NOVEMBER 2026

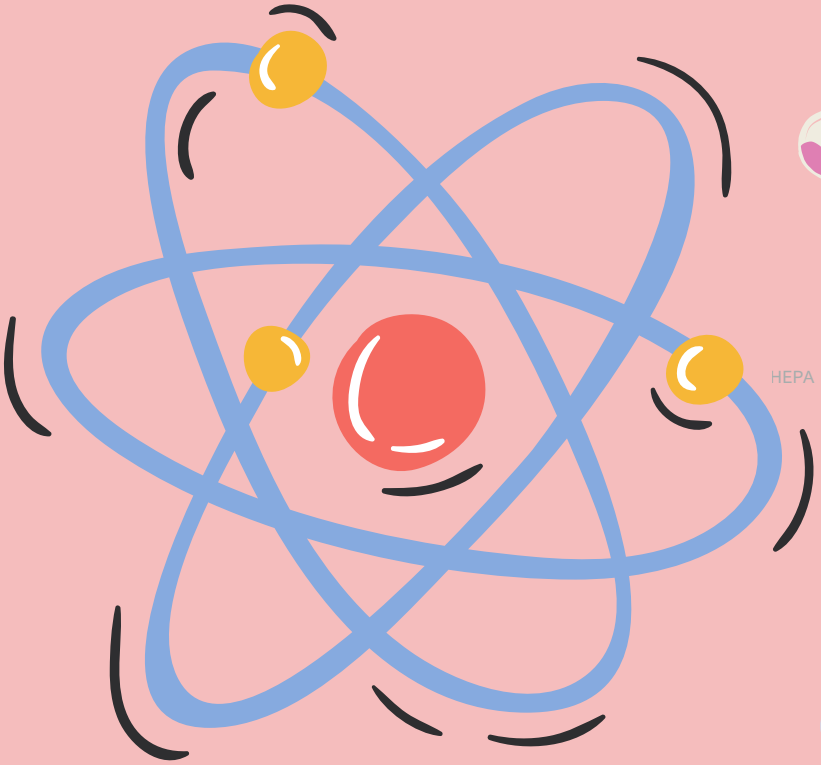
ISSUE 28

WORLD HEALTH NETWORK

KIDS' ZONE

COVID-CONSCIOUS MAGAZINE











THANKFUL FOR SCIENCE EDITION

VACCINE VOCABULARY

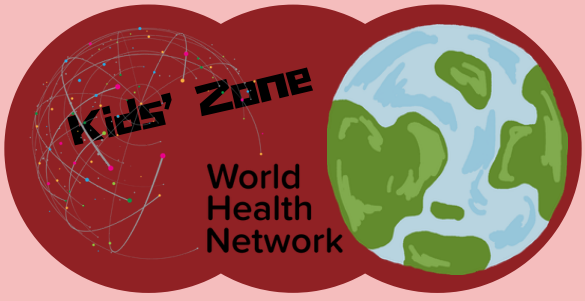
THE SCIENCE OF VACCINATION

VACCINE RESOURCES FOR KIDS

TAKING CARE OF AN EARLY BABY

... AND MORE INSIDE!

CHECK US OUT ONLINE AT:
WHN.global/KidsZone



EXPLORE | SHARE | CONNECT



WHAT'S IT ALL ABOUT?

COVID-conscious: Keeping COVID risks in mind when exploring, sharing, and connecting with others.

Synonyms: COVID-cautious, COVID-aware, COVID-informed, Still COVIDing, COVID-safe, COVIDing-inclusive

ABOUT US

KIDS' ZONE COVID-CONSCIOUS MAGAZINE IS A FREE PUBLICATION CREATED BY THE WORLD HEALTH NETWORK'S PSYCHOSOCIAL CHILDREN'S GROUP.

OUR MISSION IS TO FEATURE MATERIALS FOR KIDS THAT HIGHLIGHT STORIES, ART, SCIENCE, AND LIFESTYLE OF COVID-CONSCIOUS FAMILIES.



FEATURING WORKS FOR AND BY KIDS OF ALL AGES. ADULTS CAN SUBMIT THEIR OR THEIR CHILD'S WORKS AT WHN.GLOBAL/KIDSZONE

= ARTICLES WRITTEN IN US-ENGLISH

= ARTICLES WRITTEN IN UK-ENGLISH

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*The contents of this magazine, such as text, graphics, images, and other material, are intended for informational and educational purposes only and not for the purpose of rendering medical advice.

The Month Ahead

Here's our pick of November's main events!



ALL MONTH:

NATIONAL GRATITUDE MONTH

PREMATURITY AWARENESS MONTH







1 NOVEMBER ALL SAINTS' DAY

2 NOVEMBER DIA DE LOS MUERTOS

5 NOVEMBER BONFIRE NIGHT (UK)

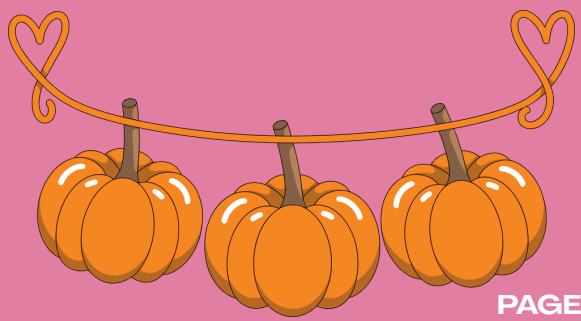
8 NOVEMBER INTERNATIONAL STEM DAY

11 NOVEMBER VETERANS DAY (US)

11 NOVEMBER REMEMBRANCE DAY

13 NOVEMBER WORLD KINDNESS DAY

26 NOVEMBER THANKSGIVING (US)



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SAYING THANKS



PAGE 6

What are you thankful for? Hear what our readers had to say.

VACCINE VOCABULARY



PAGES 7-8

Explore key terms about vaccines and put them to use in a crossword.

THE 5 PILLARS OF PREVENTION



PAGES 9-10

Learn about the 5 pillars of COVID prevention.

PUBLIC HEALTH MESSAGING

PAGES 11-13

Learn about COVID myths and facts. Complete a scavenger hunt on the history of vaccines.



VACCINE-THEMED GAMES



PAGES 14-16

Complete a vaccine-themed maze, an online game and Would You Rather.

GRATITUDE FOR FAMILY

PAGES 17-19

Read a story about an unexpected family surprise.

ARTS AND CRAFTS!



PAGES 20-22

Learn to make a turkey and learn how to draw a fall leaf!

RECIPES



PAGES 23-24

Make Mexican Bread of the Dead for Dia de los Muertos.



FAVORITE MUSIC & A FILL IN GAME!



PAGES 25-27

Read about our readers' favorite pieces of music and play a fill-in game!

SCIENCE



PAGES 28-37

Explore with the Public Health Detectives, learn about vaccines, and discover fun facts about anteaters and space programs!

STORY TIME

PAGE 38-39

Read an original story about an African spider!



FROM OUR READERS



PAGE 40

"Why I Mask" written by a university professor.

ART BY FRENCHIEBOOPS

Editor's Note:

Thankful for Science

by: Aspa



The world can seem such a difficult place to be sometimes. But there are also so many things to be thankful for! One of them is science! We are so lucky to have vaccines that protect us from so many harmful diseases! What are you thankful for?

I hope you enjoy the information and games we have included in this issue!

What is your favourite piece of music to listen to or to play during the fall holidays?
See what our readers and editors told us--and please let us know what your favourite piece of music is so that we can include it in the next issue!

It is important to remember what we are thankful for, especially when it comes to science. It is important to do our best to improve things for all.

We hope you enjoy this issue!

What are you THANKFUL for?

I am so GRATEFUL

I'm thankful for TLOAS: The Encore by Taylor Swift and The Happy Writer by Marissa Meyer!
-Camille



I'm thankful for
my partner and my kids.
-Tammy

I'm thankful for my friends
at work and WHN!
-Claire

I'm thankful for
science research.
-Karen

I am thankful for having at least two good friends this year.
-Dorothy

I am thankful for family.
-Gail

I am thankful for my internship with WHN.
-Aitana

VACCINE VOCABULARY

ANTIBODIES – Tiny fighter chemicals in your blood to mark and help attack germs.

B-CELLS – Fighter cells that can make antibodies.

BOOSTER – An extra dose of a vaccine that helps your body remember how to fight germs better.

CLINICAL TRIAL – A test to see if a new vaccine or medicine is safe and works well. People take the vaccine or medicine, and scientists watch over them.

DOSE – The amount of a vaccine or medicine that you take at one time.

EFFICACY – How well a vaccine works to keep you healthy.

