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ISSUE 14

WORLD HEALTH NETWORK

KIDS' ZONE

COVID-CONSCIOUS MAGAZINE



BACK TO SCHOOL CLEAN AIR EDITION

CLEAN AIR IN SCHOOLS

RED PANDAS

SHORT STORIES

CELEBRATING SAFELY

CSA Z94.4-25

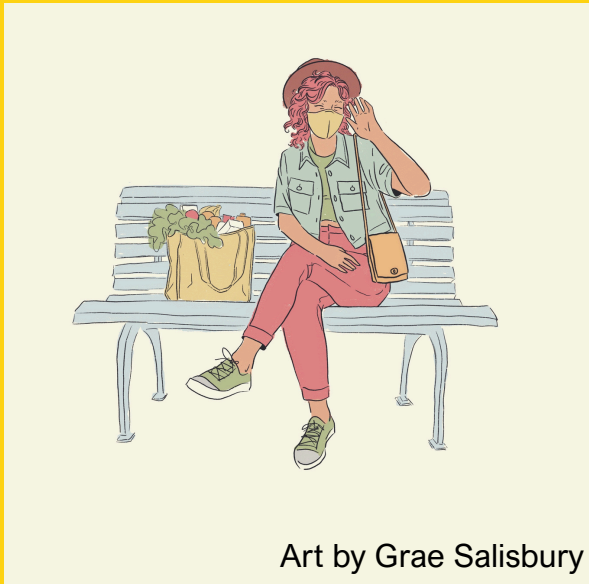
... AND MORE INSIDE!

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[WHN.global/KidsZone](https://whn.global/KidsZone)



EXPLORE | SHARE | CONNECT



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

WHAT'S IT ALL ABOUT?

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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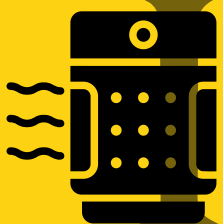
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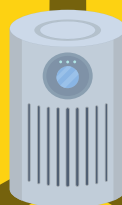
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The Month Ahead

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

ALL MONTH:

LIBRARY CARD SIGN-UP MONTH (US)

**CHILDHOOD CANCER AWARENESS MONTH
[GLOBAL]**

NATIONAL SICKLE CELL AWARENESS MONTH (US)

WORLD ALZHEIMER'S AWARENESS MONTH



01 SEPTEMBER - LABOR DAY (US AND CANADA)

04 SEPTEMBER - MAWLID AL-NABI (GLOBAL)

08 SEPTEMBER - WORLDWIDE CYSTIC FIBROSIS DAY

11 SEPTEMBER - NATIONAL SCHOOL PICTURE DAY (US)

13 SEPTEMBER - NATIONAL CELIAC DISEASE AWARENESS DAY (US)

15 SEPTEMBER - NATIONAL ONLINE LEARNING DAY (US)

15 SEPTEMBER - NATIONAL HISPANIC HERITAGE MONTH STARTS (US)

16 SEPTEMBER - INDEPENDENCE DAY (MEXICO)

20 SEPTEMBER - OKTOBERFEST STARTS (GERMANY)

20 SEPTEMBER - INTERNATIONAL RED PANDA DAY

21 SEPTEMBER - INTERNATIONAL DAY OF PEACE

23 SEPTEMBER - BI VISIBILITY DAY (GLOBAL)

24 SEPTEMBER - ROSH HASHANA (GLOBAL)

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Editor's Note: CLEAN AIR IN SCHOOLS

by Claire 



This edition of the Kids' Zone Magazine is a breath of fresh air! September means it's time to go back to school, learn new things, and meet new friends. Unfortunately, it can also mean asthma attacks, seasonal germs, and more exposures to COVID-19. That's why it's important that we breathe in clean air!

A few years ago, my parents teamed up with clean air activist Michael Bailey to update our karate school and make it extra safe. We added Corsi-Rosenthal boxes, HEPA filters, UV lights, and a super-duper air conditioner called a dedicated outdoor air system that lets us bring in more clean air from outside. This taught me a lot about the many ways we can make the air we breathe safer.

Not every school will use the same tools, and that's okay! But with many schools on substandard air systems, it's important that we make changes to keep students safe, healthy, and ready to learn.

So let's open the windows, wield our CO2 monitors, turn on the filters, and crank up the fans! Simple changes can make a big difference!

Three Unbelievably Easy Ways to Clean and Ventilate the Air

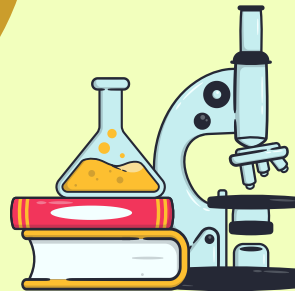
- Use HVAC filters with a rating of MERV-13 or MERV-14. Always check that your HVAC can handle the increased resistance first!
- Build a Corsi-Rosenthal box. It's heavy-duty, cheap, and delightful to decorate!
- Open two windows. Put a fan in one, pointing outside.

What Is Your Favorite School Subject?

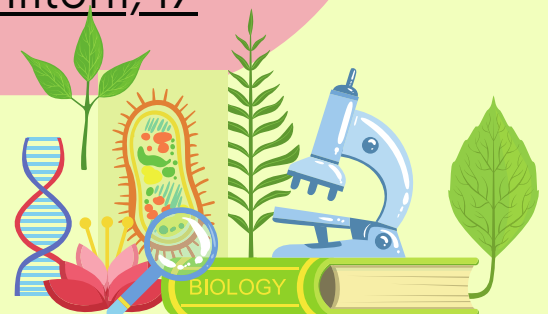
Share about your favorite subject or major in school. Why do you like it?

My favorite subject is Public Health, which I study in school and contribute to at WHN. I like it because it combines all my other favorite subjects, like math, civics, and biology!
→ Claire, Lead Editor, 17

My favorite subject is science because it rules the entire universe.
→ A, age 17



My favorite school subject is science, specifically biology. It is interesting to learn how our bodies function - why you breathe, eat, sleep, grow, and get sick or better.
→ Liana, Intern, 17



I like learning about history. I enjoy learning about ancient battles and weapons and armor. Fantasy battles are also good.

→L, age 12



My favorite subjects are English and History. I like learning about grammar and spelling and I also like to learn about what happened in the past.

→K, age 9

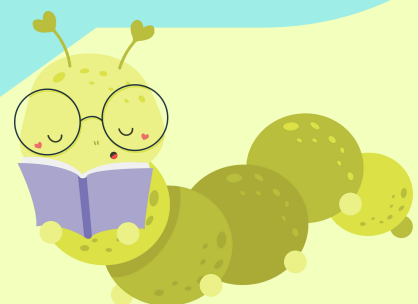
My favorite subjects are philosophy, cognitive science, and the other sciences, because if we understand the universe and we understand ourselves then we can make everything better.

