

ISSUE 1

THE IMMUNIZER

**AND THE COVID-19
VACCINES**

**INCLUDING
PUZZLES, FACTS,
AND A GLOSSARY**

BY: JENNYFER OSUNA, SAM RAINES, AND RYAN HIGGINS

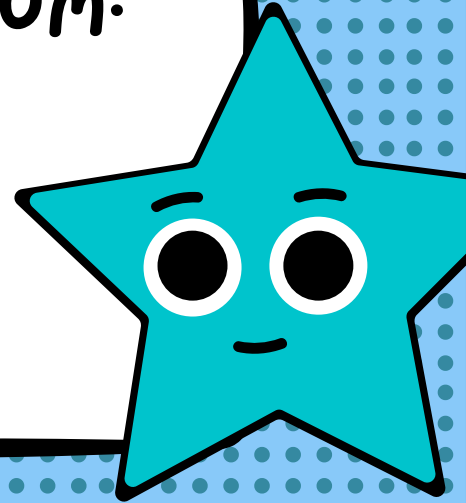


Department of
Public Health

CITY OF PHILADELPHIA

SPECIAL THANKS

TO THE CONTRIBUTIONS FROM:
ALEX HOWEY
SHI ROBISON
AND NICHOLE DANTZLER



QUESTIONS?

DON'T BE SHY,
TALK TO YOUR DOCTOR!
THEY ARE PREPARED TO ANSWER
ANY VACCINE RELATED QUESTIONS.
THEY CAN ALSO TELL YOU WHERE TO
FIND THE RIGHT ANSWERS!



LEARN ABOUT VACCINES WITH

TOPICS:

PAGE

WHAT VACCINES DO

4-5

HOW MANY DOSES
YOU NEED

6

HOW COVID-19
VACCINES WORK

7

VACCINE SIDE EFFECTS

8

VACCINE SAFETY

9-10

WHY YOU SHOULD GET
COVID-19 VACCINES

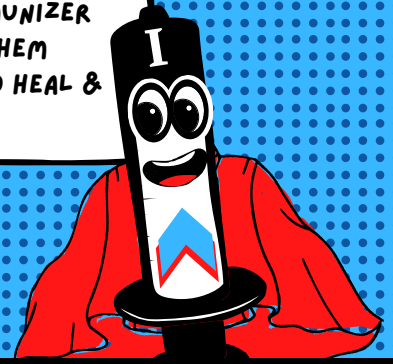
11

WHERE YOU CAN GET
COVID-19 VACCINES

12-13

LET'S BEGIN!