IMMUNE RESPONSE – How your body reacts to germs or vaccines to protect you from getting sick.

MEMORY B-CELLS & T-CELLS – Cells that remind your body about specific germs. It's like your body gives you a booster!

mRNA – Tiny instructions for your body. In vaccines, they help you make a small part of a germ so your body can learn to fight it.

PROTEIN-BASED – A type of vaccine that uses harmless pieces of a germ. These proteins teach your body to defend itself.

SIDE EFFECTS – Reactions your body might have after a vaccine. Most are small, like a sore arm or feeling tired.

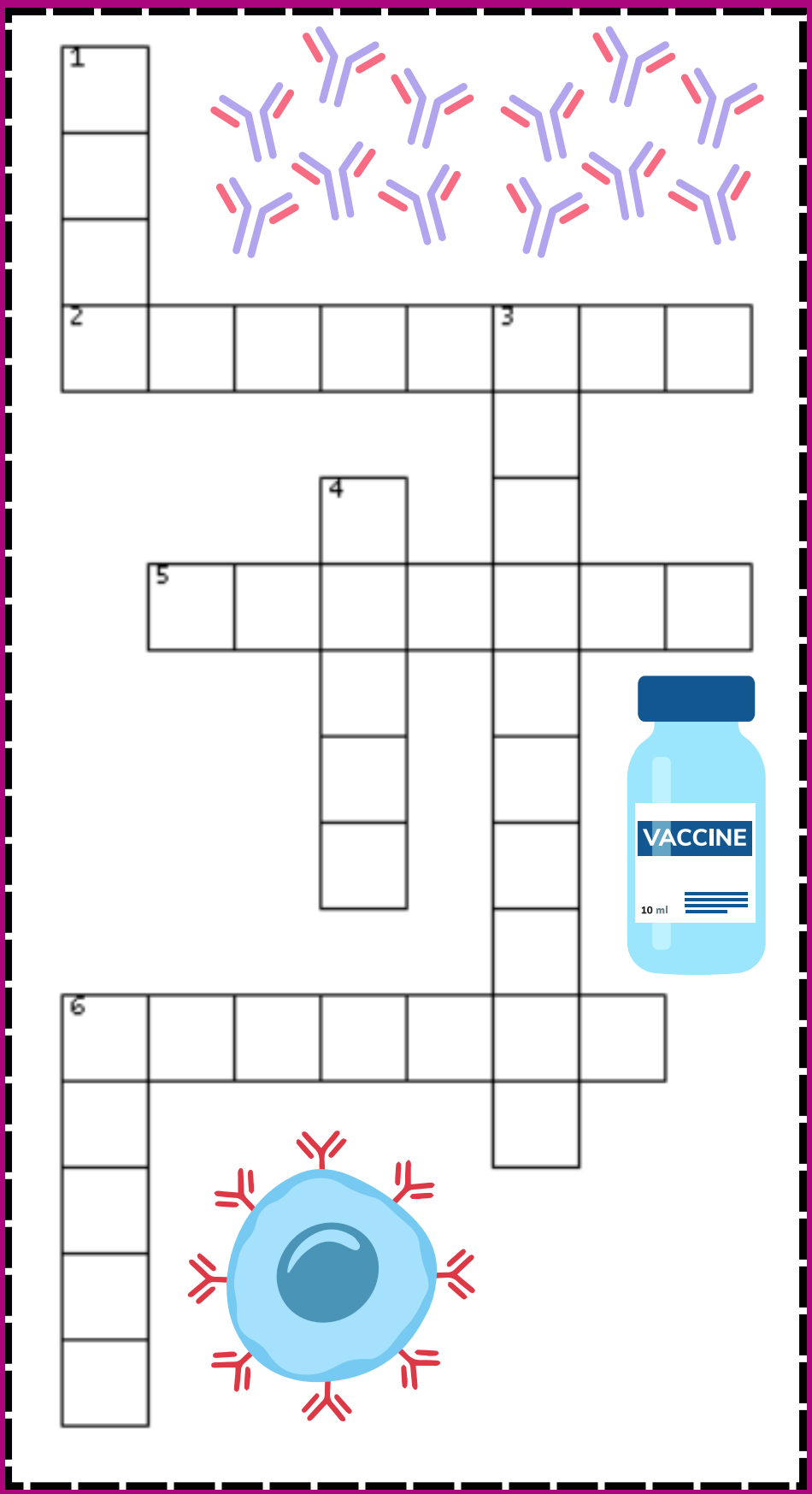
SPIKE PROTEIN – A piece of a germ, like a key to get into cells. Vaccines can use them to train your body.

T-CELLS – A type of fighter cell that helps your body find and destroy germs.

VACCINE – A medicine that teaches your body how to fight certain germs. It helps your body practice so you're less likely to get sick or get very sick.



VACCINE CROSSWORD



ACROSS

2. How well a vaccine works to keep you healthy.

5. A medicine that teaches your body how to fight certain germs. It helps your body practice so you're less likely to get sick or get very sick.

6. An extra dose of a vaccine that helps your body remember how to fight germs better.

DOWN

1. The amount of a vaccine or medicine that you take at one time.

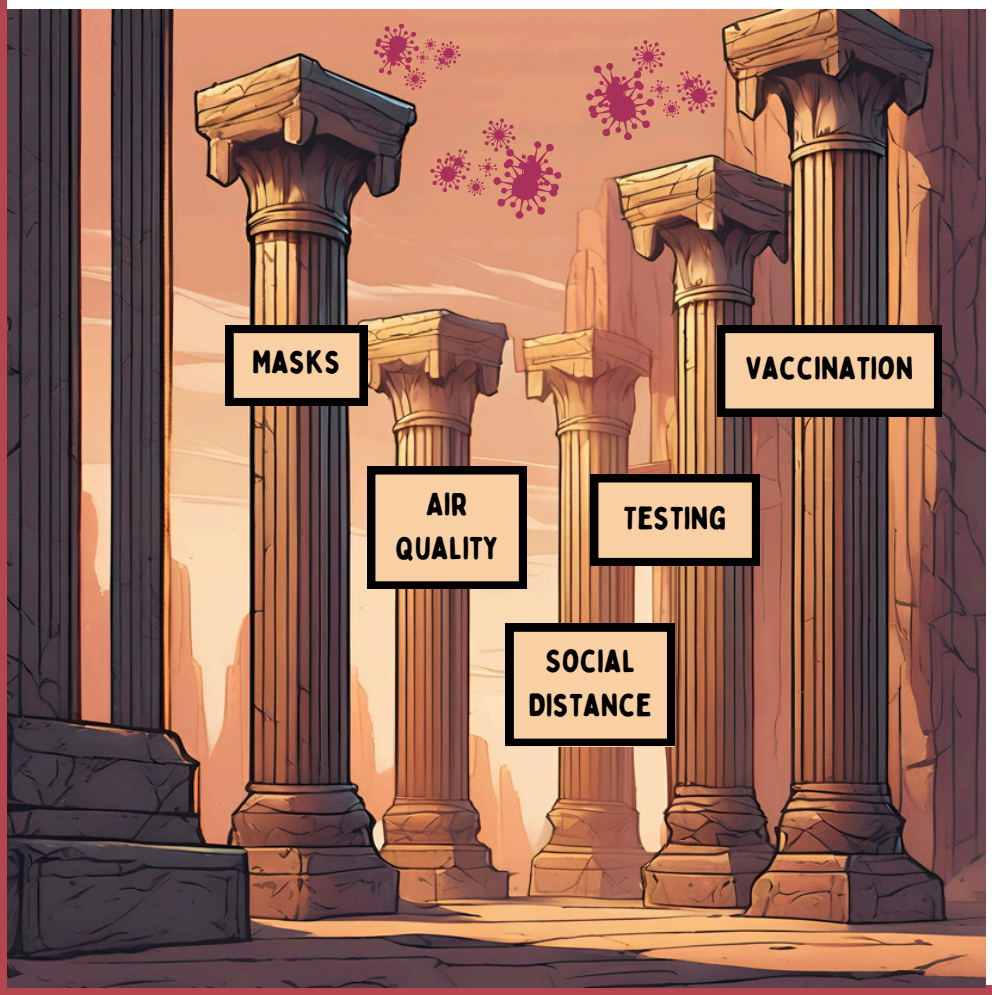
3. Tiny fighter chemicals in your blood to mark and help attack germs.

4. A type of fighter cell that helps your body find and destroy germs.

6. A fighter cell that can make antibodies.

*puzzle generated using https://puzzlemaker.discoveryeducation.com/criss-cross

THE FIVE PILLARS OF COVID-19 PREVENTION



WHY PILLARS?