→VB



I love reading books where the characters go on adventures.

→C, age 12





FIVE BENEFITS OF Clean Indoor Air

1

Increase brain
power so you can
think more clearly

**2**

Breathe easier

**3**

Help prevent the
spread of viruses

**4**

Clear allergens
from the
environment


**5**

Sleep better





BLUEBERRY PANCAKES!!

by Selina Halaseh 


INSTRUCTIONS:

INGREDIENTS:

- 1 CUP ALL-PURPOSE FLOUR
- 1 TABLESPOON SUGAR
- 1 TEASPOON BAKING POWDER
- ½ TEASPOON BAKING SODA
- ¼ TEASPOON SALT
- 1 CUP BUTTERMILK
- 1 LARGE EGG
- 2 TABLESPOONS MELTED BUTTER (PLUS EXTRA FOR COOKING)
- 1 CUP FRESH BLUEBERRIES, OR ANY TOPPING YOUR HEART DESIRES

1. WHISK FLOUR, SUGAR, BAKING POWDER, BAKING SODA, AND SALT IN A BOWL.
2. IN ANOTHER BOWL, MIX BUTTERMILK, EGG, AND MELTED BUTTER.
3. COMBINE WET AND DRY INGREDIENTS; STIR GENTLY.
4. FOLD IN BLUEBERRIES.
5. HEAT A BUTTERED SKILLET OVER MEDIUM HEAT.
6. POUR ¼ CUP BATTER PER PANCAKE; COOK 2–3 MINS UNTIL BUBBLES FORM. FLIP AND COOK 1–2 MINS MORE.
7. SERVE WARM WITH SYRUP.

Clean Air Words

by Claire 

Sometimes we use big words and abbreviations when talking about clean air. Let's learn some of these terms!

ACH: air changes per hour, how many times in an hour enough air to fill the room can be removed and replaced

Aerosol: A sort of mist, like tiny particles hanging in the air

Airborne: Spreading or moving through the air

ASHRAE Standard 241: A standard produced by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers describing how many air changes are needed in different places when germs are spreading

CADR: clean air delivery rate, how fast an air filter releases air with a certain type of particles cleaned out

Corsi-Rosenthal Box: A do-it-yourself air filter made with a box fan and HVAC filters

CO2: carbon dioxide, a gas released when you breathe or when things are burnt

DOAS: dedicated outdoor air system, a superhero air conditioner

HEPA: high-efficiency particulate air, a kind of really effective air filter

HVAC: heating, ventilation, and air conditioning

MERV: minimum efficiency reporting value, a way to classify how good an air filter is

PM2.5: particulate matter 2.5 micrometers across or smaller

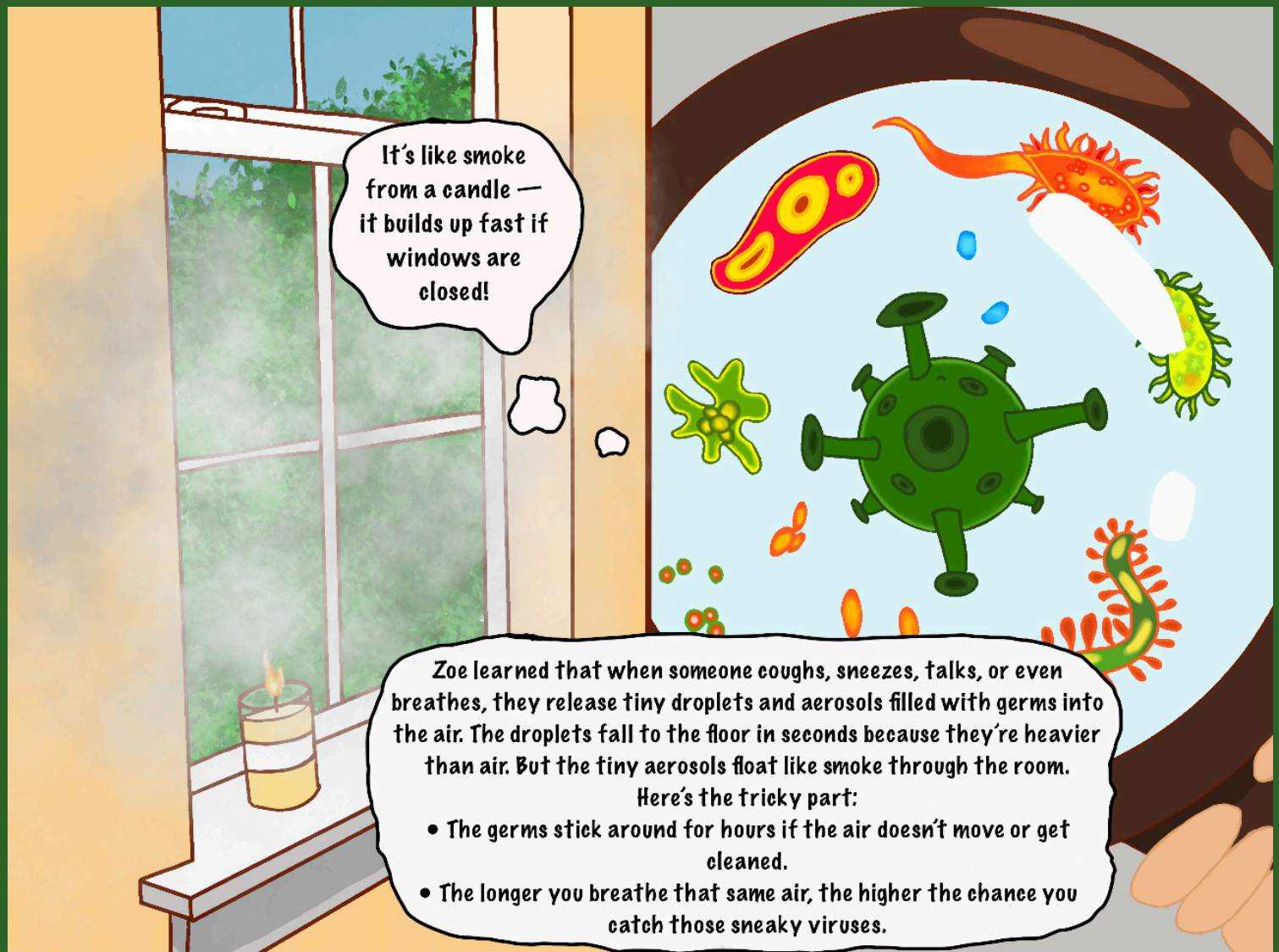
Upper-Room UV: ultraviolet lamps attached to the ceiling that kill germs

