Let' Science!

2021 KSEA science Fair

Zoom Manners

Change your zoom name to your name + write your grade in front of your name!
Example: 3 Minjung Lee

Be respectful!

Stay Muted when not talking

Raise digital hand to talk!

Turn on video

Stay in spot!

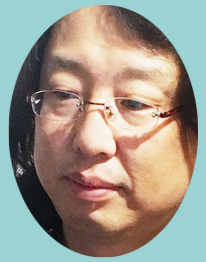
Let's Science Team

Science Fair Committee

Min Suk Kang, Ph.D.
Organizer/Chair

K.Stephen Suh, Ph.D.
Award

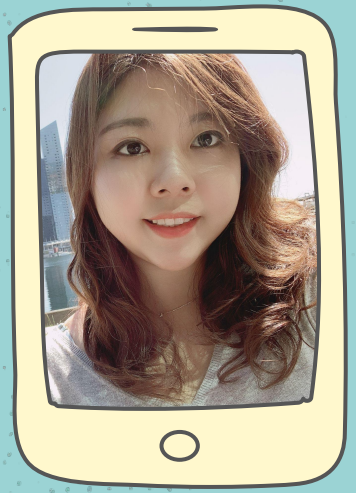
Minjung Lee, Ph.D.
Program Moderator



Sinaburo Lee
Web/Register

Jingyu Cheong
Media

Our Teachers

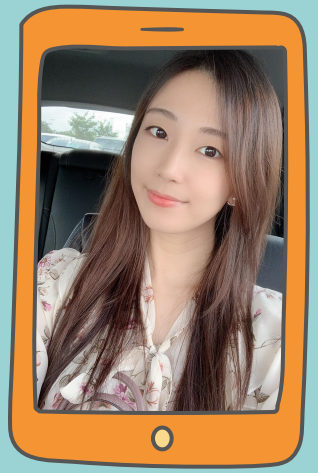


Clara Kim, Pharm. D.

I wonder how cancer medicines are developed

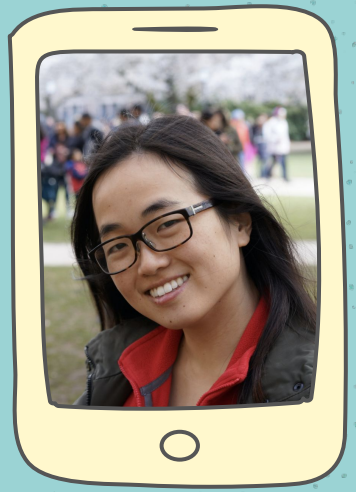
Sunny Lee

I wonder where science could take us



Sarah Lee

I wonder how learning can be more fun



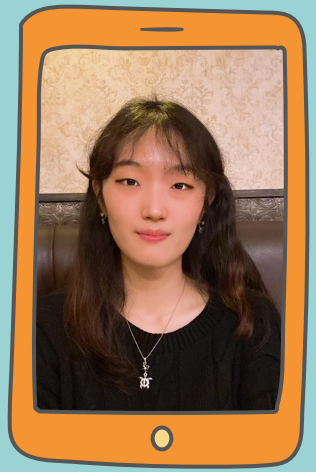
Eun Bin Go

I wonder how we can use the power of chemistry and microbes to save the environment and make

Our Teachers

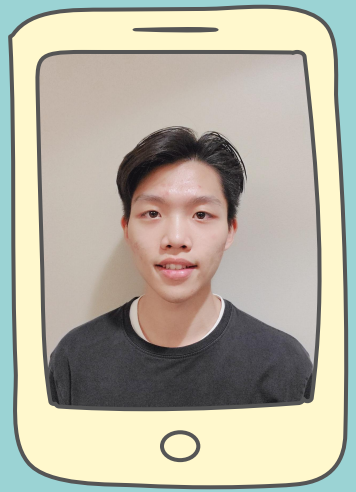
Yoomee Lee

I wonder how students enter and succeed in STEM fields.