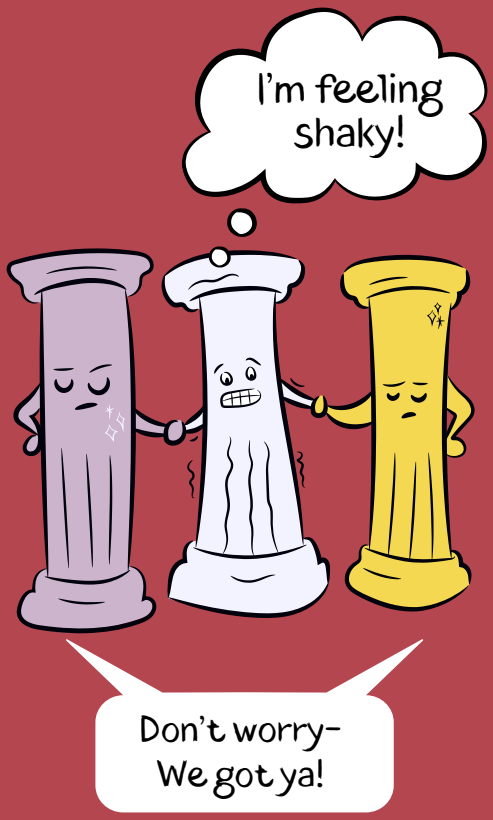
THEY SUPPORT EACH OTHER IN CARRYING A HEAVY LOAD.



THE 5 PILLARS OF PREVENTION

Masks
Air Quality
Social Distance
Testing
Vaccination

Together, they reduce the chances of getting COVID-19 or giving it to others!



TIPS

If you are weaker in one pillar of prevention, you can level up the other pillars to help! For example, since protection from vaccines can wear off over time, we need to use the other pillars, like masks, to stay safe.

COVID-19 Fact Checking



Preventing COVID-19 and Long COVID can be a lot to understand. Vaccines are important. They can keep you from getting very sick and may lower the risk of Long COVID. But over time, vaccines don't protect you as well from getting or spreading COVID-19. They are only one of the pillars of prevention.

Getting immunity through infection is even worse. It may not protect you from another infection for very long, especially with new variants of COVID-19. And it means you already got infected!

That's why we need the other four pillars! Masks protect you. Masks also protect others if you're sick. Clean air tools, social distancing, and COVID testing can help prevent infections. Let's bust some myths about COVID-19. That way we know how to stay even safer!

Match the Myth to the Fact!

Myth: It's very uncommon to develop Long COVID after an infection.	**Fact:** Respirator masks are great at preventing the transmission of viruses.
Myth: Air quality and ventilation are not important for stopping the spread of COVID-19.	**Fact:** Vaccines lower the chance that you will die or go to the hospital. Vaccines may lower the chance of getting Long COVID.
Myth: Masks only protect the person using them.	**Fact:** Filtration and ventilation can help us stop the spread of COVID-19.
Myth: Vaccinations prevent infection from COVID-19.	**Fact:** Multiple infections may mean a higher chance of disability and harm.
Myth: COVID reinfection is good because it builds immunity.	**Fact:** Long COVID occurs in 10-30% of people with COVID-19. More infections mean more risk.

HISTORY of VACCINATION

Web Scavenger Hunt

Use the links below to explore resources about the history of vaccines. Go on a web scavenger hunt to find information and answer the questions!



Start Here: The World Health Organization's Brief History of Vaccines

CHALLENGE ONE: FIND THE PEOPLE

A. Who brought a tool to prevent smallpox from Turkey to Europe?

B. Who created the live polio vaccine?

C. Who showed that the pertussis vaccine worked?

How fast can you find them all?

CHALLENGE TWO: FIND THE DATES

A. What year did James Phipps get the first smallpox vaccine?
B. What year was the first HPV vaccine approved?
C. What year was the malaria vaccine pilot program?

Can you race a friend or family member?

CHALLENGE THREE: FIND THE PLACES

A. What was the first country to eliminate polio?
B. Where was the malaria vaccine pilot?
C. Where was James Phipps vaccinated?

Did you find everything on the list?



explore

VACCINES

Did you know there are games online
to help kids learn about vaccines?
Here is a fun activity available online for you to explore!

Children's Hospital of Philadelphia

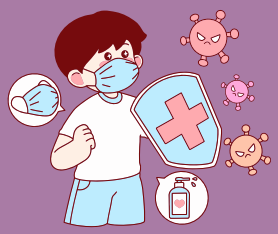
Vax Pack Hero

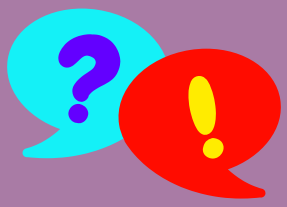
Team up with vaccine heroes
to beat viruses!



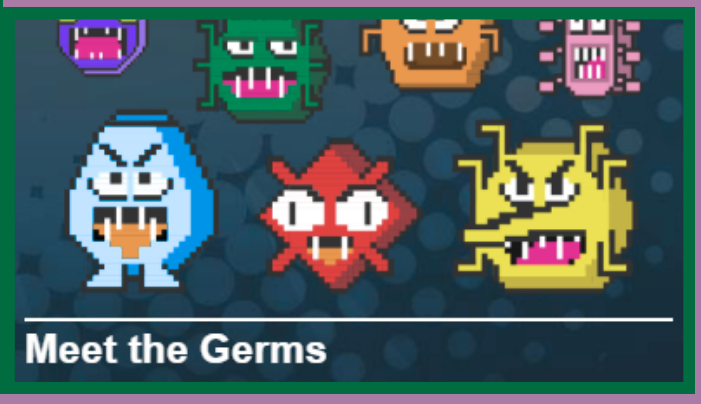


Trivia!





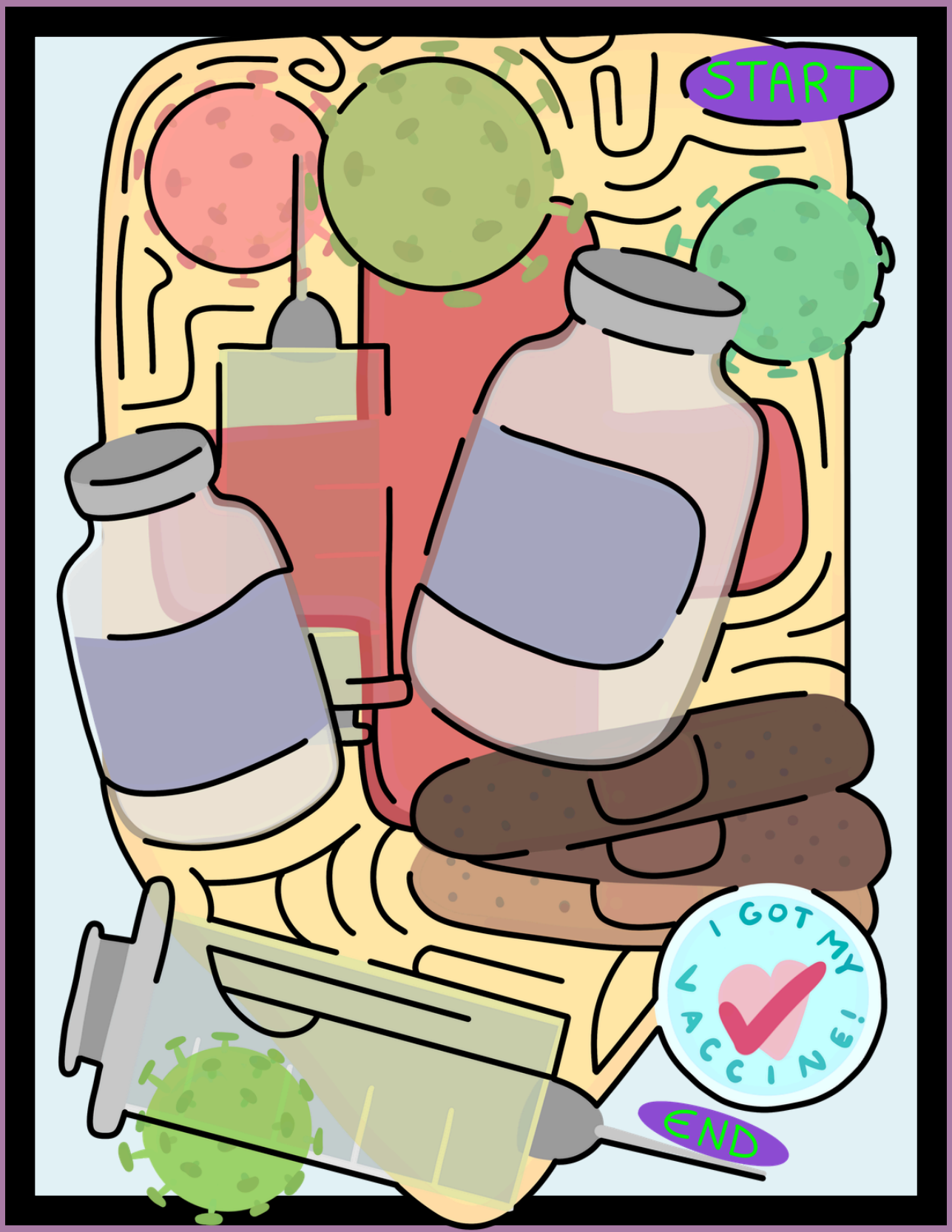




explore

VACCINES

Can you complete the vaccine-themed maze? Good luck!



