warm water 37°C with half spoon of sugar waited for five min for foam to appear and potted into bottles and I put double balloon and secured it a lot with tape and started measuring every 15 min





Time	horse	Dog	gir	cow	bunny	empty
10:31	29cm	26cm	23cm	22cm	24.5cm	20.5cm
10:45	30cm	34.5cm	31cm	28.5cm	39cm	24.5cm
11:00	38cm	40cm	38cm	35cm	40cm	29cm
11:17	36cm	41cm	40cm	37cm	42cm	33cm

colder in room

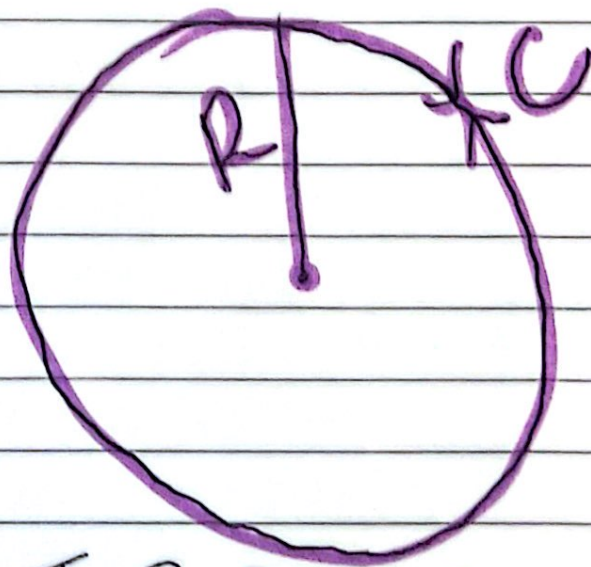


~~radius~~ radius I measured  
circumference

$$R = C \div 2\pi$$

~~radius~~

$$\pi = 3.14$$



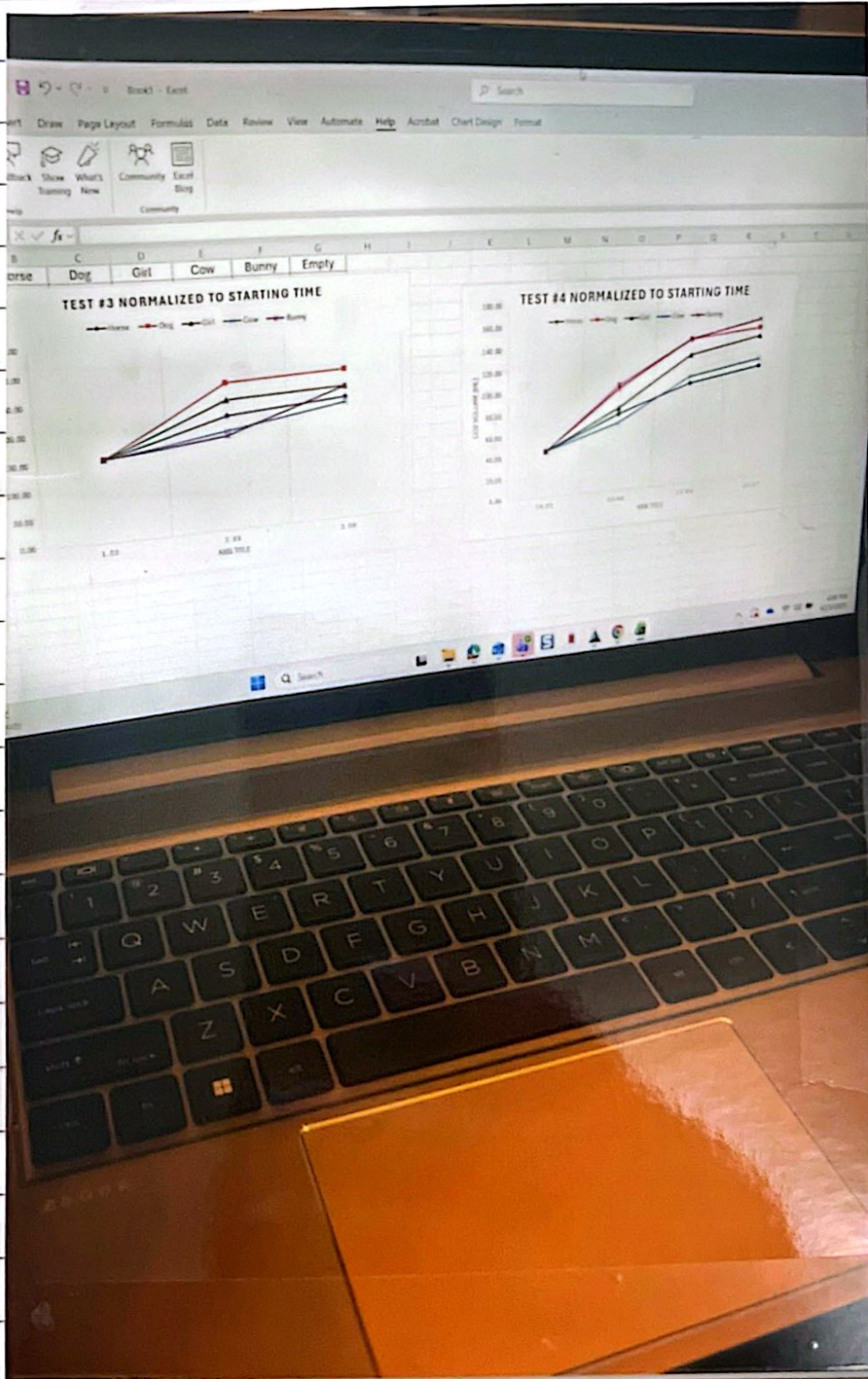
$$\text{Volume} = \frac{4}{3} \cdot \pi \cdot R \cdot R \cdot R \text{ [ml]}$$

I will calculate the volume of  
CO<sub>2</sub> using 2 equations  
CIRCUMFERENCE

↓  
radius

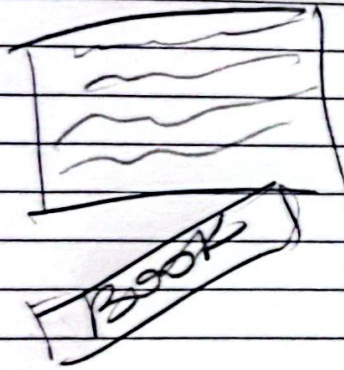
↓  
volume

from the graphs ~~it~~ looks  
like bunny and dog made the most gas  
horse and cow are doing less and  
girl is in middle



What is it

Storage bottle



# Attitudes  
why failed  
or succeed

- ①
- ②
- ③
- ④

in a

Results

$$Q = C \cdot 2\pi$$

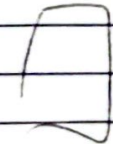
$$\pi = 3.14$$



graph

$$\text{Volume} = \frac{4}{3} \pi R^3$$

Experiment



What we  
learn

- 1
- 2
- 3

Reference book