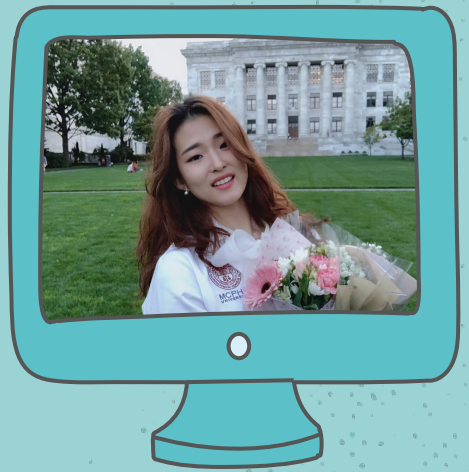
Jieun Lee

I wonder how science relates to medicine



Minhong Baik

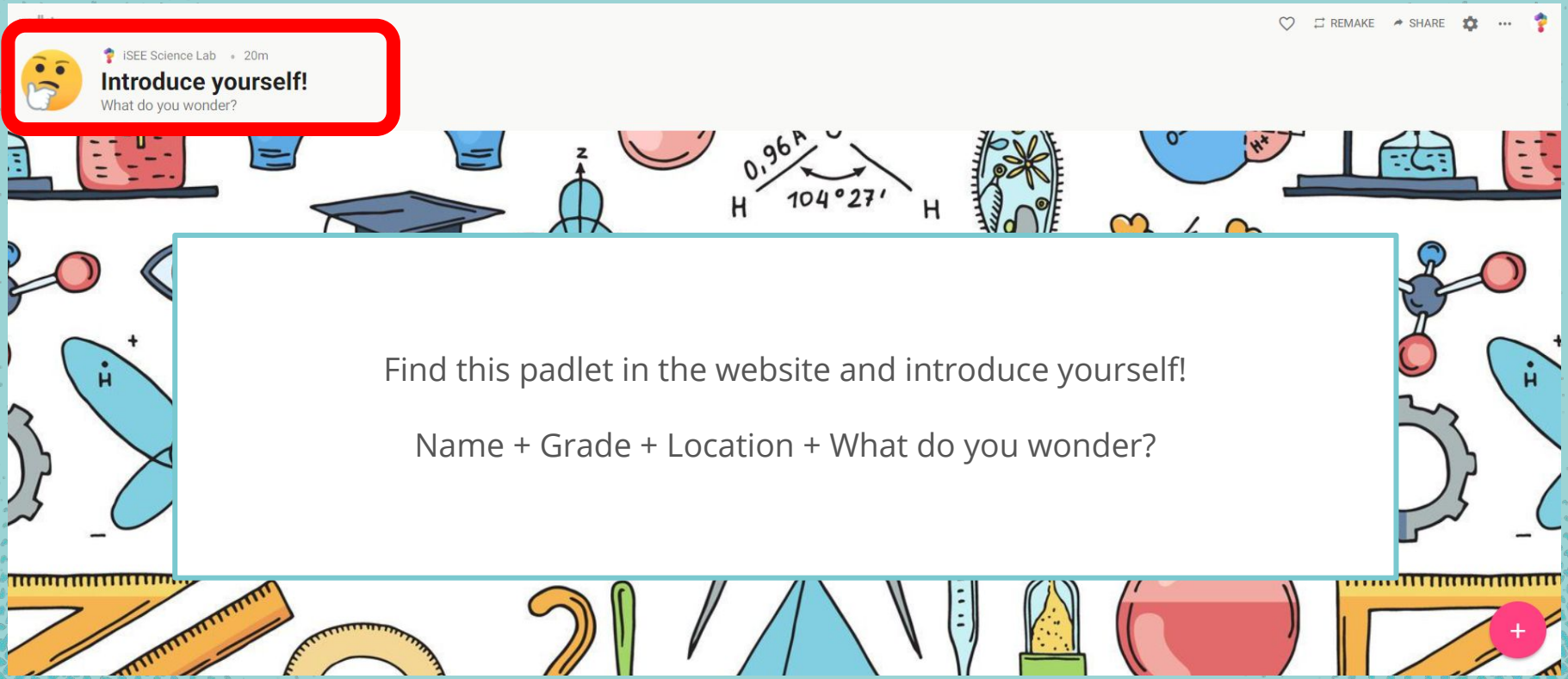
I wonder how students brush their teeth



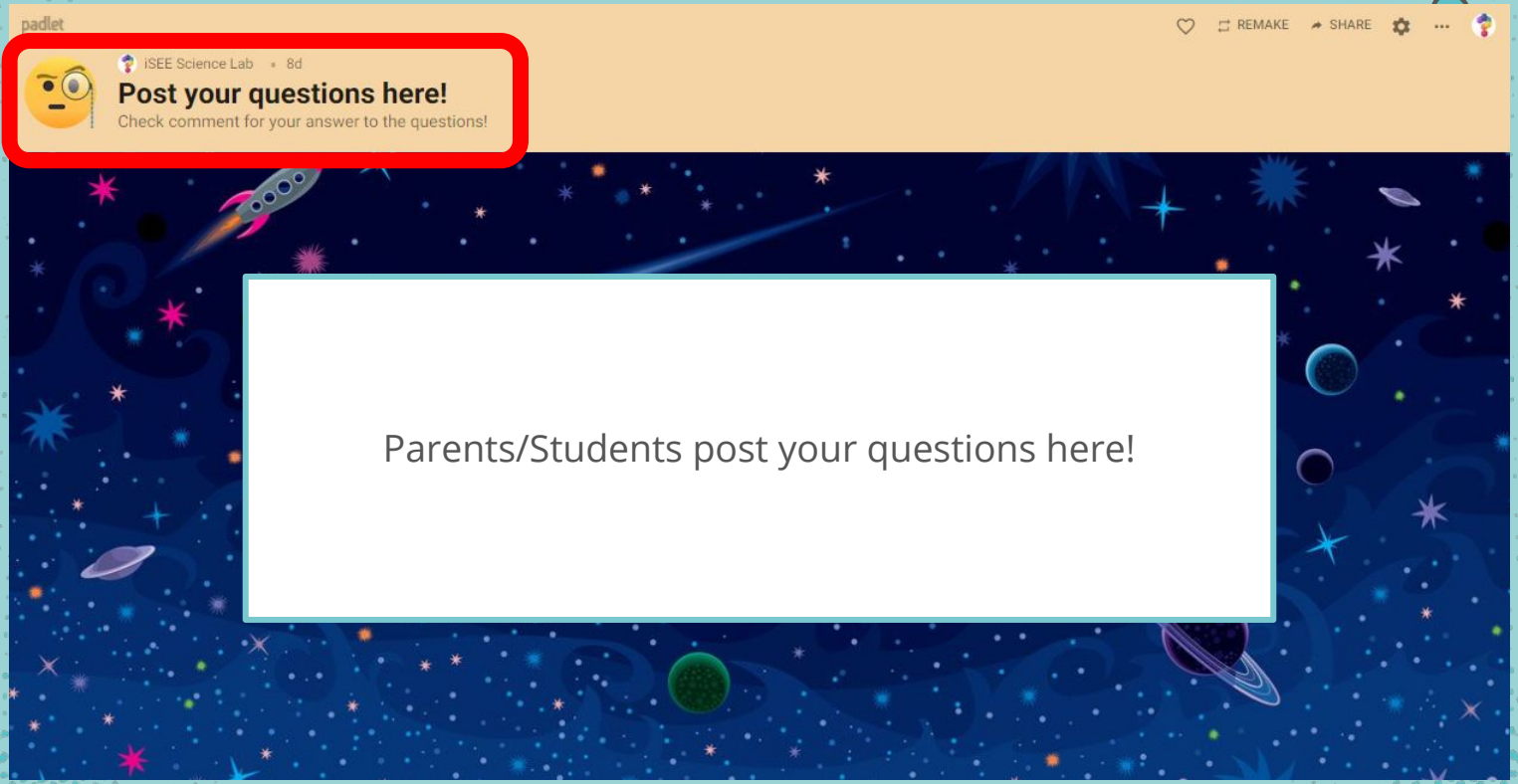
Catrina Son

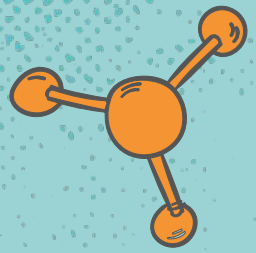
I wonder how students take care of their health

Who are you?

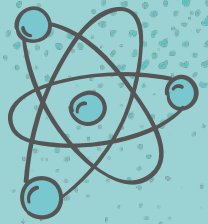

REMAKE
SHARE
iSEE Science Lab • 20m
Introduce yourself!
What do you wonder?
Find this padlet in the website and introduce yourself!
Name + Grade + Location + What do you wonder?

Questions?


padlet
REMAKE
SHARE
iSEE Science Lab • 8d
Post your questions here!