THE IMMUNIZER
THEY/ THEM
LIKES TO HEAL &
TEACH



ASH, THEY/THEM
12 YEARS OLD
LIKES PIZZA AND
BASKETBALL



ASA, SHE/HER
17 YEARS OLD
ASH'S SISTER
LOVES HISTORY



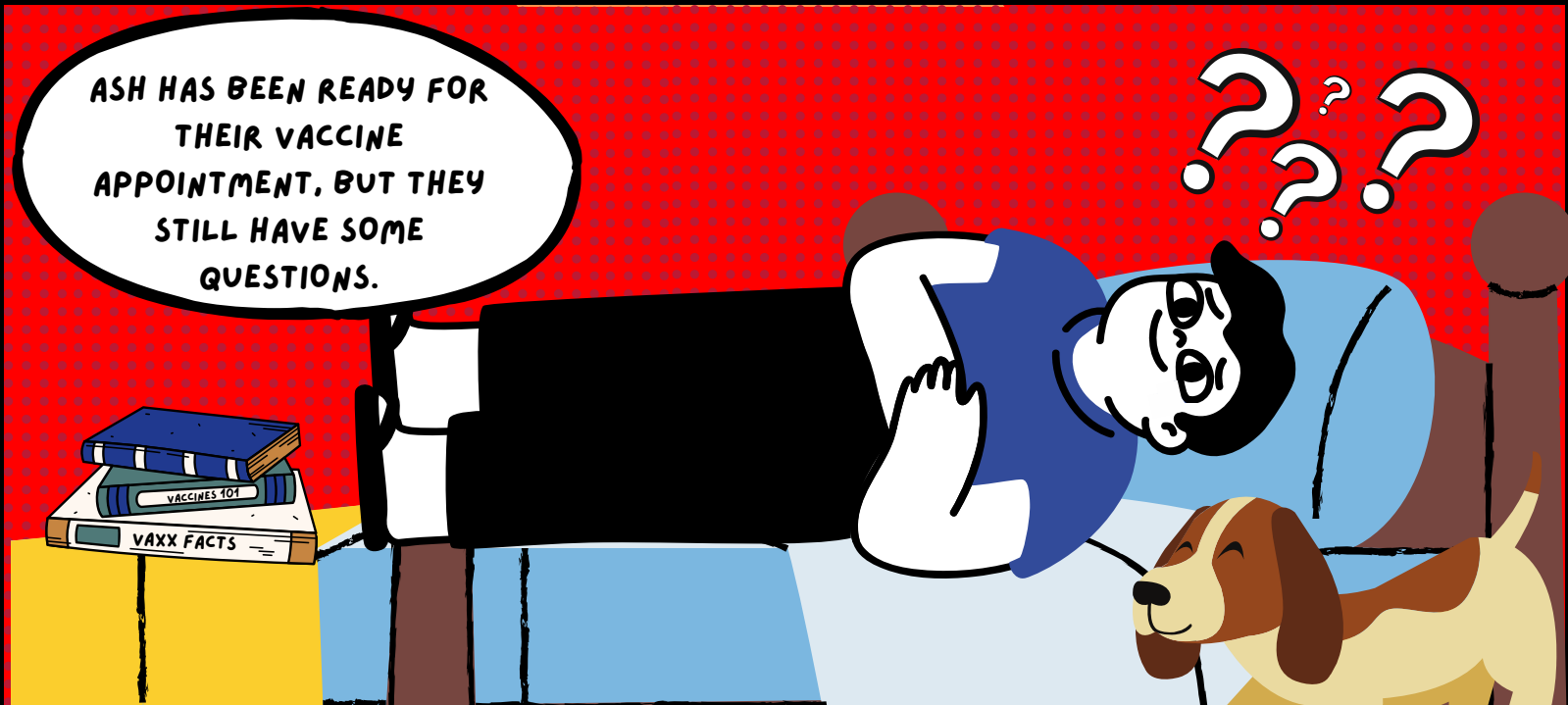
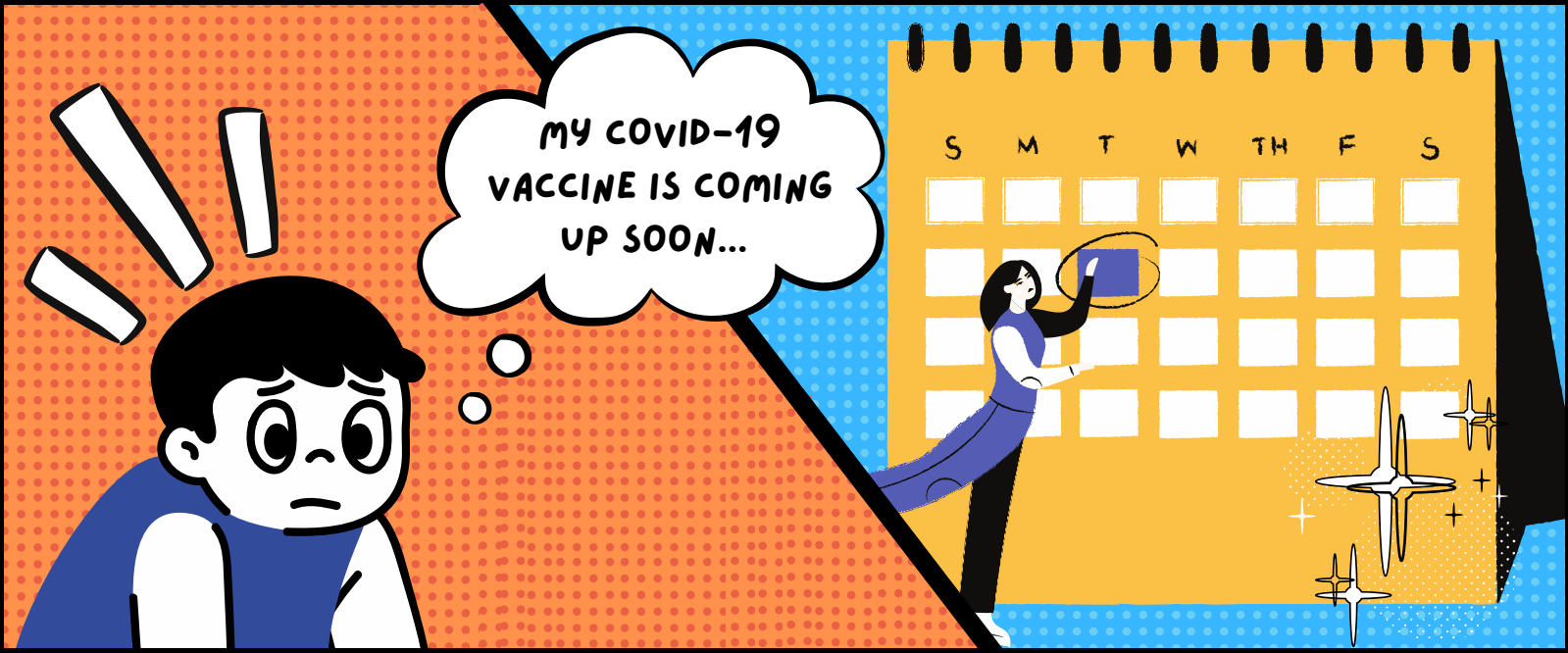
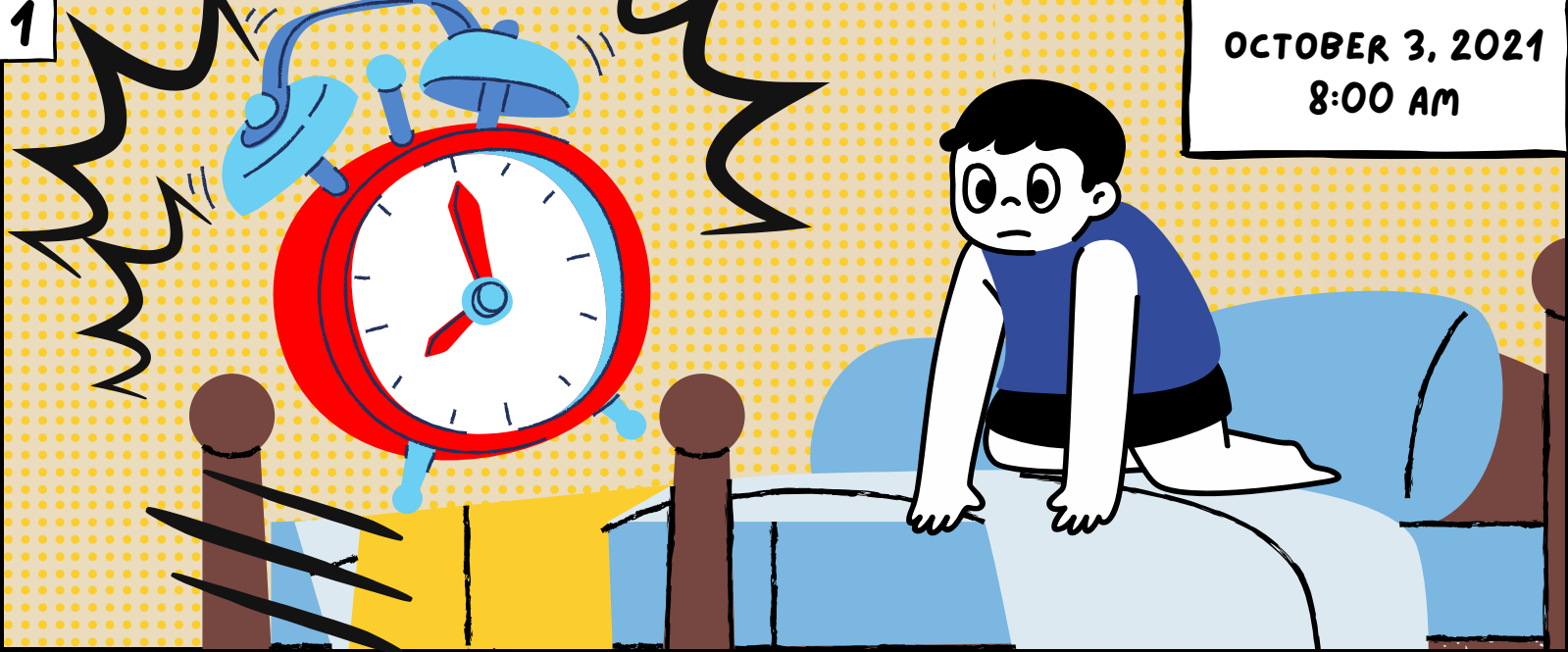
DOCTOR, SHE/HER
45 YEARS OLD
VACCINE EXPERT
LIKES PUZZLES