Clean Air Comic

WRITTEN BY CLEANAIRKITS BASED ON A REAL EXPERIMENT THAT THE FOUNDER'S DAUGHTER
[ZOE] DID IN SCHOOL

ILLUSTRATED BY ELKE FERGUSON [AGE 12]

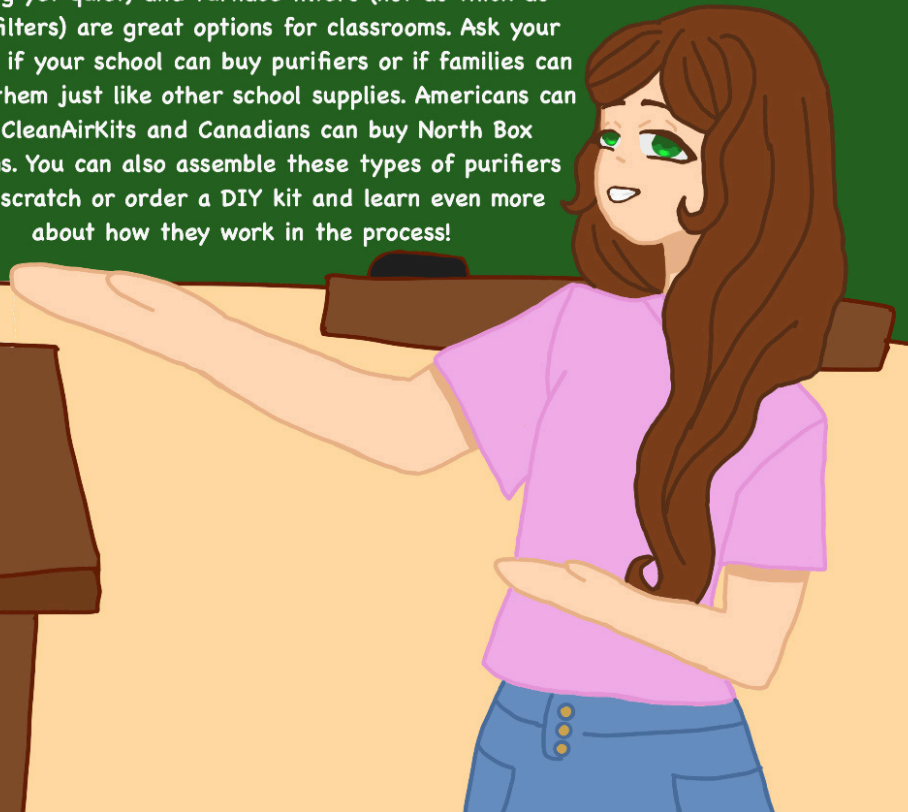








Use air-cleaning machines. Just like a mask, air filters work by trapping the harmful particles before we inhale them. Classrooms need 1-3 quiet air purifiers to clean the air that open windows and the heating/cooling system miss. HEPA purifiers work well but are usually too loud on their highest setting, so classrooms need a lot of them spread out on lower settings. Purifiers with PC-fans (strong yet quiet) and furnace filters (not as thick as HEPA filters) are great options for classrooms. Ask your teacher if your school can buy purifiers or if families can donate them just like other school supplies. Americans can buy CleanAirKits and Canadians can buy North Box Systems. You can also assemble these types of purifiers from scratch or order a DIY kit and learn even more about how they work in the process!



Use air-cleaning UV lights. Ask your principal and superintendent if they will add Far UVC lights to the ceiling to destroy the germs mid-air.

Keep your hands clean! Washing removes germs that land on things in the form of droplets, but remember, germs mostly float in the air! Always wash your hands after going to the bathroom and before eating (even a snack)!

**Now we know how
to protect
ourselves and
others!**

For her science project, Zoe used a special gadget called an air quality monitor to see how many tiny particles were floating in her classroom. The device she used measured particles that are dust-sized as well as even smaller particles that are germ-sized. Zoe observed the speed at which candle smoke moves through the air compared to air that has been cleaned by air purifiers. She discovered that cleaned air, contaminated air, and smoke all spread at the same speed.



The Big Germ-Busting Challenge!

Now it's your turn! Can you become a Germ-Fighting Hero?

Here's how you start:

1. Remember to open windows or doors when you can, even a little bit.
2. Wear your mask.
3. Wash your hands often, especially before eating.
4. Tell your friends what you've learned so you can all keep your classroom safe and fun!

The End... or Just the Beginning!

Invisible viruses might seem scary at first, but with smart moves like Zoe's, we can beat them together. You have the power to keep yourself and your friends healthy — like real-life Ghostbusters fighting off invisible germs

A Short History of Sanitation

by Claire 

You are living through a revolution—a revolution in public health! As you know if you like to read this magazine, COVID-19 spreads through the air, sometimes in big spit droplets, but often through small particles you let out during speaking and breathing. This means that COVID-19, like influenza, RSV, measles, and lots of other germs, is **airborne**. Recognizing that illnesses can spread through tiny particles that hang in the air and travel around the room wasn't easy, and, even though we have lots of proof, not everyone has been convinced.



But this isn't the first public health revolution; they actually happen *all the time*. It takes a lot of work to discover the true way a disease spreads, and everyone seems to have their own guess. Let's learn about some scientists who led public health revolutions to change the way we clean up germs.

In Europe before the 1800s, people were sick all the time. European cities were crowded, unsanitary places, so diseases like the Black Death could spread like wildfire. Without the benefit of the variolation practiced in places like India, China, Turkey, and parts of Africa, Europeans were at especially high risk of measles, too.

So, it's no surprise that Europeans tried to understand why people got sick, and they came up with an awfully familiar answer: bad air. However, this "miasma theory" wasn't a scientific understanding of airborne disease. Instead, it was a general excuse for everything from malaria (which is actually spread by mosquitoes) to cholera (which is spread through dirty water). People had no idea that microbes even existed!

In 1847, Hungarian doctor Ignaz Semmelweis was just beginning his medical career, and he was concerned by the numbers of women who died of sepsis after having babies in the Vienna Hospital where he worked. Women tended by midwives got sick much less often than those tended by doctors, who also performed autopsies in the mornings. Semmelweis realized that doctors were spreading disease through touch and advocated for doctors to wash their hands in a chemical called chlorinated lime. Even though his efforts saved many women, other doctors ignored or even argued with him.

In fact, Dr. Semmelweis was not the first person to tell doctors to wash their hands. Poets and physicians including Oliver Wendell Holmes, Sr. (father of the Supreme Court justice by the same name), Alexander Gordon, and Zsoldos János had been calling for handwashing for years.

In 1849, a young English doctor named John Snow published a paper where he argued that people got cholera by swallowing contaminated water, not by breathing in bad smells. In 1854, a terrible cholera outbreak began in Soho, and Dr. Snow began tracking infections. He realized that patients were getting water from a particular water pump. After Snow disabled the pump, the cholera outbreak quickly ended. However, because most people already assumed cholera was in the air, it took another decade before other doctors agreed that cholera germs were spread in the water!