Check comment for your answer to the questions!
Parents/Students post your questions here!



Today's Agenda



01
Welcome Remarks

02
Intro to pH

03
Meet a scientist 1

04
Activity 1

05
Meet a scientist 2

06
Group Photo

07
Activity 2

08
Closing Remarks

01 Welcome Remarks

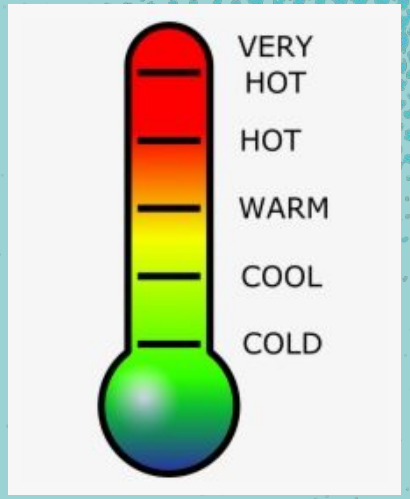
Haejung An, Ph.D.
Vice President of KSEA
US Food and Drug Administration

02

Introduction to pH

What is pH?

Today you will learn...



pH

A scale that measure how acidic or basic substance is!
Range: 0 - 14

Acid

pH smaller than 7
Sour

Base

pH lager than 7
Slippery

"Why do we have to know about Acid, Base, and pH?"