SCRUFFY, HE/HIM,
2 YEARS OLD, RAISED BY ASH
LIKES TO RUN, EAT, AND SLEEP

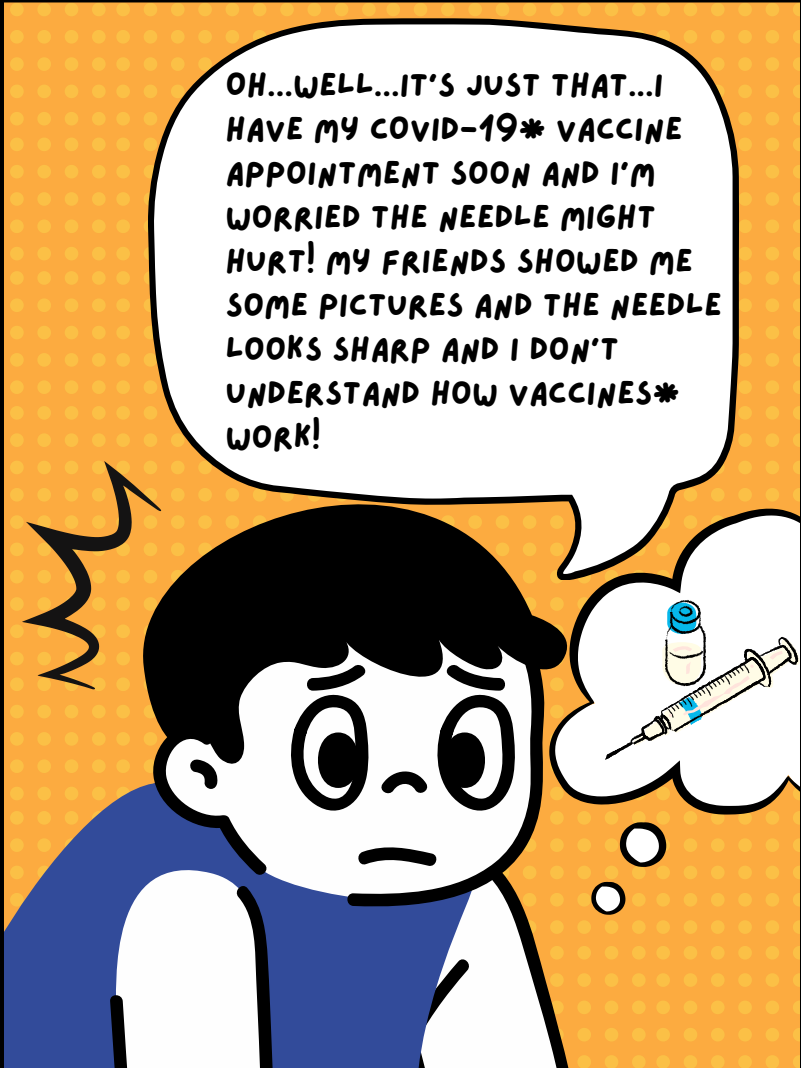


OCTOBER 3, 2021
8:00 AM






ASH, YOU LOOK LIKE
SOMETHING IS BOTHERING
YOU. ARE YOU OK?



OH...WELL...IT'S JUST THAT...I
HAVE MY COVID-19* VACCINE
APPOINTMENT SOON AND I'M
WORRIED THE NEEDLE MIGHT
HURT! MY FRIENDS SHOWED ME
SOME PICTURES AND THE NEEDLE
LOOKS SHARP AND I DON'T
UNDERSTAND HOW VACCINES*
WORK!



WHEN YOU
SEE AN
ASTERISK
(*) NEXT
TO A WORD,
CHECK OUT
THE
GLOSSARY
ON PAGES
15 & 16 TO
FIND OUT
WHAT IT
MEANS!

**BABY
ASH**

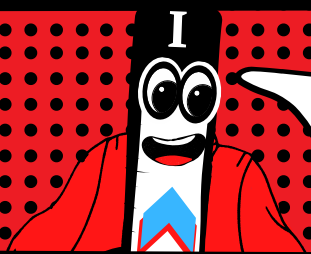
IT'S OK ASH. I ALREADY
GOT MY COVID-19
VACCINE AND YOU MAY
NOT REMEMBER, BUT
YOU'VE ACTUALLY
GOTTEN MANY
VACCINES SINCE YOU
WERE A BABY.

LET'S GO TALK TO
SOMEONE WHO
KNOWS MORE
ABOUT VACCINES.

**DOCTORS
OFFICE**

I'M GLAD YOU TWO CAME TO TALK WITH ME.
IT'S OK TO BE SCARED ASH.
THERE'S SO MUCH INFORMATION OUT THERE
ABOUT VACCINES, IT CAN BE VERY CONFUSING.
LET'S LEARN MORE ABOUT VACCINES FROM
THE IMMUNIZER!





VACCINES ARE CREATED AND STUDIED
BY DOCTORS AND SCIENTISTS TO
HELP US FIGHT DISEASES. VACCINES
HAVE BEEN KEEPING US SAFE FOR
OVER 200 YEARS!



WOW!