WOULD YOU RATHER

by Rachel L.

Vaccine Edition

have your favorite person with you	or	take your favorite stuffed animal with you
look at the needle during the shot	or	look away during the shot
sit on your parent's lap	or	sit in a chair by yourself
show off your bandage to friends	or	keep it covered
tell someone how brave you were	or	text a picture showing how brave you were
have a backup plan for if you feel scared	or	wing it and hope for the best
wear your most comfortable clothes	or	wear your 'power outfit'

My Baby Sister Came Early

By Naomi Bar-Yam



Sam's family was going to have a baby.

"Is the baby coming today?" Sam asked.

"Not yet," Mom said. "Our baby still has lots of growing to do."

Sam waited. And waited.

But one morning, Dad woke Sam up very early. "The baby is coming," he said.

"But is the baby done growing inside Mommy?" asked Sam, worried.

"No," Dad said. "Our baby is coming too soon."

Baby Noor was born that day, and she was so very small. So small that Sam's hand looked almost as big as Noor's whole arm.

Noor couldn't come home yet. Noor needed to stay in a special part of the hospital called the NICU.

"What's a NICU?" Sam asked.

"It is a place where they take care of new babies who need extra help," Dad said.

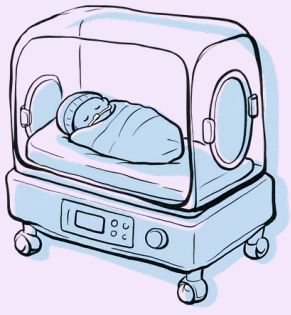
The NICU had doctors and nurses. It had little beds with clear sides. It had tubes, wires, screens and lots of beeping sounds.

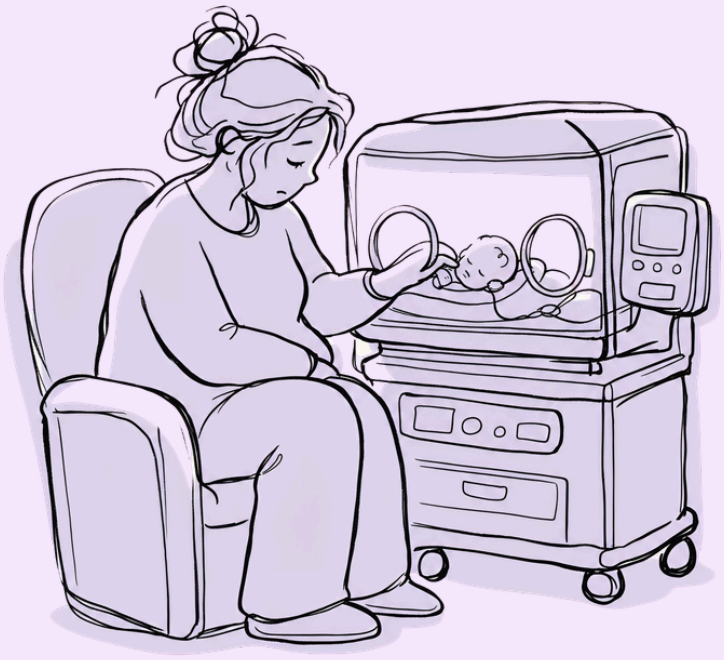
"Noor was supposed to be growing inside me for a few more weeks," Mom explained. "The NICU is helping Noor grow outside of me–helping her stay warm, eat, and sometimes even breathe."











Mom and Dad took care of Noor, too. "But they aren't doctors," Sam said.

"No," said Noor's nurse. "But they are Noor's parents and they are very important."

Mom and Dad took turns holding Noor against their chests, skin-to-skin. Dad changed Noor's tiny diapers. He talked and sang the same silly song he used to sing to Sam.

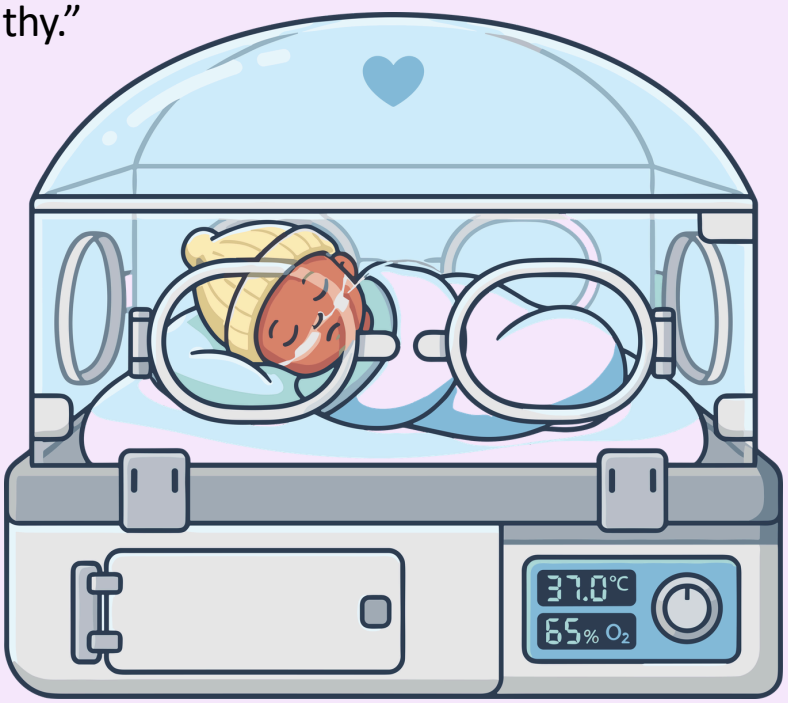
And Mom made milk for Noor. At first, there were only a few drops.

"That isn't very much," Sam said. "For a tiny baby, every drop is important," the nurse said.

Mom's milk helped Noor grow. It also helped protect Noor from getting sick.

When Noor needed more milk than Mom could make, she got donor milk. Other mothers had given some of their milk to help babies like Noor.

"The doctors give Noor medicine," Mom said. "My milk and the donor milk are also like medicine. They help Noor grow and stay healthy."



"I want to help, too. What can I do?" Sam asked.

"You can talk to Noor," Dad said. "Noor knows your voice."

Sam wasn't sure about that, but he leaned close.

"Hi, Noor. Welcome to our family."

Noor didn't answer. Of course.

Noor was a baby.

Sam talked about home instead.

About the tree outside their window. About which toys they could share and which ones were just for Sam.

Sam also sang a favorite song. And drew a picture for Noor's bed. Days passed. Then weeks.

Noor grew.

One day, there were fewer tubes. Another day, there were fewer wires.

Soon, Noor could drink milk right from Mom's breasts without so much help.

Then came the best day. Noor came home, still small and still needing lots of care.

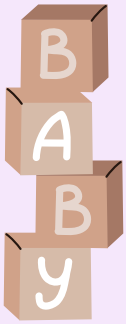
But now, when Sam said, "Hi, Noor. Welcome to our family," Noor's eyes opened.

Sam smiled. "I think Noor knows me," he said.

"I agree," Mom said.







What about your family?

Were you born early?

Was your brother or sister born early?

Did anyone in your family stay in a NICU?



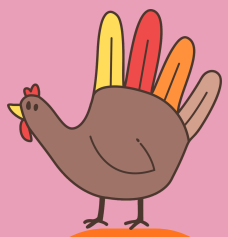




Ask someone in your family what they remember. You might discover a story about your family that you have never heard before.



Craft Something New!
Let's Make a Turkey!



Art by FrenchieBoops

By Camille A

Always have an adult help with scissors!