-Dr. Lee

pH is everywhere!

03

Meet a scientist 1

Why is lemon sour?

Dr. Hojoon Lee

Assistant Professor,
Northwestern University

2021 KSEA SCIENCE FAIR

LET'S SCIENCE!

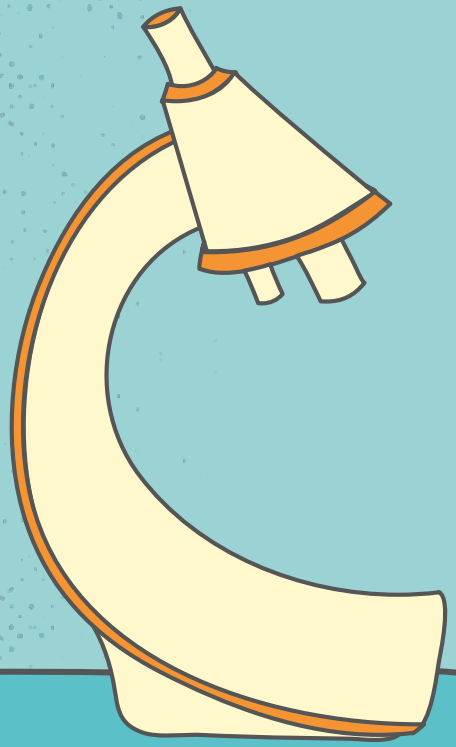
5 minutes

LIVESTREAM STARTING AT 3PM EDT, 12PM PDT

SEE Science Lab

Korean-American Scientists and Engineers Association
KSEA

OVERSEAS KOREANS FOUNDATION
재외동포재단



04

Activity 1

Where is acid/base in our daily life?

Let's prepare!

Lab report

0. Information about yourself

Who did the experiment?

1. Research Question

What are you curious about?

2. Hypothesis

Based on what you know, guess what the result will be for your research question

3. Method

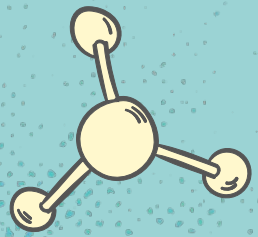
Explain what you did during the experiment to answer the research question

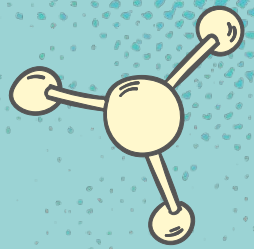
4. observation

Observe what you got from the experiment

5. Conclusion

What can you tell from the result?





Activity 1: Which liquid is Acid and Base?

Lab report

Information about yourself

Stella

1. Research Question

Which liquid is acid and base?

2. Hypothesis

Orange is sour so it will be acid

3. Method

Add 10 drops of samples and 1 drop of pH indicator to each well

4. Observation

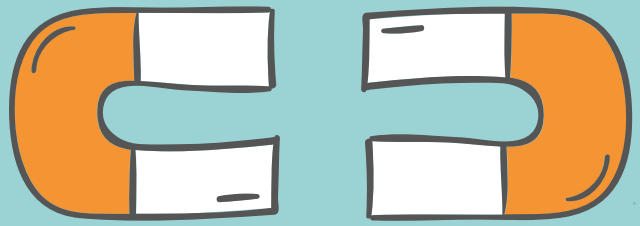
The colors were different.

5. Conclusion

Milk was acidic!

Why duplicate samples?

To confirm that what we see in the experiment is true and not by chance

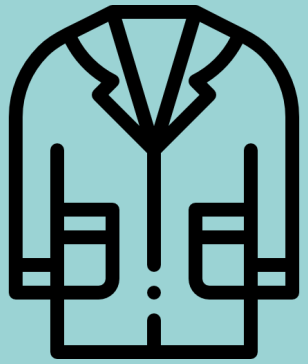


Control?

A color reference point.
We know that the control is a neutral liquid, so it shows the “pH 7 color”, which is green.

For your safety

Goggles



Lab coat

Gloves

For the experiment, you will need...

From home:

- ¼ cup of Juice
- ¼ cup of Vinegar
- ¼ cup of Milk
- ¼ cup of Soap
- ¼ cup of Baking soda

Kit box:

- Lab coat
- Goggles
- Gloves
- pH indicator
- Control
- 12 well plate
- Pipette

Breakout room

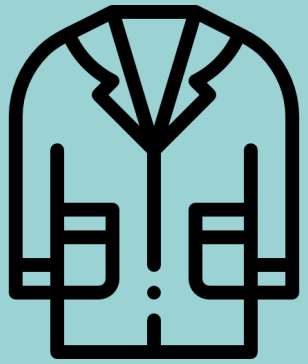
Select your room!