**A HISTORY OF
VACCINES:**



**SMALL POX
APPROVED 1931**



**POLIO VAX
APPROVED 1955**

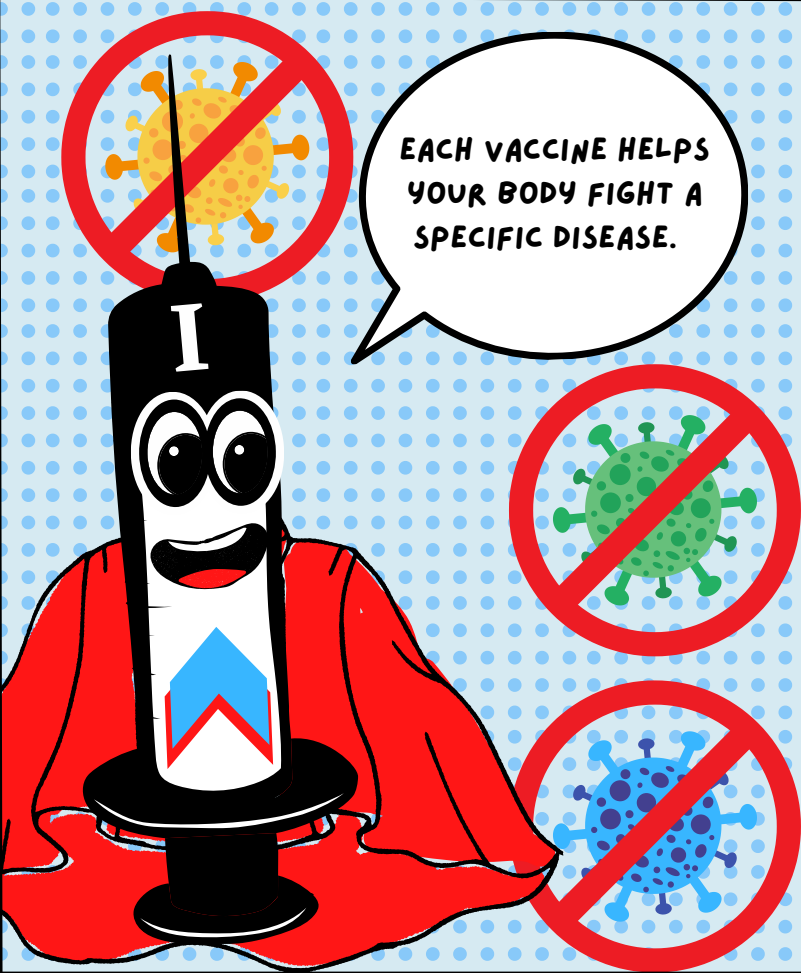


**MEASLES
APPROVED 1963**



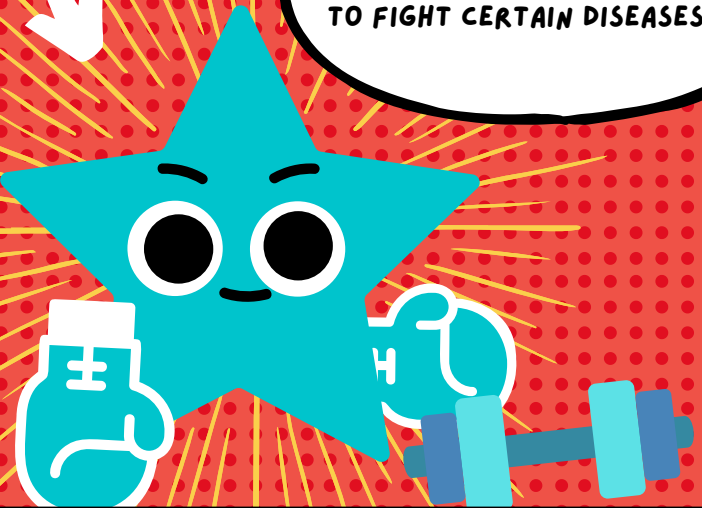
**HEPATITIS B
APPROVED 1985**

DATES PROVIDED BY
CHILDREN'S HOSPITAL
OF PHILADELPHIA

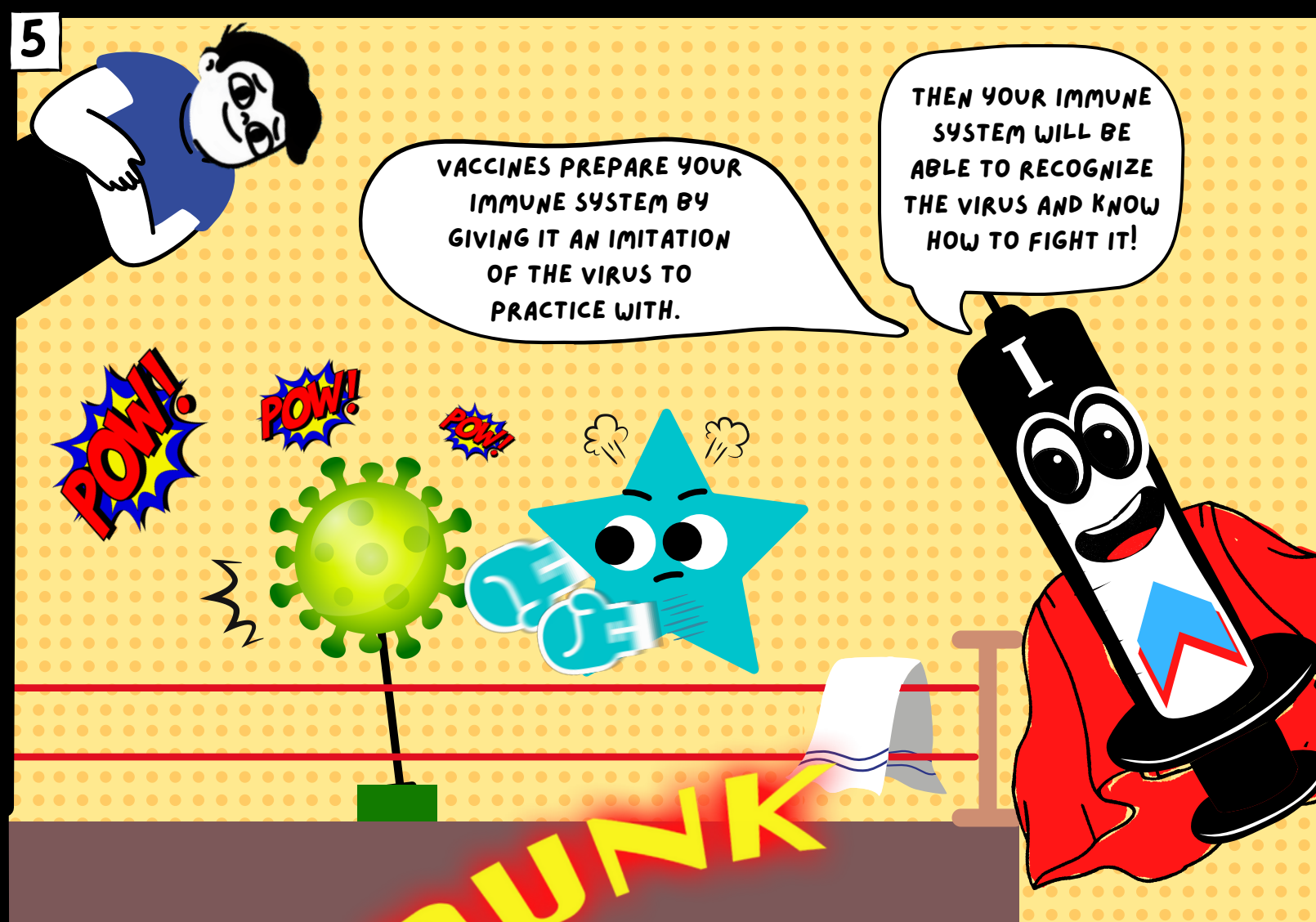


EACH VACCINE HELPS
YOUR BODY FIGHT A
SPECIFIC DISEASE.

YOUR BODY FIGHTS DISEASES
WITH AN IMMUNE SYSTEM.
THEY ARE LIKE YOUR OWN
PERSONAL SUPERHERO.



VACCINES HELP YOUR
IMMUNE SYSTEM GET READY
TO FIGHT CERTAIN DISEASES.





BUT I NEED TO PRACTICE TWICE A WEEK TO STAY IN SHAPE!

HOW MANY DOSES OF A VACCINE DO I NEED TO KEEP MY IMMUNE SYSTEM STRONG?