We're going to craft easy-to-make, cute turkeys!

Materials needed:

- **A piece of paper (orange, red, and white are good colors)**
- **A pencil or pen**
- **Colored pencils or markers (optional)**
- **Scissors (check the turkey to the right for a rule about scissors!)**

Step-by-step Instructions:

- Our first step is to trace the turkey! Grab your paper and put one hand on the middle of it. Make sure the hand you put on the paper isn't the one you use to draw!

- Once you have your hand at least close to being centered on the paper, use a pen or pencil to trace your hand. Before you do trace your hand, make sure your fingers are spread apart!

- Once you've traced your hand, you can make the turkey's head! Draw a little triangle on the outside of the outline of your thumb - that's the turkey's beak.

- After the beak is drawn, make a little circle inside the outline of your thumb. Make sure that the circle is a bit higher up than the beak is! Once you've done that, you've finished the turkey's face!

- Now, we'll color the turkey in. We'll do this before we cut it out, because that makes it easier to control the paper. All of the outlined fingers except your thumb are part of the turkey's tail! Color them whatever colors you want the tail to be.

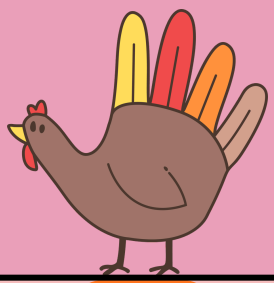


Art by FrenchieBoops





Craft Something New!
Let's Make a Turkey!



Our last step is to cut the turkey out of the paper. Make sure you have an adult help with this step! Be careful when you cut out the turkey's tail because it can be very tricky to cut the paper between the finger outlines. You don't have to cut out all of the paper between the finger outlines!

Always have an adult help with scissors!

Awesome job!



You just created a **hand turkey**! It looks amazing!

Please take a picture of your hand turkey and share it with us! Remember to share your name with your photo, if you like!
https://whn.global/kidszone/

Art by FrenchieBoops





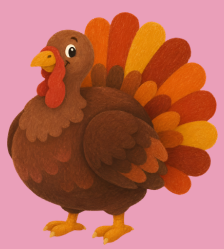






Grateful for Crafts!







HOW TO DRAW A FALL LEAF

Made by FrenchieBoops

1.



Draw a stick

2.



Add wiggles on one side

3.

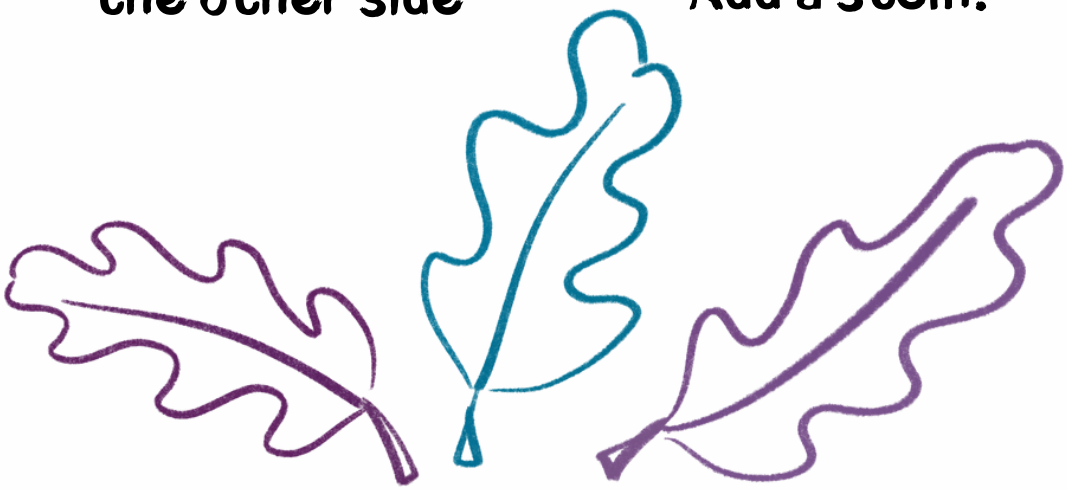


Then wiggles on the other side

4.



Add a stem!



MEXICAN BREAD OF THE DEAD

by Karen

adapted from AllRecipes





INSTRUCTIONS:
ALWAYS COOK WITH AN ADULT.

To celebrate Día de los Muertos, work with an adult to bake a homemade bread with a sweet glaze!



BREAD INGREDIENTS:

- ¼ CUP MILK
- ¼ CUP BUTTER
- ¼ CUP WARM WATER
- 3 CUPS ALL-PURPOSE FLOUR
- ¼ CUP WHITE SUGAR
- 1 ¼ TEASPOONS ACTIVE DRY YEAST
- ½ TEASPOON SALT
- 2 TEASPOONS ANISE SEED
- 2 LARGE EGGS, BEATEN
- 1 TABLESPOON ORANGE ZEST

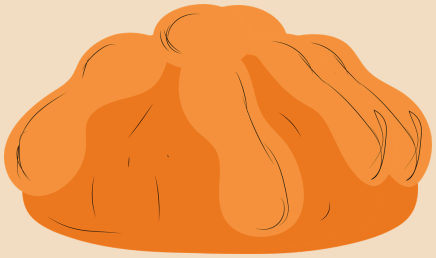
GLAZE TO DRIZZLE ON TOP OF THE BAKED BREAD:

- ¼ CUP WHITE SUGAR
- ¼ CUP ORANGE JUICE
- 2 TEASPOONS ORANGE ZEST
- 2 TABLESPOONS WHITE SUGAR

MAKE THE GLAZE:

MIX ALL INGREDIENTS EXCEPT THE 2 TBSP SUGAR IN A PAN. BRING TO A BOIL FOR 2 MINUTES. SPREAD OVER BAKED BREAD.







MEXICAN BREAD OF THE DEAD

by Karen

adapted from AllRecipes







ALWAYS COOK WITH AN ADULT.



INSTRUCTIONS

- PREHEAT OVEN TO 350 DEGREES F (175 DEGREES CELSIUS)
- HEAT MILK AND BUTTER OVER LOW HEAT.
- REMOVE FROM HEAT AND ADD WARM WATER.
- USE A COOKING THERMOMETER TO TAKE THE TEMPERATURE OF THE MIXTURE. IT SHOULD BE AROUND 110 DEGREES F (43 DEGREES C).
- COMBINE 1 CUP FLOUR, ¼ CUP SUGAR, 2 TEASPOONS ANISE SEED, 1 ¼ TSP YEAST, AND ½ TSP SALT.
- BEAT IN WARM MILK MIXTURE, THEN EGGS AND ORANGE ZEST.
- STIR IN 1/2 CUP FLOUR. ADD FLOUR UNTIL DOUGH IS SOFT.
- KNEAD DOUGH UNTIL SMOOTH AND ELASTIC.
- PLACE DOUGH INTO A LIGHTLY GREASED BOWL.
- COVER BOWL WITH PLASTIC WRAP.
- ALLOW TO RISE IN A WARM PLACE UNTIL DOUBLED IN SIZE.
- SHAPE DOUGH INTO A LOAF WITH A ROUND KNOB ON TOP. PLACE DOUGH ON BAKING SHEET. LOOSELY COVER WITH PLASTIC WRAP. LET RISE IN A WARM PLACE UNTIL SIZE DOUBLES.
- PLACE IN OVEN FOR 35 TO 45 MINUTES.
- AFTER BREAD COOLS, BRUSH WITH GLAZE.
- TOP WITH 2 TABLESPOONS SUGAR.





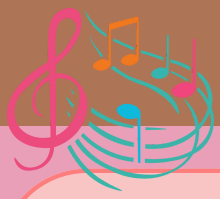




WHAT IS YOUR FAVOURITE PIECE OF MUSIC TO PLAY OR LISTEN TO DURING THE NOVEMBER HOLIDAYS?











I like to listen to
Aurora during the holidays.
-Dorothy











I like to listen to
anything spooky!
-Fox



What is your favorite piece of music to play or listen to during the fall holidays?

Submit your responses to https://whn.global/kidszone/

WHAT IS YOUR FAVOURITE PIECE OF MUSIC TO PLAY OR LISTEN TO DURING THE NOVEMBER HOLIDAYS?





I like to listen to
The Nutcracker Suite by
Tchaikovsky.
-Karen

When we go to our neighbor's home for a party, I like listening to the holiday music that plays with the holiday lights that decorate their home.
-Elias

What is your favorite piece of music to play or listen to during the fall holidays?

Submit your responses to https://whn.global/kidszone/

Pet Gratitide Fill-In Story

How it works:

Step 1.
Write a list of the 10 words below before reading the story. Be silly and creative!