Look at the Grade & Last name

3rd grade & Last name starts with H?
Click 3rd grade + Last name: A-K

For your safety

Goggles



Lab coat

Gloves

Lab report

Information about yourself

Who did the experiment?

1. Research Question

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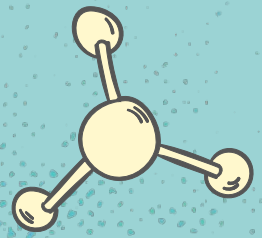
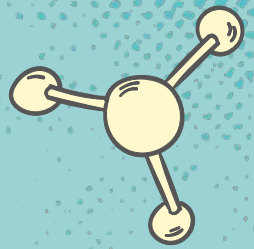
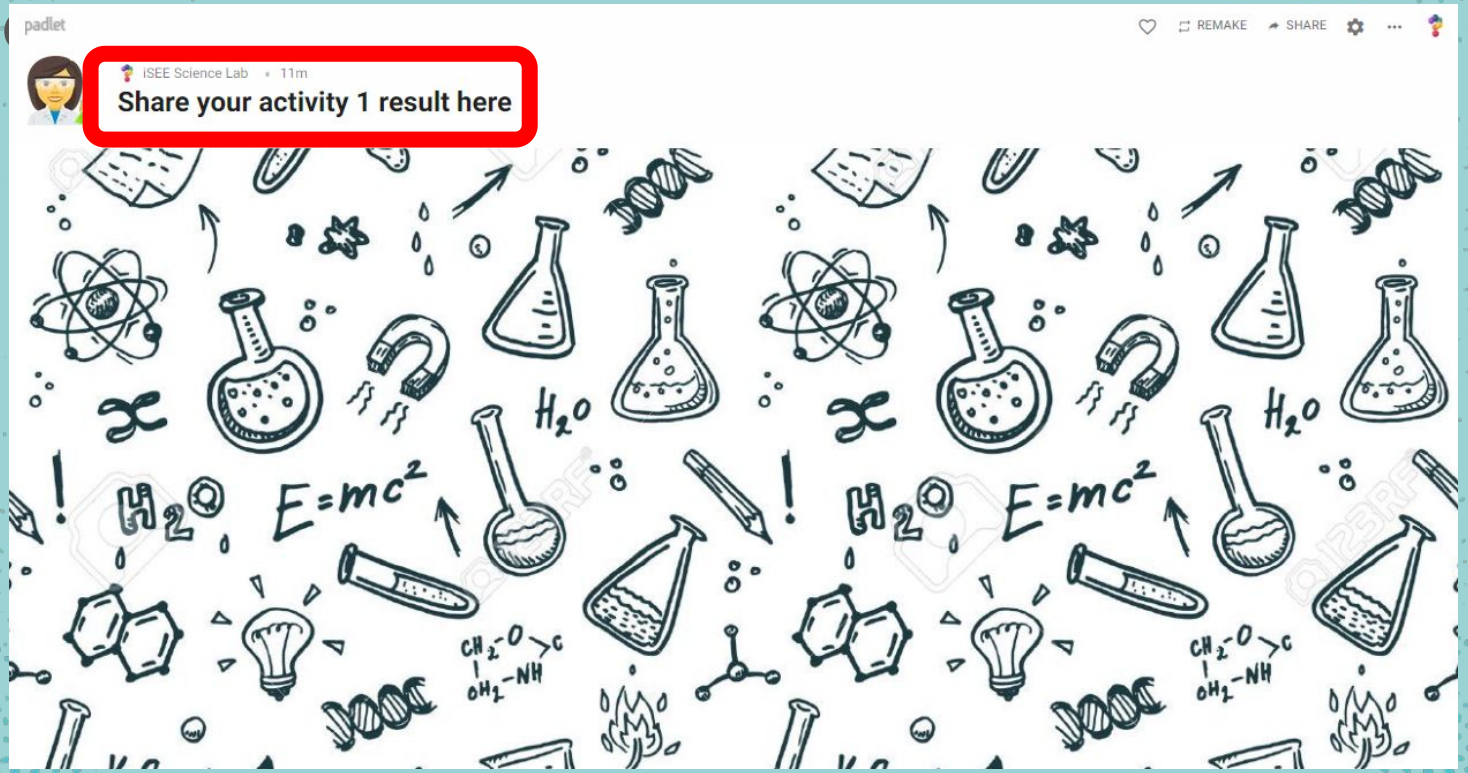
5. Conclusion

What can you tell from the result?





Share your result!



Did you get the same result?