IT DEPENDS ON THE ILLNESS AND THE VACCINE. SOMETIMES ONE VACCINE WILL BE ALL YOU NEED. OTHER TIMES YOU MAY NEED MORE.



FOR EXAMPLE: YOU NEED A VACCINE AGAINST THE INFLUENZA VIRUS (THE FLU) EVERY YEAR. THIS IS BECAUSE THE INFLUENZA VIRUS CONSTANTLY CHANGES, AND YOUR IMMUNE SYSTEM ALSO MAY HAVE LOST SOME OF THE EXTRA STRENGTH IT HAD FROM IT'S LAST FLU VACCINE.

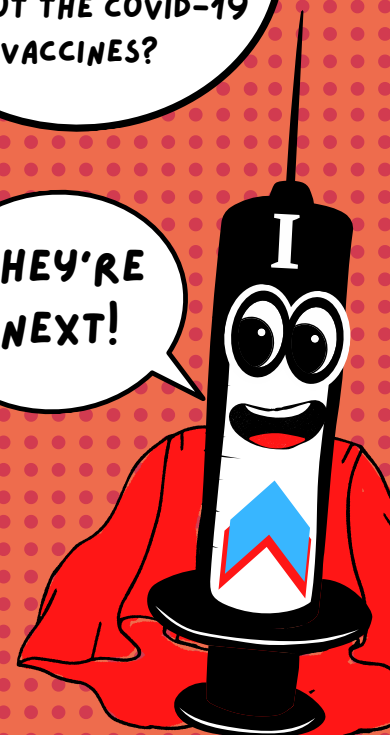
SOMETIMES YOU MAY NEED A BOOSTER SHOT* TO KEEP YOUR IMMUNE SYSTEM READY TO FIGHT A CERTAIN DISEASE.

GET YOUR FLU SHOT EVERY FALL!



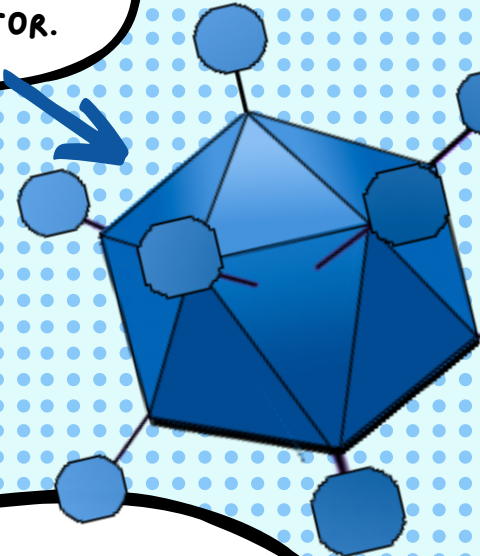
OK I'LL GET MY FLU SHOT...BUT WHEN WILL WE LEARN ABOUT THE COVID-19 VACCINES?

THEY'RE NEXT!



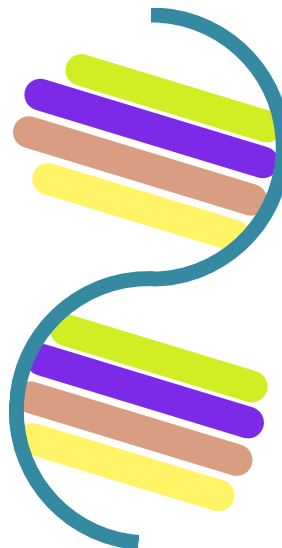
LET'S LOOK INSIDE THE COVID-19 VACCINES

THE JOHNSON AND JOHNSON VACCINE USES A VECTOR.



THE VECTOR IS A HARMLESS VIRUS THAT HELPS YOUR IMMUNE SYSTEM TRAIN AGAINST COVID-19.

THE PFIZER AND MODERNA VACCINES USE MRNA*.

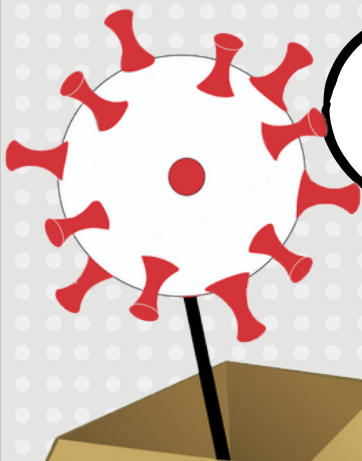


MRNA USUALLY WORKS AS A MESSENGER FOR A CELL'S NUCLEUS

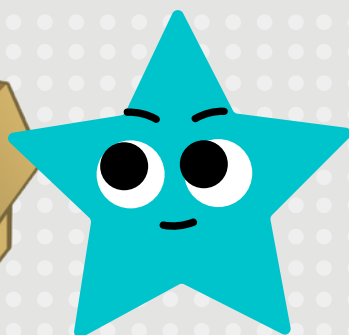
IN THE PFIZER AND MODERNA VACCINES, MRNA HELPS YOUR IMMUNE SYSTEM TRAIN AGAINST COVID-19.

BOTH VACCINES GIVE YOUR IMMUNE SYSTEM AN IMITATION OF THE COVID-19 VIRUS TO PRACTICE FIGHTING. THESE VACCINES WILL NOT ALTER YOUR DNA!

A COVID-19 VACCINE WILL NOT CAUSE YOU TO TEST POSITIVE ON A COVID-19 TEST!



COVID-19
TRAINER

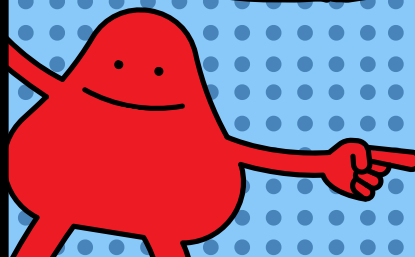


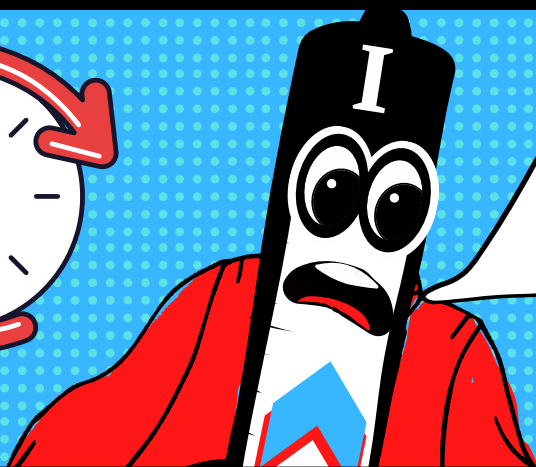
YOU NEED ONE JOHNSON AND JOHNSON VACCINE TO BE READY FOR COVID-19.

MODERNA AND PFIZER VACCINES NEED TWO DOSES TO GET YOUR IMMUNE SYSTEM READY FOR COVID-19.