Step 2.
Read the story out loud using your list of words to fill in the blanks.

Use your imagination to choose words for your story!

1. Adjective (Description)
2. Animal
3. Title (ex: President, Princess)
4. Breakfast Food
5. Adjective (Description)
6. Color
7. A Number
8. Unit (Meters, Inches)
9. Color
10. Shape

Fill-In Story Time!

My family has an awesome pet! I love our 1.____ 2.____ named 3.____ 4.____. From her 5.____ 6.____ tail that is about 7.____ 8.____ long, to her 9.____ 10.____ eyes that glow in the dark. I am grateful for my family pet!

Fill in game made by FrenchieBoops

PUBLIC HEALTH DETECTIVES: A WHOLE SCHOOL OF CLUES

By: Naomi Bar-Yam



The next day, Ifrah and Luke came to science class ready to design their CO_2 investigation.



"I think we should compare our classroom when the windows are open and closed," said Ifrah.



"I want to compare the classroom and the cafeteria," said Luke.

Ms. Rachel smiled. "Those are both good investigations. But today I want to show you something bigger."

She opened a website on the classroom computer. A map appeared on the screen, followed by a long list of schools.

"What is that?" asked Ifrah.

"CO_2 data from schools in Boston," said Ms. Rachel.

Luke moved closer. "All of them?"

"Boston put air-quality sensors in classrooms and other spaces in its public schools. The measurements are sent to a **dashboard**, an online place where anyone can look at the data." Ifrah stared at the screen.



"So instead of one CO_2 monitor, they have lots of them?"



"Exactly."



"And instead of us writing down a few measurements in our notebooks, the monitors keep collecting data?"



"Yes."



Luke grinned. "That is a really big Public Health Detective Notebook."

Ms. Rachel laughed. "It is. We call a collection of information like this a **dataset**."

She clicked on one school. "Let's see what we can find."

The screen showed readings from different rooms. "Here's a classroom," said Ms. Rachel.

The students looked at the graph.

Early in the morning, the CO_2 level was close to the outdoor level.

As the morning went on, it rose. Around lunchtime, it dropped. During the afternoon, it rose again.

"I see a pattern!" said Ifrah.

"What do you see?" asked Ms. Rachel.



"It goes up when people are probably in the classroom."



"And down when they leave for lunch," said Luke.

"That's a **hypothesis**," said Ms. Rachel. "A hypothesis is an explanation we can investigate. How could we find out whether you're right?"

"We could look at other days," said Ifrah.

"And see whether the same pattern happens again," said Luke.

Ms. Rachel nodded. They looked at another day. The pattern was similar. Then another. Similar again.

"So were we right?" asked Luke.

"You found evidence that supports your hypothesis," said Ms. Rachel. "But good detectives keep looking."

They chose another classroom. Its readings were different.

"Why doesn't this room have the same pattern?" asked Ifrah.

"What could be different?" asked Ms. Rachel. The class began making a list.

"Maybe there are fewer students."

"Maybe it's a bigger room."

"Maybe the windows are open."

"Maybe the ventilation is different."

"Maybe nobody was using the room that day."

Luke looked at the two graphs. "So we can't just look at a number and know why it happened."

"That's right," said Ms. Rachel. "Data can help us find patterns, but then we have to ask questions about those patterns."

Ifrah pointed to the list of schools. "Can we compare different schools?"



"We can."



"What about the gym and a classroom?"



"We can investigate that, too."

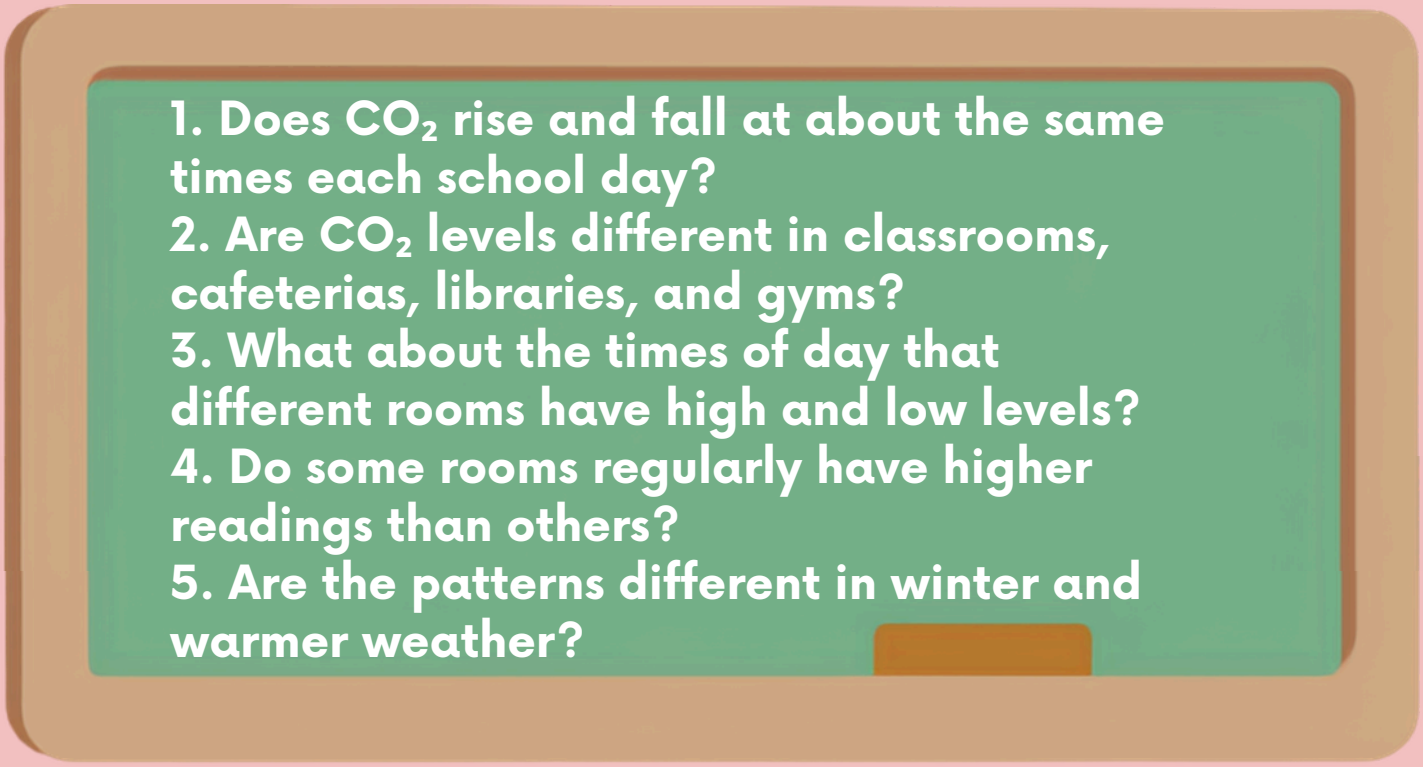


"And the cafeteria?"



"Yes."

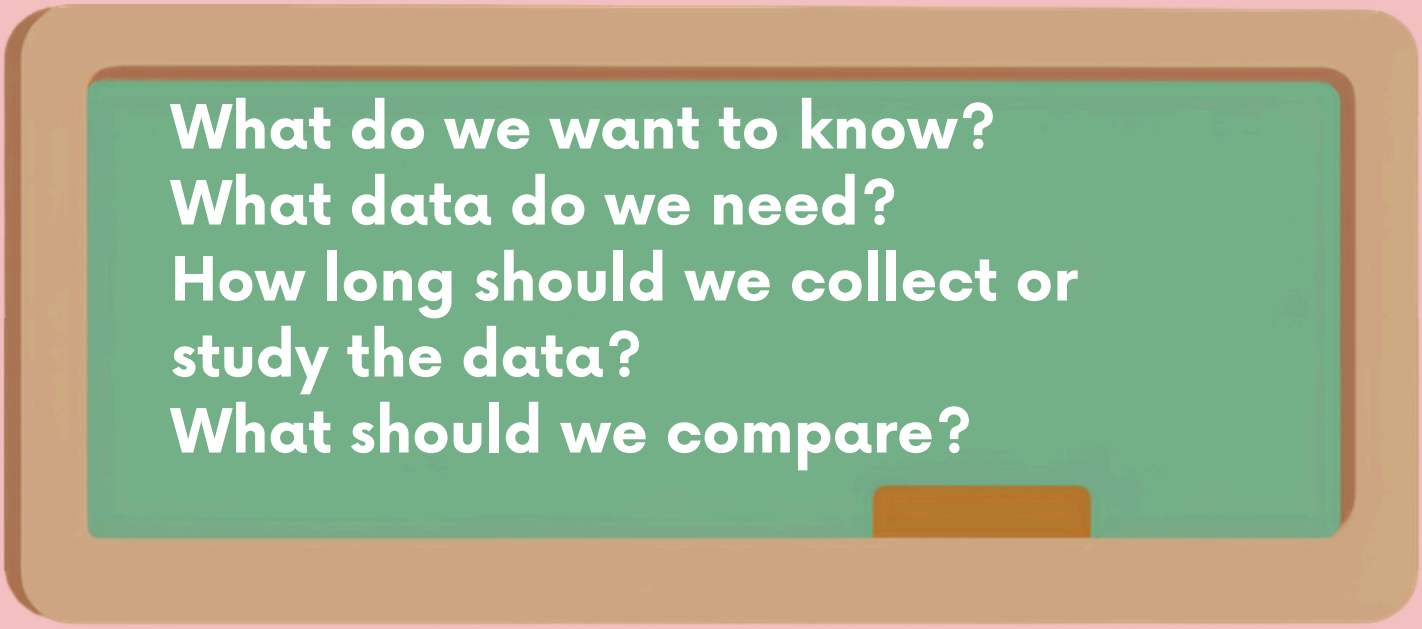
Suddenly everyone had a question. Ms. Rachel began writing them on the board.