Control

Green, pH 7
Neutral

Soap

Blue, pH 11
Basic

Vinegar

Red - Orange, pH 3
Acid

Milk

Yellow, pH 6
Acidic

Juice

Orange, pH 5
Acidic

Baking Soda

Green - Blue, pH 9
Basic

2021 KSEA SCIENCE FAIR

STARTING SOON!!

LET'S SCIENCE!

10 minutes

LIVESTREAM STARTING AT 3PM EDT, 12PM PDT

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KSEA

OVERSEAS KOREANS FOUNDATION
재외동포재단

05

Meet a scientist 2

What's in my stomach?

Hyunji Lee

Medical Doctor

Family Medicine
Pediatrician CityPeace Medical Care

2021 KSEA SCIENCE FAIR

LET'S SCIENCE!

5 minutes

LIVESTREAM STARTING AT 3PM EDT, 12PM PDT

SEE Science Lab

Korean-American Scientists and Engineers Association
KSEA

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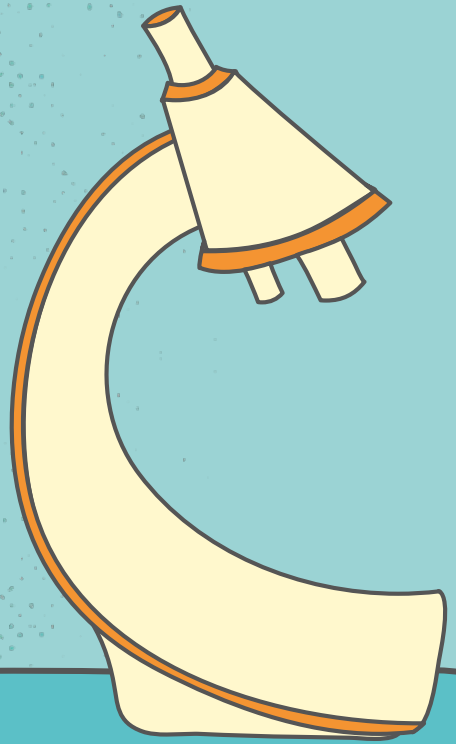
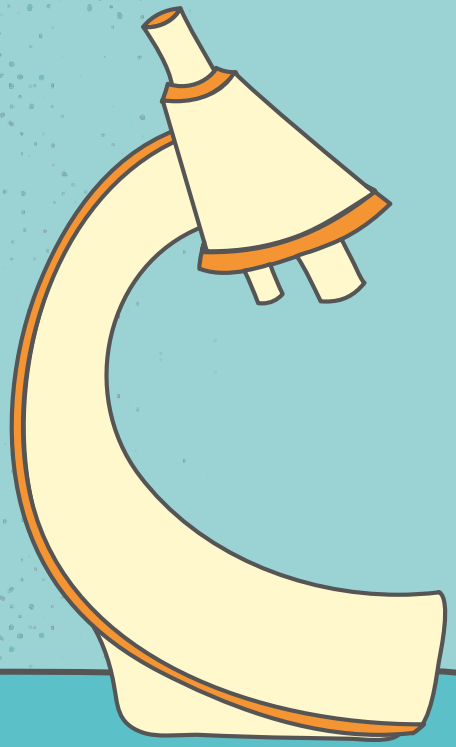


Group Photo

Please turn on your camera!



07

Activity 2

Competition

Let's prepare!

what do you wonder?

Test any kinds of liquids around you and share what you found!

Lab report video

0. Introduce yourself

Name, Grade, School

1. Research Question

What are you curious about?

2. Hypothesis

Based on what you know, guess what the result will be for your research question

3. Method

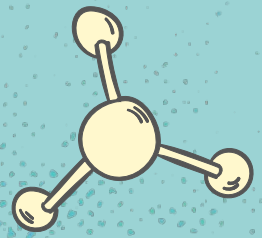
Explain what you did during the experiment to answer the research question