TURN TO PAGE 18 TO LEARN ABOUT COVID-19 BOOSTERS!





AFTER YOU GET A DOSE
OF A COVID-19 VACCINE,
YOU MAY FEEL...



PAIN AND/OR REDNESS
ON THE ARM WHERE
YOU GOT YOUR VACCINE



TIRED



A HEADACHE
AND/OR
A FEVER

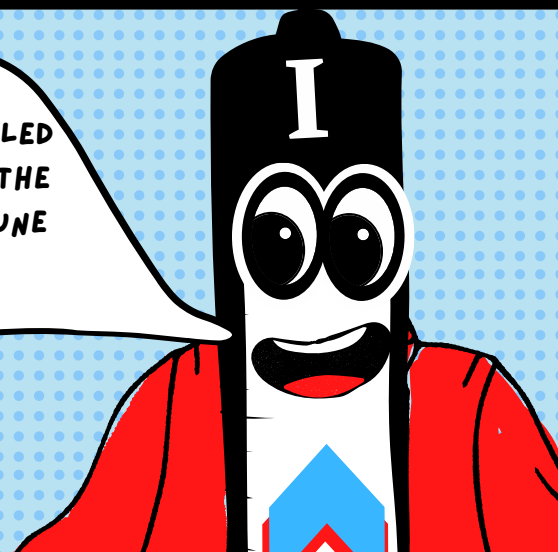


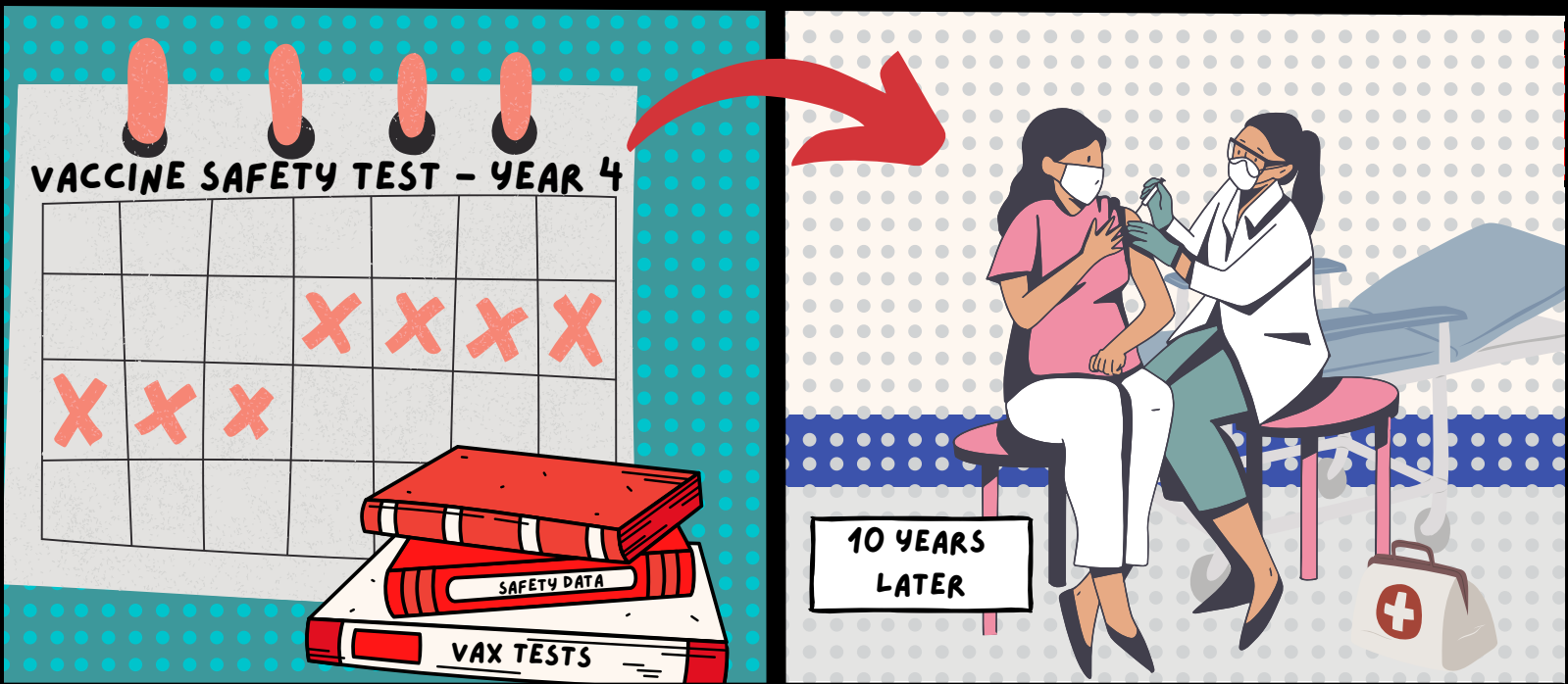
CHILLS

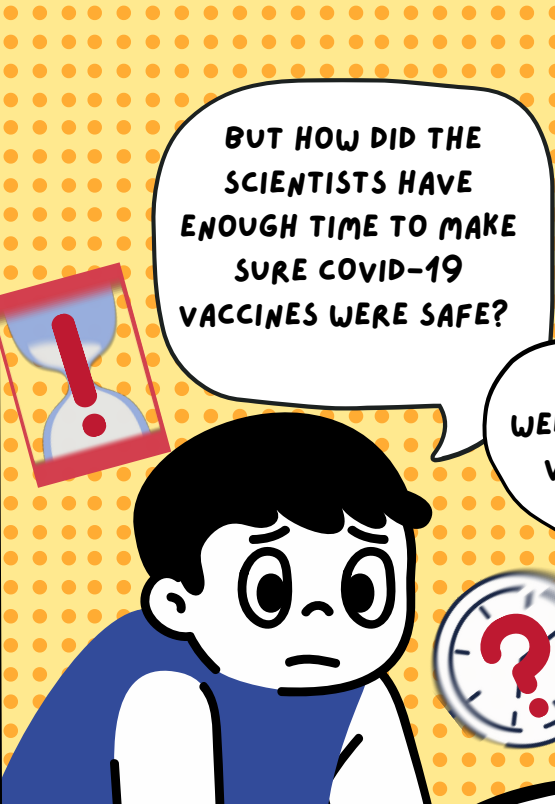


BUT THESE ARE NORMAL. THEY ARE CALLED
SIDE EFFECTS*. THEY ARE SIGNS THAT THE
VACCINE WORKED AND THAT YOUR IMMUNE
SYSTEM IS PRACTICING!

NICE!