Around the same time, the visionary nurse Florence Nightingale was combatting deadly diseases among Crimean War soldiers. Her recommendations included handwashing, fresh air, and sunlight. Handwashing became much more common after the 1860s, but it took until the 1980s before countries actually created hand hygiene recommendations for their healthcare workers!

Germs can also spread through food, and French chemist Louis Pasteur was the hero of that story. While studying the production of alcohol, Pasteur realized that fermentation is caused by living organisms. In the 1860s, Pasteur discovered that germs in beverages like wine and milk could cause them to spoil, so he created a new way to keep drinks fresh—heating them for a short period. This trick is called pasteurization. Pasteur also demonstrated that keeping foods in airtight containers can keep them from spoiling. Louis Pasteur was luckier than Semmelweis and Snow; he lived to see many of his discoveries put into action. However, it would be the early 1900s before pasteurization of milk became a legal requirement.



In 1861, English surgeon Dr. Joseph Lister was put in charge of several surgical wards at the Glasgow Royal Infirmary. His amputation patients were dying of sepsis, much like the mothers in Semmelweis's maternity ward. Lister realized that miasma theory didn't really explain why so many surgical patients died; instead, a kind of dust, which he believed was spread through the air, seemed to be getting into their wounds. By studying the work of Pasteur, Lister realized his infectious dust was actually microbes. Beginning in 1865, Dr. Lister dressed his patients' wounds with carbolic acid, and surgical deaths decreased dramatically. His process was quickly accepted in Germany and eventually became common in England and the United States.

Throughout the 1800s, European and North American cities built the first modern sewer systems (although people all around the world had developed early versions of sewers and toilets centuries earlier). Sewage treatment plants were created during the late 1800s and early 1900s to use chemicals or microbes to clean up dirty water before releasing it into rivers and bodies of water.

Pollution laws for air and water became common in the 1900s. In the US, the 1948 Federal Water Pollution Control Act and 1972 Clean Water Act were passed to prevent people and businesses from putting toxins into waterways and bodies of water. Similarly, the Safe Drinking Water Act, first passed in 1974, works to ensure the water supply is clean. The Clean Air Act of 1970 regulates pollutants that can be emitted into the air.



Even when scientists agree that sanitation rules are important, they can be hard to put into place. Many areas in the world don't have clean water, doctors often fail to wash their hands, and some people drink raw milk. It's important to remember how many lives have been saved by handwashing, clean water, and pasteurization so we don't forget their importance today.

Today, we're living through another revolution in public health. Clean indoor air and masking are important tools to prevent the transmission of those germs that really are spread through the air, including COVID-19, influenza, and measles. Many people spend 90% of their time indoors, and we must ensure those indoor environments are safe.

We know that accepting new public health tools can take time, but it will also save many lives. Let's keep campaigning for indoor air quality, masking, and reminding doctors and policymakers that we need to use every tool available to stop disease in its tracks!

Make Your Own Back-to-School Health Kit!

By: Liana, 17

5 essential items to maintain a safe & clean school environment



1.

Hand Sanitizer: an easily accessible way to protect against germs

2.

Personal Air Purifier: cleaning the air around you helps keep away airborne pathogens



3.

Reusable Water Bottle: staying hydrated is important to keep a healthy body



4.

High-Quality Mask: for protection in the classroom



5.

Sanitary Wipes: for wiping away any germs on your hands or surfaces





BOSTON PRIVATE TUTORS

WHN member and MIT alum Stephanie Schmit founded Boston Private Tutors in 2017 to provide the best STEM education to families like yours. Tutoring and small group classes are available for all math, science, and engineering subjects through 12th grade. Future in-person, mask-required programs are being planned.



- Amazing experience overall!
- Felt safe mentally and physically
- Fun engineering challenges throughout the week to teach about mechanisms, strength, and prototyping
- Connected with other kids
- Got to use some power tools!

– Luke Szigety

WHN Intern and Robotics Camp Participant



Stay tuned for future in-person, mask-required programs for COVID-cautious kids like you! Ask your parents to fill out this survey.



An International Surprise Party

by Claire 

One of my best friends turned 16 this month, and I helped throw her a Google Meet surprise party! Even though some of us live in the US and some live in India, my friends and I worked together to create a lovely event.

What are the elements of a fantastic virtual birthday surprise?

- Timing--our friend's a night owl, so we met with her just after midnight on her birthday
- Surprise--our sneakiest friend pretended our Google Meet had nothing to do with her birthday
- A Card--people all over the world signed our card on Canva
- Entertainment--funny music, good conversation, and a heartfelt video

I had the best time at my first surprise party, and I was completely safe from COVID! How do you do COVID-conscious celebrations?



CELEBRATING THE JEWISH AUTUMN HOLIDAYS

ROSH HASHANAH, YOM KIPPUR, AND SUKKOT – BY NB



Every fall, Jewish people around the world celebrate a special set of holidays that bring together family, friends, and community. These holidays—Rosh Hashanah, Yom Kippur, and Sukkot—each have their own meaning, traditions, and flavors. Let's take a tour through the season!



ROSH HASHANAH – THE JEWISH NEW YEAR

Rosh Hashanah means “head of the year” in Hebrew. It's the start of the Jewish year and usually happens in September or early October.

- It's a time to think about the past year and make good choices for the new one.
- Families often eat apples dipped in honey not just because it's yummy, it's a way of saying we hope the new year is sweet and good. Some families also eat pomegranates, because they're full of seeds, for a successful, fruitful year!
- A ram's horn called a shofar is blown in synagogue to mark the holiday—its blast is meant to wake people up—not from sleeping, but to pay attention to what's important in our lives and in the world.



L'shanah tovah
u'metukah!
(To a good and
sweet year!)



YOM KIPPUR – THE DAY OF ATONEMENT

Ten days after Rosh Hashanah comes Yom Kippur, the holiest day in the Jewish year.

- It's a day to say "I'm sorry" for our mistakes, ask forgiveness, and make plans to do better.
- Many adults fast—don't eat or drink—for 25 hours, but children usually do not fast.
- The day is filled with prayer and quiet reflection.



SUKKOT – THE HARVEST FESTIVAL

Five days after Yom Kippur begins Sukkot, a joyful, week-long holiday.

- Families build a sukkah, a hut with a roof made of branches, where they eat meals (and sometimes even sleep, if it's warm and dry where they are).
- The sukkah reminds people of the temporary shelters used by the Israelites during their journey in the desert long ago. It also reminds us of the beauty and the power of nature.
- Special plants called the lulav (palm, myrtle, and willow branches) and etrog (a lemon-like fruit called a citron) are waved in all directions—north, south, east, west, up, and down—to show that the whole world matters and that we are all connected.