Ifrah looked at the growing list. "How do we decide which question to investigate?"

"That," said Ms. Rachel, "is part of designing a study."

She wrote four questions on the board:



Luke opened his Public Health Detective Notebook. "I'm going to choose one classroom and follow it for a month."

"Why a month?" asked Ms Rachel.

"If I only look at one day, it might be an unusual day. A month will give me lots of days to compare."

Ifrah thought for a moment.



"I want to compare two rooms in the same school."



"Which rooms?"



"I don't know yet. Maybe a classroom and the library."



"What will you need to think about when you compare them?"

Ifrah looked back at the notes from their earlier investigations. "How many people use the rooms. What time of day it is. Maybe how big the rooms are."

"And whether windows are open," added Luke.

Ms. Rachel nodded. "You're starting to think about all the things that might affect your measurements."

Luke looked again at the graph. "But once we find a pattern, what do we do with it?"

"What do you mean?" asked Ifrah.



"Well, suppose we find a classroom where CO_2 gets really high every afternoon. We know that means more of the air people breathe out is building up."



"Then maybe we should try to change it," said Ifrah.

"How?" asked Ms. Rachel.

"Open a window?"

"Improve the ventilation?"

"Use an air purifier?" someone suggested.

Ms. Rachel paused. "Those are all ways people can improve indoor air. But they don't all do the same thing."

Ifrah looked at the CO_2 monitor. "What do you mean?"

"That's another mystery," said Ms. Rachel.

Luke opened a new page in his notebook. "I'll write it down." Across the top he wrote: **If we make the air cleaner, what happens to the CO_2 reading?**

Ifrah smiled. "I think we need another experiment."

DETECTIVE CHALLENGE: INVESTIGATE A BIGGER DATASET

With an adult, teacher, or group leader, explore the Boston Public Schools indoor air-quality dashboard.

Choose **one question** to investigate.

You might:

- Follow one classroom or other room over several days or weeks.
- Compare two rooms in the same school.
- Compare the same kind of room in two schools.
- Look at what happens at different times of day.
- Look for days when the pattern is unusual.

Before you begin, write your investigation plan in your Public Health Detective Notebook.

My Question

What do I want to find out?

My Prediction or Hypothesis

What do I think I will find?

My Plan

Which school or rooms will I study?

How long will I study the data?

What will I compare?

My Evidence

Record the measurements or patterns you find. You can make a table, draw a graph, or describe what you see.

DETECTIVE CHALLENGE: INVESTIGATE A BIGGER DATASET

What Did I Find?

Did you find a pattern?

Did the evidence support your prediction?

What other explanations might there be?

My Next Question:

What would you investigate next?

Public Health Detective Glossary

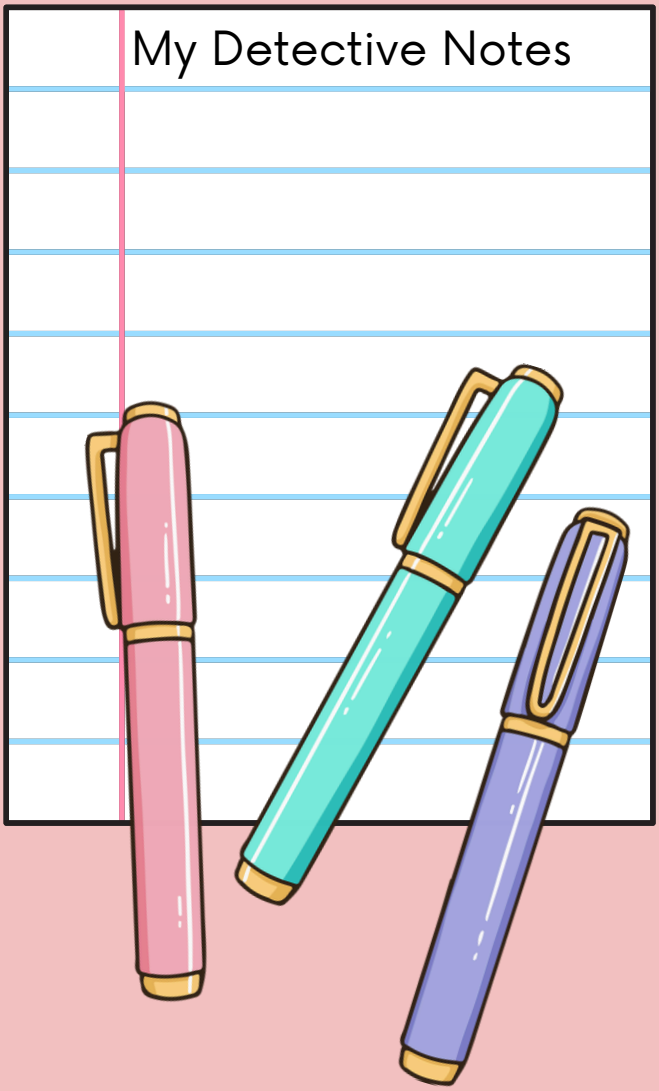
Compare: To look at two or more things to find ways they are alike or different.

Dashboard: A website or display that brings together information so people can see and study it.

Data: Information collected through observations or measurements.

Dataset: A collection of information that can be organized and studied.

Hypothesis: An idea or possible explanation that can be investigated using evidence.



SCIENCE

Vaccine Exploration

by Katelyn Miyasaki



Vaccines help your body learn what germs look like. Germs have little flags on the surface called antigens. So how do the different types of vaccines show these antigens to your body?

Traditional Vaccines: Traditional vaccines contain antigens so your body can learn what they look like. There are many ways to do this. One is by inactivating germs or weakening them so they are much less likely to make you sick. Your body can see the antigens on the germs' surfaces and learn to detect them! Another way is to use "subunits" – parts of the germs containing the antigens. These are injected into your muscles, where your cells see the antigens and learn to recognize them.

Traditional vaccines are hard to make. You either need the germs themselves or a large amount of finished protein. It can take a long time!

mRNA Vaccines: DNA is the instructions inside your cells that tell them how to function. The DNA is protected inside a nucleus, because these instructions need to be safe. So when your cells need these instructions, a copy called messenger RNA (mRNA) is made. The cell can then read this mRNA to make proteins, and then the mRNA breaks down. In mRNA vaccines, special mRNA with the instructions to make antigen proteins is protected inside a fatty bubble and delivered to your cells.



This mRNA is then read by the cells to make the antigens. Then, the cells can respond to the antigens and the body can learn to recognize them on germs.

Some people worry that mRNA vaccines will change your DNA. They don't! The mRNA doesn't enter the nucleus, where the DNA is stored, and it breaks down over time. The vaccines that we use are very safe!

We know how to make RNA very quickly. One advantage of mRNA vaccines is that we can make small changes to the vaccines quickly and easily. Since germs can change over time, we can make the mRNA code in vaccines match the new germs. This also applies to new diseases!

Using mRNA is one reason that we had COVID-19 vaccines very soon after the pandemic began.

The vaccines we already have are amazing, but scientists are continuing to work on new types of vaccines and vaccines that provide stronger, more long-lasting protection. Some might be pills or nasal sprays instead of shots! Many countries offer traditional vaccines for COVID-19. These may cause fewer side effects and protect you longer than mRNA shots.