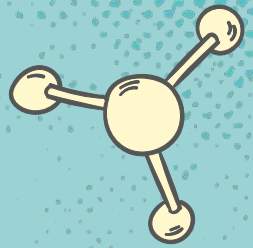
4. Observation

Explain what you observed as a result of the experiment

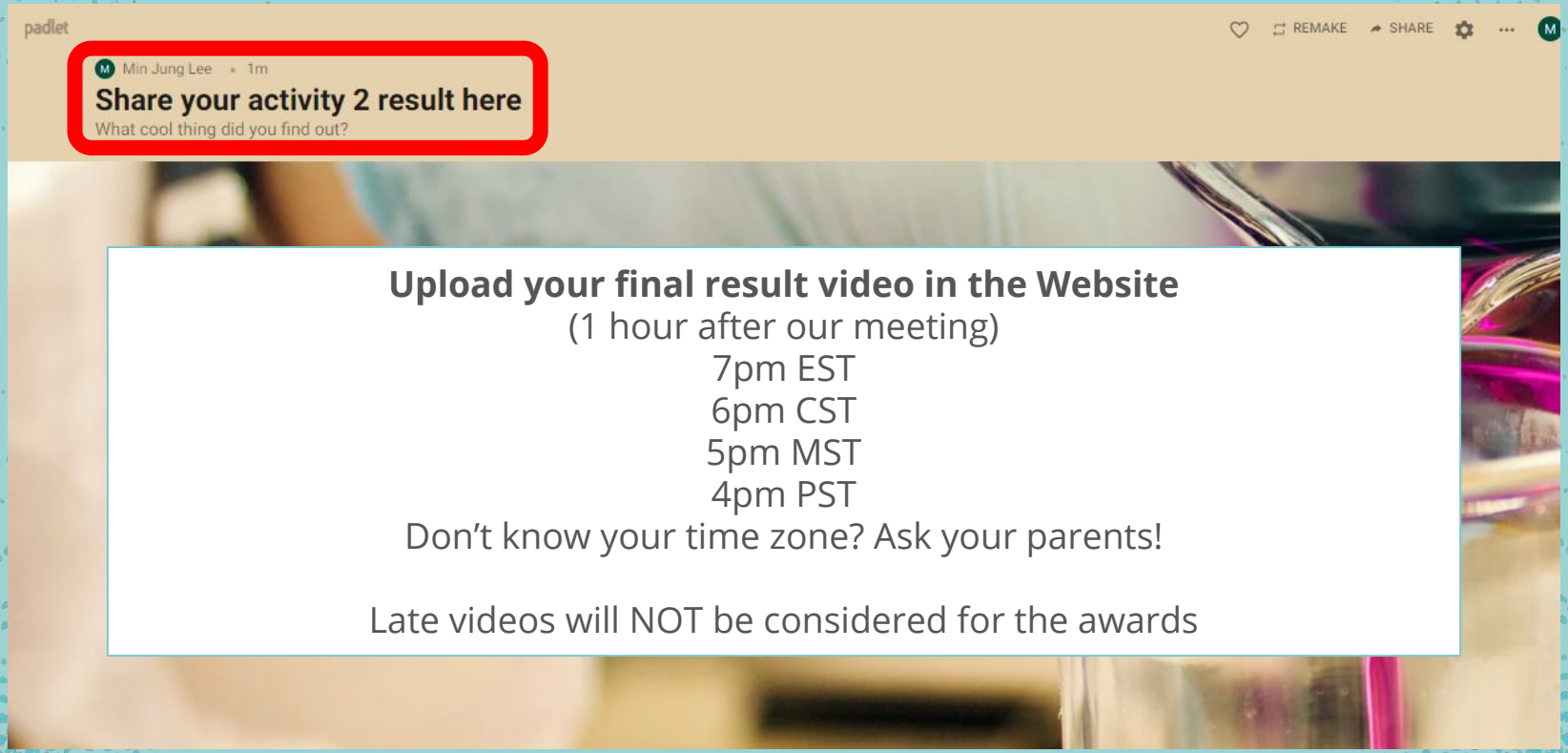
5. Conclusion

Check your hypothesis and explain what you learned from the experiment





Share your result!



Upload your final result video in the Website
(1 hour after our meeting)
7pm EST
6pm CST
5pm MST
4pm PST
Don’t know your time zone? Ask your parents!