♥ A SEASON OF REFLECTION, JOY, AND COMMUNITY

Together, these three holidays move from reflection (Rosh Hashanah), to asking for forgiveness (Yom Kippur), to celebrating nature and community (Sukkot). They're a time to look inward, connect with others, and be thankful for the good things and the people in our lives.

ACTIVITY:

Draw one picture, or make a collage, that includes all three holidays—maybe a shofar, a bowl of apples and honey, and a sukkah under the autumn sky. Send your art to Kids' Zone and we might share it in a future issue!

CELEBRATING SAFELY

The fall holidays are a time for being together—but they can also be a time when germs spread more easily, especially in synagogue and at dinners with family and friends. That's why it's important to remember COVID safety and keep everyone healthy.

Here are some ways families can celebrate while being mindful:

- Mask up indoors—especially in crowded places like synagogue services or community events.
- Keep windows open when there are a lot of people gathering. Ask grownups to help with this.
- Celebrate outdoors whenever possible—like eating and hanging out in the sukkah.
- Stay home if you're sick—you can still join by video or phone so you don't miss the celebration completely.
- Celebrating safely helps make sure everyone—from babies to grandparents—can enjoy the holidays together.

SCIENCE NEWS

by Selina Halaseh



This month: 10 Facts
About Space
Plus, COVID and
autoimmunity and red
pandas



THE article "10 Facts About Space" from National Geographic Kids presents a collection of interesting facts about the universe. It explains the enormous size of the Sun, describing how about one million Earths could fit inside it. It also talks about comets as ancient leftovers from the solar system's formation, and it points out that gas giants such as Jupiter and Saturn cannot be walked on because they do not have solid surfaces. Other highlights include the discovery that Venus has a day longer than its year and that Mars has the tallest mountain in the solar system, Olympus Mons.

The article continues with more striking details about the planets and outer space. It mentions that space is completely silent, since there is no air to carry sound, and that the footprints made on the Moon could last for millions of years because there is no wind or rain to erase them. It also introduces the concept of stars being so far away that their light takes thousands or even millions of years to reach Earth. Together, these ten facts give a broad picture of the strange and fascinating features of our solar system and beyond.

[HTTPS://WWW.NATGEOKIDS.COM/UK/DISCOVER/SCIENCE/SPACE/TEN-FACTS-ABOUT-SPACE/](https://www.natgeokids.com/uk/discover/science/space/ten-facts-about-space/)

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](https://www.whn.global/kidszone)

ALL ABOUT... RED PANDAS

IT'S International Red Panda Day this September 20! Let's learn all about the tiny-but-mighty "lesser panda."



Red pandas have pseudo-thumbs, specially big wrist bones that can be used like thumbs, which they use to climb trees and pull off bamboo to eat.

Although their distant ancestors were meat-eaters, the red panda diet is almost completely bamboo!

Baby red pandas are called cubs. Mommy red pandas usually have one or two babies a year. Red panda cubs are born in spring and summer.



Red pandas are actually related to raccoons and otters, not giant pandas!

Red pandas sleep 17 hours a day and cocoon themselves in their tails, which are as long as their bodies!



There are two kinds of red pandas. One sort lives mostly in China, and the other sort lives mostly in Nepal, India, Myanmar, and Bhutan.



COVID and Autoimmune Conditions



IT'S National Celiac Disease Awareness Day on September 13 in the United States, so it's a good time to discuss autoimmune conditions and how COVID-19 can affect them.

What is an autoimmune condition? Autoimmune conditions are syndromes where your immune system fights your own body. This can lead to painful irritation on your skin, in your tummy, or in your joints and to loss of function in organs like the pancreas. Many people have common autoimmune conditions like psoriasis, type 1 diabetes mellitus, and systemic lupus erythematosus.

Celiac disease is another autoimmune condition. When a person with celiac disease eats a food containing the bread protein gluten, it leads to painful inflammation in their small intestine that makes it harder to digest their food. People with celiac disease have to avoid eating foods with gluten, like wheat and barley, and often eat specially made breads and treats.

Many autoimmune diseases are associated with germs, including rheumatic fever, type 1 diabetes, and likely even multiple sclerosis. Genetics also put some people at higher risk for certain autoimmune conditions.

COVID-19 is no exception! In fact, COVID is quite good at triggering autoimmune conditions. A 2023 study in *The Lancet* by Renin Chang, et al., found that COVID-19 increases the risk of lots of autoimmune disorders. These include rheumatoid arthritis, lupus, Sjögren's syndrome, psoriasis, vasculitis, inflammatory bowel disease, type 1 diabetes, and, yes, celiac disease.

Autoimmune conditions are chronic, meaning that patients often must learn to manage them their whole lives. It's fantastic how many tools people with autoimmune conditions have to improve their health, but prevention remains the best medicine. And preventing autoimmunity means preventing COVID!

Here's the study link: [COVID autoimmunity study](#).





A Look at the Literature

Accessible Research for Younger Readers

Cognitive and psychiatric symptom trajectories 2–3 years
after hospital admission for COVID-19: a longitudinal prospective cohort study
Published on the 31st of July

GOAL

WHETHER COGNITIVE ISSUES ALONG WITH PSYCHIATRIC SYMPTOMS, PERSIST OR WORSEN BETWEEN 6 MONTHS AND 2–3 YEARS AFTER HOSPITALIZATION



PARTICIPANTS



475 INDIVIDUALS PREVIOUSLY HOSPITALIZED WITH COVID-19

METHOD



SCIENTISTS GAVE THEM MEMORY AND THINKING TESTS AND ASKED QUESTIONS ABOUT MOOD, TIREDNESS, AND WHETHER THEY HAD TO CHANGE JOBS. THE SAME PEOPLE HAD BEEN CHECKED SIX MONTHS EARLIER, SO THE SCIENTISTS COULD SEE WHAT CHANGED OVER TIME.

RESULTS



THE RESULTS SHOWED THAT SOME BRAIN SKILLS, LIKE MEMORY AND ATTENTION, GOT A BIT BETTER AFTER THREE YEARS, BUT MANY PEOPLE STILL STRUGGLED. PROBLEMS LIKE FEELING SAD, WORRIED, OR VERY TIRED ACTUALLY GOT WORSE. ALMOST HALF SAID THEY FELT DEPRESSED, AND ABOUT ONE IN FOUR HAD TO LEAVE OR CHANGE THEIR JOB BECAUSE OF THESE PROBLEMS.