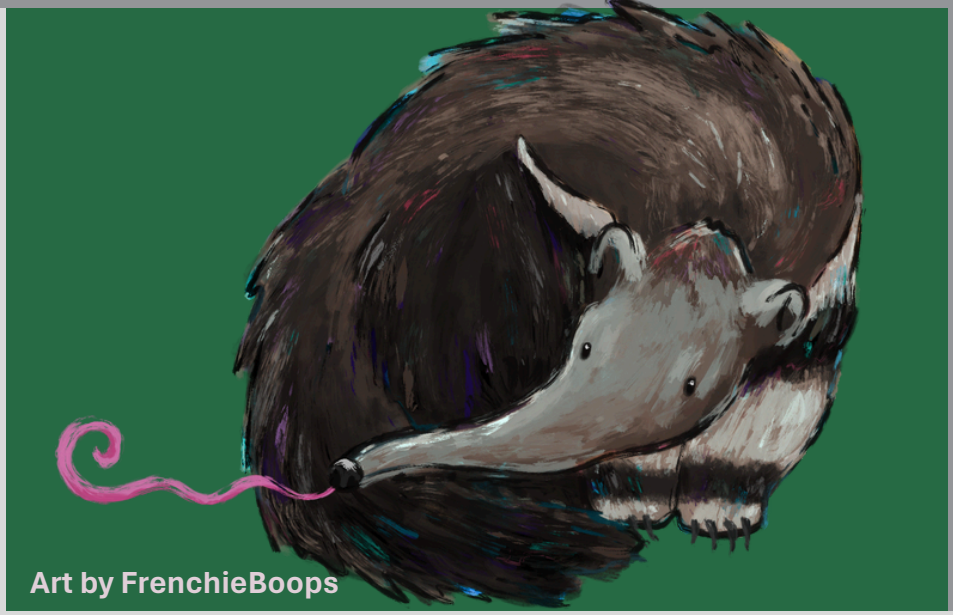
Even if you've had shots, you can still get COVID-19. Vaccination is just one pillar of protection, and masks, ventilation, testing, and distancing are important, too!

Have a science project or experiment you would like highlighted? Or a science question you'd like answered? Submit it to us at WHN.global/KidsZone

ALL ABOUT... ANTEATERS

It's World Anteater Day on November 19th!
Here are some fun facts!

by Karen



Art by FrenchieBoops

Anteaters have no teeth! They use long, sticky tongues to eat.



Anteaters live in Central America and South America! Their habitats include swamps and forests.



The largest species of anteater is the giant anteater! It is about six feet long!

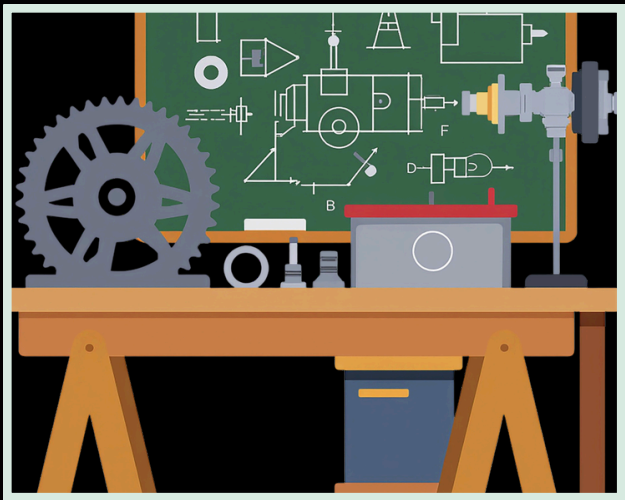


Art by FrenchieBoops

Anteaters are a part of a group of mammals known as Xenarthrans.



The silky anteater is the smallest type of anteater. It is about the same size as a squirrel!



Did you know there are space agencies all around the globe?

Can you name some of them?

A few of them are listed below.

AfSA: The African Space Agency

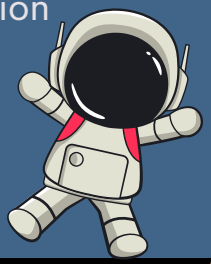
ALCE: The Latin American and Caribbean Space Agency

ESA: The European Space Agency

JAXA: The Japan Aerospace Exploration Agency

NASA: The National Aeronautics and Space Administration





GRATITUDE FOR STEM!

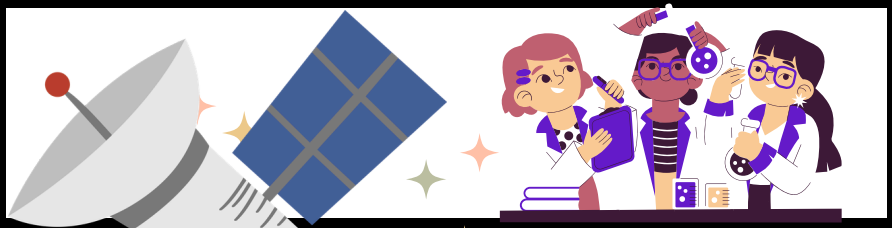
NOVEMBER 8TH IS INTERNATIONAL STEM DAY.

ON THIS SPECIAL DAY, WE CELEBRATE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH!

WE'D LIKE TO SHARE OUR APPRECIATION FOR SPACE AGENCIES!



Scientists and researchers who work for space agencies also work in STEM: Science, Technology, Engineering, and Math!







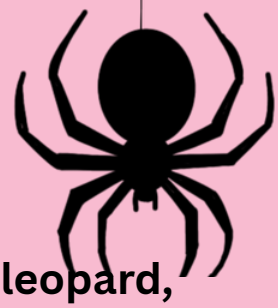
Anansi the Trickster Spider

By Camille A



Anansi the spider-god was a great storyteller.
But, originally, the power of telling stories wasn't his.
Instead, it was the sky god Nyame's.





Anansi wanted the power of stories.
So he begged Nyame to let him buy it.
Nyame gave him a list of things to bring him: the python, the leopard, the hornets, and the fairy.



To trap the python, Anansi got some string and a long stick. Then, he found the python and told him that he had been debating the length of the python with another spider. Anansi explained that the other spider thought that the python couldn't be as long as the stick. The python protested, saying he was at least as big as it. Anansi suggested that the python stretch himself out along the stick. Once the python was beside it, Anansi used the string to tie him to the stick. Once the python was tied up, Anansi took him to Nyame.



Next, Anansi went to the leopard.
He dug a hole where the leopard liked to sleep and covered it with a tangle of vines and sticks. When the leopard walked over it, he fell into the pit and couldn't get out. Anansi pretended that he had just happened to walk past the pit and find the leopard. Saying that he would help, he put down a rope for the leopard to climb. When the leopard did, Anansi trapped him in a sack and took it to Nyame.



When Anansi went to find the hornets, he brought a gourd filled with water. He splashed some of the water on the hornets and told them that it was raining. To keep them safe from the "rain," Anansi suggested that the hornets hide in the gourd.



When they flew inside, he slammed the gourd's lid over the hornets before they could fly out.
He brought the gourd to Nyame and left to capture the fairy.



To capture the fairy, Anansi took a doll and covered it in glue. Then, he put sticky yams in the doll's hands and propped it up on a tree branch.

When the fairy flew by, she asked the doll if she could eat some of the yams. Anansi hid behind the doll and made it nod by poking the head with a stick.

The fairy ate the yams, and tried to thank the doll with a hug. But when she touched it, the glue kept her stuck to the doll! Anansi grabbed the doll and took it to Nyame.

Once Anansi had given Nyame everything he had requested, Nyame gave him the power of telling stories.
Anansi has been weaving tales ever since.









Why I Mask

by University of New South Wales-Sydney Professor Deborah Lupton



Why do I mask up in indoor spaces? I mask because I am in the prime of my academic career and I want to keep my brain power and my excellent health for as long as possible to continue doing what I love as well as I can.

Masking means I can meet with colleagues and team members, see exhibitions, socialise, give talks and run workshops while helping to keep myself and everyone else safe from deadly and disabling airborne infections.

TO FEEL INTRIGUED, ENERGIZED AND ENGAGED

Kids' Zone Magazine is a free, volunteer-made digital publication.

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You can download the magazine and print it!

Kids' Zone
World Health Network

WHN.global/KidsZone

Welcome to the World Health Network Kids' Zone Magazine! Although COVID-19 is a serious topic, living a COVID-conscious lifestyle can be fun and rewarding. In this magazine we highlight the many ways kids explore, share, and connect!

LET'S JUMP INTO THE KIDS' ZONE!