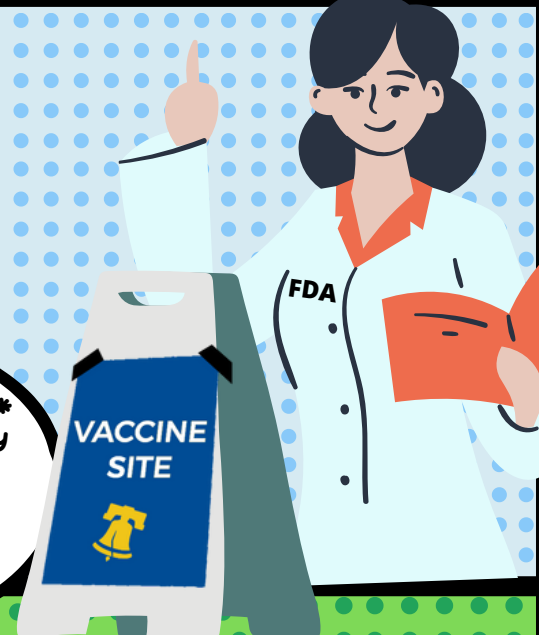
BUT HOW DID THE SCIENTISTS HAVE ENOUGH TIME TO MAKE SURE COVID-19 VACCINES WERE SAFE?




WELL BECAUSE THE COVID-19 VIRUS IS SO DANGEROUS-



MANY SCIENTISTS PUT TOGETHER THEIR SKILLS AND RESOURCES TO DEVELOP THE VACCINE AS QUICK AS POSSIBLE...

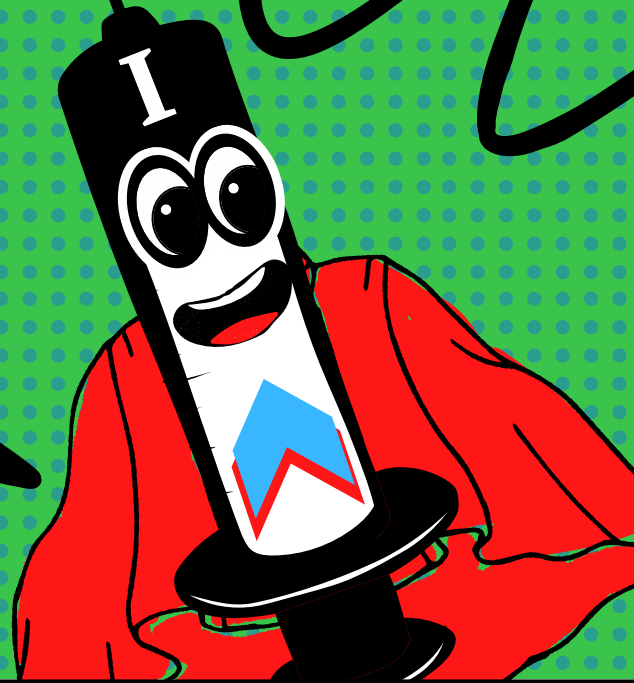


THE FOOD AND DRUG ADMINISTRATION* (FDA) GAVE THE VACCINES EMERGENCY USE AUTHORIZATION (EUA),* ALLOWING THEM TO BE GIVEN TO THE PUBLIC AS SOON AS POSSIBLE.



SO WHILE THE COVID-19 VACCINES CAME QUICK, THEY STILL WENT THROUGH INTENSE STUDY AND REACHED A HIGH STANDARD OF SAFETY. THE FDA STILL MONITORS THE VACCINES.

IT'S IMPORTANT TO GET YOUR
COVID-19 VACCINE TO
PROTECT YOURSELF AND
OTHERS, AS WELL AS BEATING
COVID-19 AND ITS VARIANTS*.



LOTS OF PEOPLE HAVE
GOTTEN THE COVID-19
VACCINE ALL OVER THE
WORLD!

#VAXXED



WHERE CAN YOU GET
THE COVID-19
VACCINE?

AT YOUR
DOCTOR'S
OFFICE

DOCTOR'S



AT YOUR LOCAL
HEALTH CENTER

HEALTH
CENTER




PHARMACY



AT YOUR
PHARMACY

HEALTH
DEPARTMENT


OR ASK YOUR PARENTS
TO CALL YOUR LOCAL
HEALTH DEPARTMENT
FOR MORE
INFORMATION.



REMEMBER
THE
COVID-19
VACCINE IS...



FREE!



THE COVID-19 VACCINE IS FREE FOR
EVERYONE REGARDLESS OF IMMIGRATION OR
HEALTH INSURANCE STATUS.



CHECK WITH YOUR LOCAL HEALTH
DEPARTMENT FOR MORE INFORMATION.

ARE YOU READY FOR YOUR COVID-19 VACCINE ASH? IT'LL JUST BE A PINCH.

SURE AM!

OK, I'M GOING TO COUNT DOWN, THREE, TWO, ONE...

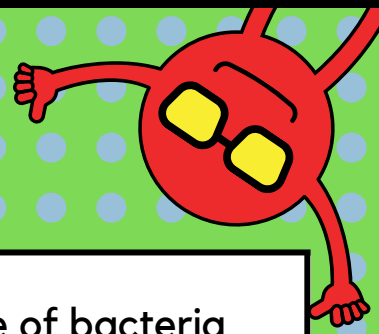
AND NOW YOUR IMMUNE SYSTEM IS READY TO FIGHT COVID-19!

I DID IT.

GO ASH!

ASH HASN'T SEEN THE LAST OF THE IMMUNIZER! IN THEIR NEXT ADVENTURE, ASH WILL LEARN ABOUT THE DANGER OF COVID-19 VARIANTS.

GLOSSARY



Antibodies: A protein that attacks and sticks to the surface of bacteria and viruses to help you fight off a disease.

Booster Shot: An additional dose of a vaccine that is sometimes needed to 'boost' the immune system.

COVID-19: A new disease discovered in 2019 that has made people all over the world sick. Other names for COVID-19 include coronavirus disease 2019. "CO" stands for corona, "VI" stands for virus, and "D" stands for disease.

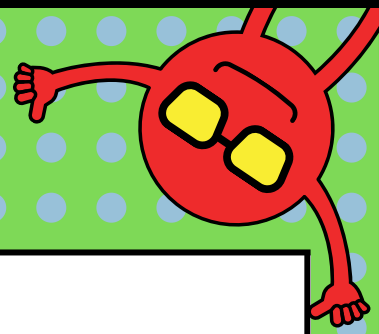
Emergency Use Authorization (EUA): In an emergency, like COVID-19, the FDA quickly authorized the three COVID-19 vaccines using an EUA to help fight COVID-19 faster! However, the COVID-19 vaccines still went through rigorous safety standards.

Food and Drug Administration (FDA): The experts responsible for protecting the public health by making sure your food, prescription drugs, and medical devices are safe.