Late videos will NOT be considered for the awards

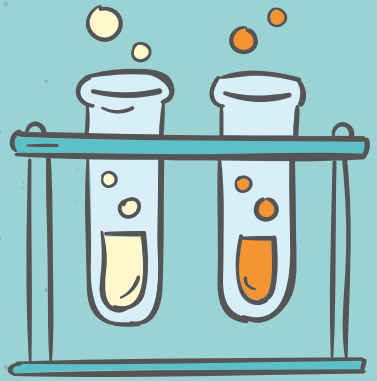
Awards

Albert Einstein Creative Award

Marie Curie Innovative Award

Leonardo da Vinci STEAM Award

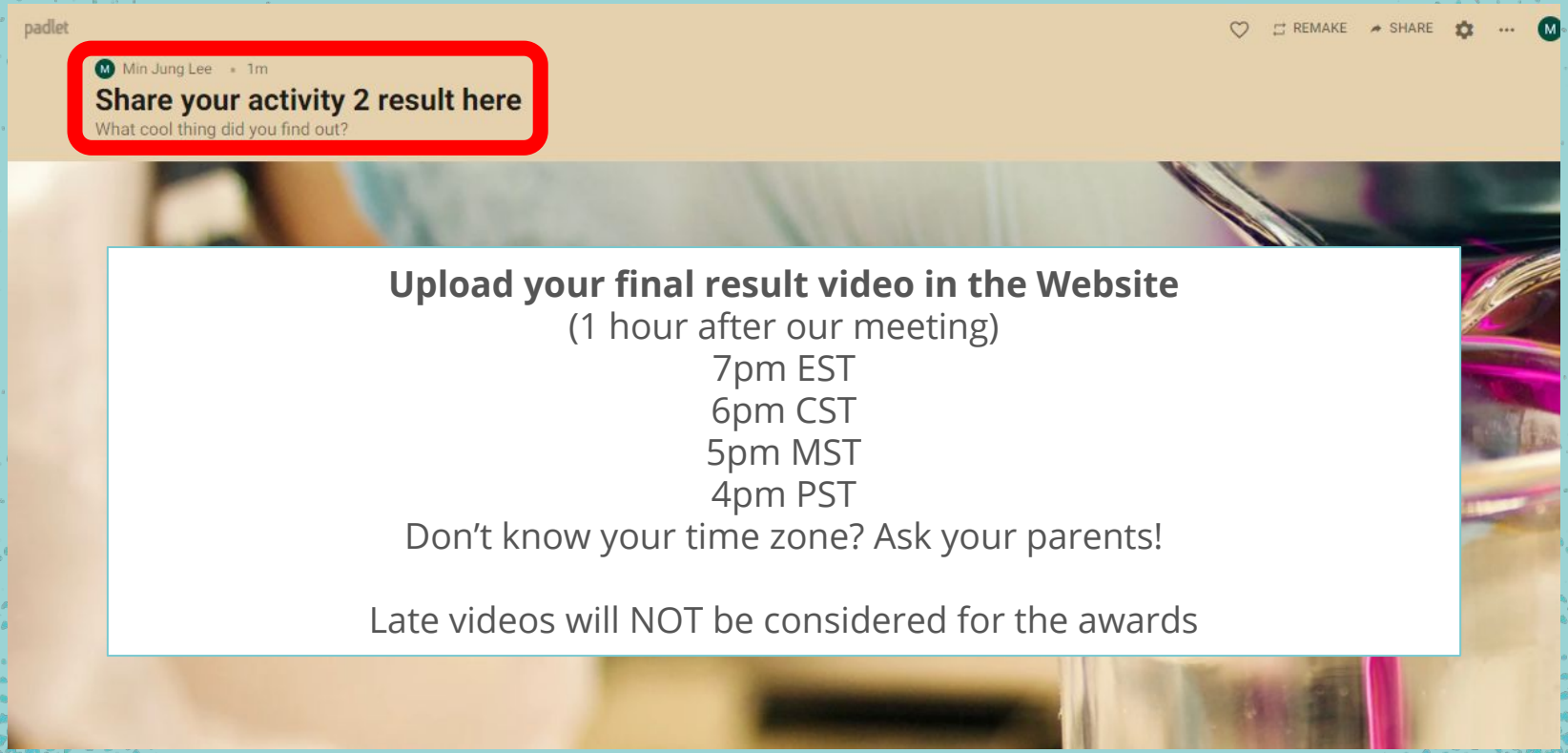
Breakout room



Select your room:
Look at the Grade & Last name

3rd grade (1) + First name: A-Ja	Join
3rd grade (2) + First name: Je-Z	Join
4th grade (1) + First name: A-F	Join
4th grade (2) + First name: H-Z	Join
5th grade (1) + First name: A-Ja	Join
5th grade (2) + First name: Ji-Z	Join
6th grade (1) + First name: A-H	Join
6th grade (2) + First name: J-Z	Join

Share your result!



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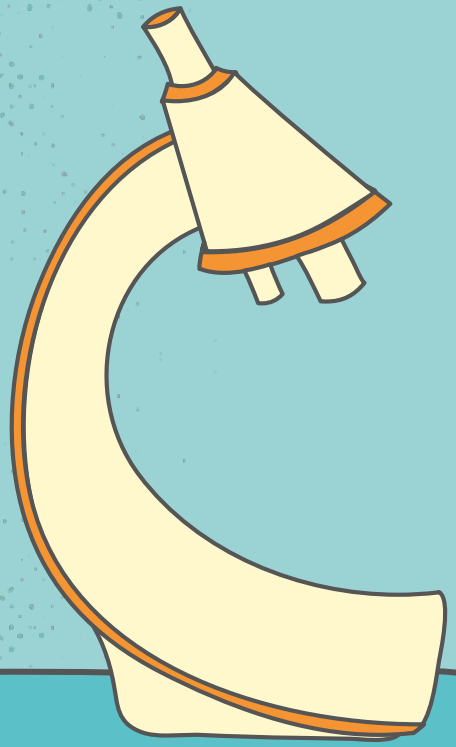

08

Closing Remarks

Thanks for coming!
See you next year!