Have you seen any research recently that you want to make accessible to a younger audience? Submit a summary to <https://whn.global/kidszone/>

Video Activity: CSA Z94.4



The Canadian Standards Association has been creating standards, especially for workplace safety and the environment, for over a hundred years! This year, the Canadian Standards Association, now known as the CSA Group, has released new drafts to protect Canadians from germs. The proposed standards cover surface disinfection, building specifications in healthcare, ventilation, and respirator masks.

Draft standard Z94.4-25 is called *Selection, Use, and Care of Respirators*. It is the sixth update of a standard first released in 1982 and discusses how workplaces decide which kinds of high-quality masks their workers need to use. For the first time, it also calls for universal masking with respirators for healthcare workers (although they get to take breaks from masking in “exempt zones” that have good ventilation, UV lights, or other germ-fighting tools).



Activity: Understand Standard Z94.4

The WHN hosted a town hall meeting about CSA Z94.4, where Dr. Dick Zoutman discussed the new standard.

With a caregiver's permission, watch the town hall and fill out the activity on the next page!

Here's the link:

<https://www.youtube.com/watch?v=8QwbwppaZJs>





Fill in the Blanks



Use the word bank below to fill-in the following statements

At least ____ of all the people in Canada who have COVID and are in a hospital bed caught COVID in the hospital.

Someone who's taking a leisurely walk will exhale over 1.2 million particles every ____.

SARS-CoV-2, the virus that causes COVID, is _____.

Surgical masks were never intended to serve as _____ protection.

The Canadian Standards Association was developed in 1919 in the aftermath of the ____ World War.

Chapter __ is new to this version of Z94.4 and discusses respirators in _____ environments.

We're trying to prevent COVID and the ravages of ____.

Many healthcare workers demanded ____ and were denied.

The hierarchy of _____ highlights the importance of engineering controls, which are included in other CSA standards.



Word Bank

half

airborne

respiratory

minute

First

9

controls

Long COVID

N95s

healthcare

GAME ZONE



How many strategies can you identify in this room to help prevent the spread of airborne pathogens?

What I saw on my daily walk

by the Masked Photographer 



Here is a photo of a black swan on a nest. What's strange, though, is that the nest had recently been occupied by a white swan, as shown here in this photo from a week earlier.



I had been watching the white swan on the nest for several weeks and suddenly, she wasn't there anymore. What happened to her and the eggs or cygnets she had been sitting on? Here they are: Those little blobs of grey down hiding under their mother's warm body! So what happened is that they hatched! But that still leaves open the question, why was the black swan sitting on their empty nest? Could it be that there is a left-over egg in there? Or could it just be that the black swans function as a sort of "godmother" for the white swan families?



For example, here is a photo of a different swan family (the swans were hatched a few weeks earlier), where you can see two parents, a few cygnets, and an auxiliary black swan. Lots of questions, looking for answers.

The other four photos were from 18th of June, right after the cygnets were hatched (just over 9 weeks ago at time of writing). These last two show a more recent version of the grey ball of down under the white

swan, as of 22nd of August. The cygnet and its mother spent a long time grooming themselves together on the bank of the lake. At the end, the cygnet showed off its cleanliness, spreading its little wings as swans do after grooming.



Aspa meets Kishor Kale (Maths graduate and COVID-19 advocate)

Hello Kishor! Tell me a bit about yourself. I believe you studied Maths at Oxford in the UK?

Yes, I was a Mathematical Scholar at St John's College. Coincidentally, I started at Oxford at exactly the same time as Boris Johnson, although we went to different colleges and I have never met him. He became Prime Minister and I did not.

Why did you study maths? Would you recommend to children and teenagers to study maths?

I studied mathematics because I like logical reasoning, and I would recommend that children study pure mathematics if they want personal satisfaction. I would not recommend pure mathematics to those who wish to progress in the real world, because mathematics has an absolute value of truth ($2+2=4$) whereas the pandemic has shown that in the real world, truth is often whatever is convenient to the most powerful person in the room at that particular time, and morality often involves finding rationalizations for the behaviour of the most powerful person.

Tell me about your practice in relation to COVID-19. For example, are you still masking in public places?

Yes. Ironically, by masking my face I am displaying my non-conformity, which existed long before the pandemic began. I am not an expert on airborne disease transmission, but my understanding is that the experts consider that the better the fit and filtration properties of the mask, the better the protection against SARS-CoV-2.

Pure Mathematics may have saved my life indirectly, which contradicts the widely held view that it has no practical applications: Cambridge is very cold in winter, much colder than Oxford, and when I was at the Department of Pure Mathematics and Mathematical Statistics there I purchased some thermal vests from an industrial protection company which supplies a wide range of equipment. I still had the company's catalogue when the pandemic struck, so I knew to check their website and obtain respirators as soon as these were available again after the shortages in the very early stages of the pandemic.

Why are you still COVID-cautious?

For four reasons:

First, I have received an email from the National Medical Director of NHS England, who coincidentally is an alumnus of my old Oxford College, advising me that my medical records show that I am vulnerable to acute COVID, and thus I may be suitable for anti-viral treatment should I contract COVID. Prevention is better than cure.

Secondly, I am aware of research showing that my medical conditions also put me at increased risk of getting long COVID.

Thirdly, I am aware of much research showing that a SARS-CoV-2 infection can have long-term consequences even for those who are fully vaccinated and not in one of the official high-risk groups.

Finally, no-one yet knows about those long-term effects of COVID which, because SARS-CoV-2 has not been around for long enough, have yet to be manifested (except for those who think that they can see into the future and predict that there will be no such consequences, because they are having too much fun dining out and uttering comfort slogans).

What is Mensa?

Mensa is an organisation for those who score on the top 2% of an approved IQ test (<https://mensa.org.uk/test-your-iq/>). I shall return to this eligibility criterion later on, as it has two important implications, but for now I shall confine myself to an amusing observation which has no practical relevance to either IQ testing or infectious diseases. The FFP1 filtration standard (80% of particles eliminated) is roughly that of the typical grammar school, at the time when such schools were widespread; the FFP2 standard (94%) is roughly that of the "A" stream of the typical streamed grammar school (although not all grammars were streamed); and the FFP3 standard (99%) is more stringent than Mensa (98%).

Tell me a bit about IQ and COVID-19.

Research which has been reported in Scientific American (<https://www.scientificamerican.com/article/covid-19-leaves-its-mark-on-the-brain-significant-drops-in-iq-scores-are/>) reveals that even mild cases of COVID-19 which are apparently resolved cause cognitive decline which is equivalent to losing three IQ points.

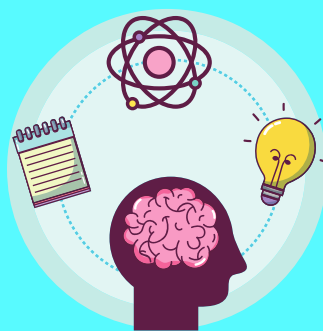
I think there is a bit of a discussion regarding IQ, some consider it a bit problematic. What are your thoughts on that? There are also several studies that suggest COVID-19 affects negatively different aspects of cognition. Any thoughts on that?

You are right that the notion of IQ is problematic, but I have found an argument which renders the much-debated question of what is being measured by IQ tests irrelevant.

The problems with IQ testing can be very briefly summarized as follows. Theoretically there are two extreme positions on the relevance of IQ tests to the real world. At one end of the spectrum is the argument that IQ tests only measure the ability to do IQ tests, and at the other is the argument that a single number (the IQ) can completely capture the fuzzy notion of intelligence. Most people would take a position somewhere between these two extremes, for the following reasons. There is much anecdotal evidence about brilliant people who do not have the knack of doing IQ tests, and conversely about those who excel at IQ tests but nothing else. However, there are also research studies which show the relationship between IQ and various aspects of real-world success. My argument shows that IQ tests have real-world implications independently of whether these tests are correlated to anything else; as far as I know, this is the first argument of its kind in psychology. Mensa's Constitution (at the reference given earlier) establishes two key organisational purposes that are relevant here: "to identify and foster human intelligence for the benefit of humanity" [my emphasis] and "to provide a stimulating intellectual and social environment for its members" [again, my emphasis]. In my opinion, this requires Mensa to ensure that its meetings are COVID-safe, even in jurisdictions where no mitigations are legally required, in order to comply with the requirements to foster human intelligence (and not risk decreasing it) and to provide a stimulating (and not potentially brain-damaging) environment. Although this argument has obvious real-world implications for every in-person Mensa meeting, from an abstract viewpoint it is interesting to a pure mathematician because it would hold even if IQ tests only measured the ability to do IQ tests (which I personally do not believe to be the case), since the Mensa Constitution defines eligibility for the organisation as a certain level of success on an IQ test, and thus implicitly defines intelligence as that which is measured by IQ tests.

What do you think Mensa (and other organisations) should change in light of evidence of the effects of COVID-19?

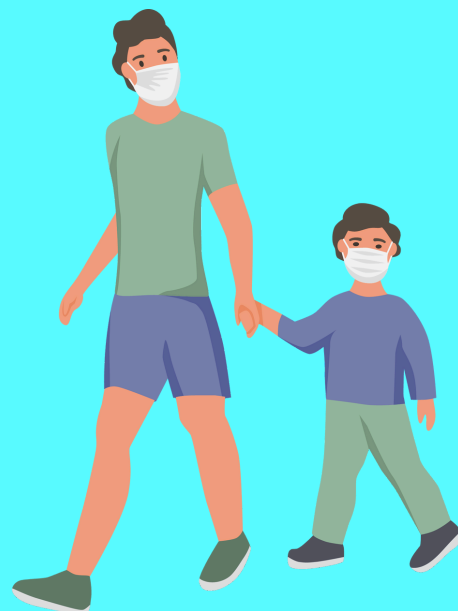
There is an interesting and paradoxical distinction here between Mensa and other organisations, and this paradox is another aspect of the medico-legal implications of SARS-CoV-2 which appeals to me as a pure mathematician. There is much scientific evidence now of many long-term effects of SARS-CoV-2 infections even in those who are fully-vaccinated and not in one of the official vulnerable categories. Mensa members by definition have high IQs, so for this particular group of people losing three IQ points should be the least of their worries compared to all the other damage which even a so-called “mild” SARS-CoV-2 infection can do. However, I think that Mensa is Constitutionally bound to make its meetings COVID-safe specifically because of the research on post-COVID IQ loss: all the other post-acute COVID sequelae, while medically worrying, are not Constitutionally relevant. Conversely, members of other organisations who do not have high IQs should be personally concerned about the full range of post-acute COVID sequelae equally, but although there are very strong medical arguments why the meetings of such non-Mensa organisations should be made COVID - safe, in most cases there would be no Constitutional imperative. (On the subject of other organisations, there is an article “The plateauing of cognitive ability among top earners” at <https://academic.oup.com/esr/advance-article/doi/10.1093/esr/jcac076/7008955> which concludes that the top percentile in terms of earnings do slightly less well, on average, on cognitive tests than the percentile immediately below them. So the 1% are not the 1%.) Lewis Carroll was also an Oxford mathematician, and I am sure that he would have found the notion of attending a Mensa meeting for the purpose of fostering human intelligence but then losing IQ points to COVID as a result to be delightfully absurd. I think that in the light of the evidence of post-COVID IQ loss, Mensa should either ensure that all its meetings are COVID-safe, or else alter their Constitution so that it is no longer required to “foster human intelligence” and “to provide a stimulating intellectual and social environment for its members”. In the latter case, if a member contracts a SARS-CoV-2 infection at a Mensa meeting and loses IQ points as a result, at least he would have the consolation that he has not breached the Mensa Constitution. Finally, Mensa should also consider whether, as a consequence of potential global IQ loss caused by SARS-CoV-2 infections, the IQ score at the threshold of the 98th percentile may have been reduced, and thus whether they may now be Constitutionally required to admit members with slightly lower IQ scores than was the case pre-pandemic.



What would you say to a child or young person that is a lone masker and face difficulty because of it?

Many Mensa members have faced difficulty because of their intellectual gifts, and reading the literature on the problems faced by gifted children may give the lone masker some ideas for coping strategies. Some of the description in the COVID-cautious piece at <https://misfitmentalhealth.substack.com/p/what-i-mean-when-i-say-misfit> could easily describe many Mensa members when they were gifted children. This is because, like COVID-cautious people after the onset of the pandemic, they were atypical, not because they had any mental or physical health problems but because they did not conform to social norms. The PhD thesis "Perceptions of causes and long-term effects of academic underachievement in high IQ adults", Anne Favier-Townsend, available online at <http://hdl.handle.net/2299/16520>, and the report at <https://www.mensafoundation.org/wp-content/uploads/A-Study-of-Unmet-Needs-Among-Highly-Intelligent-Individuals> are starting points for those who are interested in this topic of intellectual isolation. I would also draw the attention of the lone masker to Sir Oliver Letwin's answer to the UK COVID-19 Public Inquiry on pages 33-34 at <https://covid19.public-inquiry.uk/wp-content/uploads/2023/06/20184557/C-19-Inquiry-20-June-23-Module-1-Day-6.pdf>, when he was asked how orthodoxy can be challenged within a bureaucracy. He replied that "officials are just like the rest of us, they would like their careers to progress, and if you're a member of a team and you start being a frightful nuisance, it is not a career-enhancing move."

Thank you so much for taking the time to answer our questions, and thank you for your advocacy!



COVID-Conscious at a Conference

By Dr. Deborah Lupton 

Last week, I attended a conference - one of the very few in-person events I have gone to since the COVID pandemic began. As is my custom, to protect myself from the airborne viruses that are circulating right now (we are experiencing high levels of COVID and flu infections in my country), I wore a well-fitting N95 respirator mask at all times when inside a space where I shared the air with other people. I kept my mask on when I delivered my presentation. I missed the conference dinner (no point, as I can't eat and drink with a mask on) and took the beverages and lunch food provided at the conference outside in the freezing weather to consume it safely. I would then mask up again and dash inside to chat to others while they ate. I only saw a couple of other people masked up at the conference.

The reaction from others? Mostly surprise and incomprehension that I still thought airborne pathogens were a risk I should protect myself from. Nonetheless, they tolerated me and probably just saw me as a harmless eccentric. The lack of awareness of this risk from otherwise highly educated people signifies the yawning public health gulf, where adherence to medical science and recognition of the importance of educating the public about health risks once existed. Despite constantly feeling like an outsider due to my mask wearing, I was very happy to have (safely) experienced the socialising and companionship of conference going, the opportunity to make field trips to local galleries, museums and historical sites, and to attend an excursion to learn about Antarctic history and science.



A Trip to the Fairy Woods

by Julie Wornan 

"Seven o'clock - Up you get. Sam!"

Sam's Mom always woke him at seven. That gave him enough time to dress, eat breakfast and walk to school. Sam opened his eyes.

But - a strange being was sitting on the foot of his bed. "Uh... who are you?" Sam asked.

"I should ask 'Who are you?'" the creature replied, scratching a scaly green cheek with a claw. "I'm the one who sleeps here. You are in my bed!"

Sam touched his firm mattress to make sure he was really in his own bed. The mattress was not firm. It felt soft and mossy. The breaking daylight did not show a white ceiling overhead, but a tangle of tree branches. He was sitting on a large leaf strung like a hammock between two trees.

The creature was hardly bigger than a cat, but it had sharp teeth and long pointy ears. Sam tried to be bold.

"Hey. Mr ... Goblin? You look like the picture of a goblin in one of my books. Are you a goblin?"

"Yes." it chuckled. Its bright eyes twinkled and its mouth curved into a crooked smile. "I'm a very small goblin, not one of the big ones. You needn't be afraid of me. My name is...". Here the goblin made a noise somewhere between the sound of a rusty hinge and the wind before a storm. "But you can call me Gobby."

"Gobby..." Sam murmured. "I want to go home. Can I go home?"

Gobby made some more strange sounds. Perhaps it was his way of laughing. Then he said, "Sure. You can go home whenever you like. Just climb down and go straight along the pebbly path."

Sam looked down. The ground was far below.



Then Gobby clicked his fingers twice and a large cobweb suddenly grew from the bedside down to the ground. "Follow me!" Gobby shouted, climbing down. Sam followed. The cobwebby ladder was surprisingly strong and not at all sticky.

When they were both on solid ground, Gobby twinkled again and smiled. "Won't you stay awhile? I'd love you to meet some of my friends." Then he turned and scampered off to the right. Sam had no choice but to follow.

Gobby stopped in front of a willow tree whose leafy branches reached the ground on all sides. Gobby whistled. Then he parted the branches and stepped inside the tree hut, beckoning Sam to follow. There, dancing on a log, was a tiny girl no bigger than a squirrel. She wore a skirt made of rose petals. Her corsage was a large leaf wrapped around and pinned with a thorn, and her flowing hair was the colour of corn silk. "Hi, Miranda," called the goblin. "I've brought you a guest."

"A giant?" the fairy gasped.

"He's only a child giant. He won't harm us," the goblin grinned.

"Hello, Sam," smiled the fairy, holding out a dainty hand. Sam touched it with his finger. "How did you know I'm called Sam?" he gasped.

Miranda winked. "I know things."

"She knows things," Gobby confirmed.

Then Miranda said, "I've just made some pollen tea.

Come have some with me."

Miranda threw a mossy mat over a flat stone and arranged the tea things on it: cooled pollen tea in a tulip cup and acorn cups for drinking. The tea was delicious. Sam drank 17 cups. Gobby drank seven and Miranda drank three. Sam knew he should be getting home to get ready for school, but he didn't quite know how to say this to his new friends.

"Don't worry, Sam," said Miranda. "You'll be home in good time. Now we just have time for a dance. Yellowbird will sing for us."



Then the three held hands (although Sam had to stoop a little) and danced round in a ring three times to the delicious flute-like music of the birdsong.

When they fell down at last, Gobby turned to Sam and said, "We'll get you home now." Miranda asked, "Would you like to come again?"

Wouldn't he, though! He felt his eyes say "Yes". "Well then," Gobby twinkled, "anytime you want to visit us again, just leave a wildflower on the foot of your bed."


A wildflower! That was it. Sam recalled that he'd picked some primroses and violets to make a bouquet for his Mom. One of the flowers must have fallen onto his bed.

Then Gobby said, "Shut your eyes now", and tickled him with a feather until he giggled and squirmed. When Sam opened his eyes, he was back in his room, alone. The clock on the wall showed one minute past seven.

"I'm just coming, Mom," he called, reaching for his clothes and wiping a bit of moss from his cheek.



The Story of Metis

a retelling of a Greek myth by Camille Alexander 

Zeus, king of the gods and god of storms, had a queen. Her name was Metis. After Zeus had cast the Titans into Tartarus, Gaea, the earth goddess, angrily cursed him. “Just as you took your father’s throne, your child shall take yours!”

Zeus was deeply worried by this prophecy, and his queen could tell. She asked him why he was so worried, but he evaded her question.

“Follow me,” Zeus told Metis. He took her to the edge of the palace and told her to transform into a bird. Metis protested, saying that she couldn’t transform. But Zeus encouraged her until she transformed.

Leading Metis through the transformations, Zeus had her turn into harder and harder animals, like winged serpents and dragonflies. Zeus turned into a hawk and told her to turn into a fly.



Elated with her newfound abilities, Metis cried to Zeus in happiness. But he didn’t respond. Just as Metis turned, Zeus’s beak closed around her. “Zeus?” Metis called, having transformed back into a human. “Where am I? Where are you?” She could hear his voice, but she couldn’t see him.

“Gaea cursed me, Metis,” Zeus told his queen. “I can’t let the prophecy come true. But now I can always hear your wisdom. You can still rule beside me.”

“You can’t keep me here!” Metis began to make as much noise as she could. “You can’t lock me away! You can’t just make me disappear! Zeus, please. I’m pregnant...”

Despite his promise, Zeus didn’t listen to her voice. He pursued other women to be his queen. And he never let Metis out, trapping her inside his head until she faded to less than a memory.





TO FEEL INTRIGUED ENERGIZED AND ENGAGED

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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!