FDA Full Approval: A vaccine is given full approval when the FDA has even more scientific evidence to support the use of the vaccine. It's like the last stamp of approval and we can keep giving out the vaccines to fight COVID-19.

mRNA: Also known as "messenger RNA." It teaches our cells how to make a protein that will trigger an immune response inside our bodies.

GLOSSARY



Nucleus: The main control center for the cell and acts like the cell's brain.

Side effects: A secondary and normal effect you get after you receive the COVID-19 vaccine.

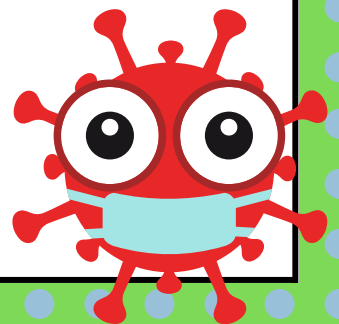
Vaccine: Medicine that helps your body to become immune to a disease caused by certain infectious diseases and germs.

Variants: Different forms of COVID-19 that have been appearing and circulating around the world.

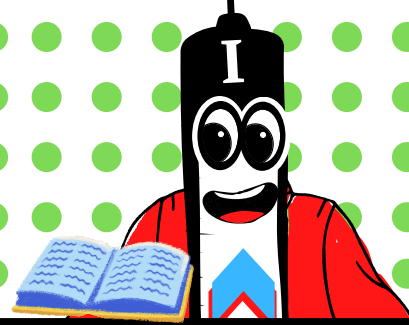
Vector: Anything that carries a disease. In a vector vaccine, it is a harmless version of a different virus.

Viral Vector: In a viral vector vaccine, it uses a vector to deliver important instructions to our cells.

Virus: A type of germ. They are very tiny and when they get inside your body they can make you sick.



FACTS



- THE COVID-19 VACCINES DO NOT CONTAIN THE COVID-19 VIRUS ITSELF, THE VACCINE WILL NOT CAUSE YOU TO TEST POSITIVE ON COVID-19 TESTS.
- EVEN THOUGH THE COVID-19 VACCINES WERE AUTHORIZED FASTER THAN NORMAL, ALL FOOD AND DRUG ADMINISTRATION* (FDA) APPROVED AND AUTHORIZED VACCINES ARE THOROUGHLY RESEARCHED SUCH AS THE COVID-19 VACCINES.
- EACH INGREDIENT IN A COVID-19 VACCINE SERVES A SPECIFIC PURPOSE. A LIST OF INGREDIENTS IN EACH COVID-19 VACCINE IS AVAILABLE AT:
[CDC.GOV/CORONAVIRUS/2019-NCOV/VACCINES/SAFETY.HTML](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety.html)
- THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) DEVELOPED THE SMART PHONE TOOL "V SAFE" FOR VACCINATED PATIENTS TO SELF MONITOR THEIR SYMPTOMS. THE TOOL IS AVAILABLE AT [HTTPS://VSAFE.CDC.GOV/EN/](https://vsafe.cdc.gov/en/)
- ANYONE WHO MEETS THE AGE REQUIREMENTS IS ELIGIBLE TO GET THE COVID-19 VACCINE. THE PFIZER COVID-19 VACCINE IS CURRENTLY AUTHORIZED BY THE FDA FOR PEOPLE 5 YEARS AND ABOVE. THE MODERNA AND JOHNSON & JOHNSON COVID-19 VACCINES ARE CURRENTLY AUTHORIZED FOR PEOPLE 18 YEARS AND ABOVE.*
- TO FIND VACCINE PROVIDERS NEAR YOU VISIT [VACCINES.GOV](https://www.vaccines.gov), TEXT YOUR ZIP CODE TO 438829, OR CALL 1-800-232-0233. YOU CAN ALSO CHECK YOUR LOCAL PHARMACY'S WEBSITE TO SEE IF VACCINATION APPOINTMENTS ARE AVAILABLE. REMEMBER THE VACCINE IS FREE!
- FOLLOW YOUR LOCAL HEALTH DEPARTMENT FOR THEIR MOST RECENT COVID-19 VACCINE GUIDELINES. FOR THE MOST RECENT COVID-19 VACCINE GUIDELINES IN PHILADELPHIA, VISIT [PHILA.GOV](https://www.phila.gov).

* AS OF 3 JANUARY 2022

FACTS



MORE FACTS ABOUT COVID-19 BOOSTERS:

- THE COVID-19 BOOSTERS USE THE SAME TECHNOLOGY AND INGREDIENTS AS THE COVID-19 VACCINES.
- THE CENTERS FOR DISEASE CONTROL STRONGLY RECOMMENDS THE BOOSTER FOR ANYONE OVER THE AGE OF 65, AS WELL AS ANYONE WITH CHRONIC ILLNESS OR SEVERE DISABILITIES.
- ANYONE OVER THE AGE OF 12 SHOULD GET A COVID-19 BOOSTER. TEENS OVER THE AGE OF 12 CAN GET THE PFIZER COVID-19 BOOSTER, ADULTS OVER THE AGE OF 18 CAN GET ANY COVID-19 BOOSTER.*
- IF YOU GOT THE PFIZER OR MODERNA COVID-19 VACCINES YOU CAN GET ANY COVID-19 BOOSTER FIVE MONTHS AFTER YOUR SECOND COVID-19 VACCINE DOSE.
- IF YOU GOT THE JOHNSON & JOHNSON COVID-19 VACCINE YOU CAN GET ANY COVID-19 BOOSTER TWO MONTHS AFTER YOUR FIRST COVID-19 VACCINE DOSE.
- YOUR COVID-19 BOOSTER DOES NOT HAVE TO BE THE SAME BRAND AS YOUR COVID-19 VACCINES. YOU CAN MIX AND MATCH!
- SCAN HERE FOR UP TO DATE INFORMATION ON COVID-19 BOOSTERS



OR VISIT:

[HTTPS://WWW.CDC.GOV/CORONAVIRUS/2019-NCOV/VACCINES/BOOSTER-SHOT.HTML](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html)

* AS OF 3 JANUARY 2022.



SECRET CODE PUZZLES



UNSCRAMBLE THE WORDS TO SPELL OUT A WORD YOU'VE SEEN IN THIS COMIC BOOK!

ORVTCE

RSOIUNVARCIO

SKMA

SDOABNITIE

TANRVAI

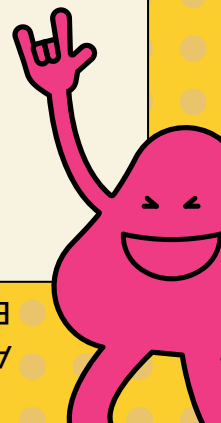
IMEZMUIRN

AOMENDR

MGCEYEENR

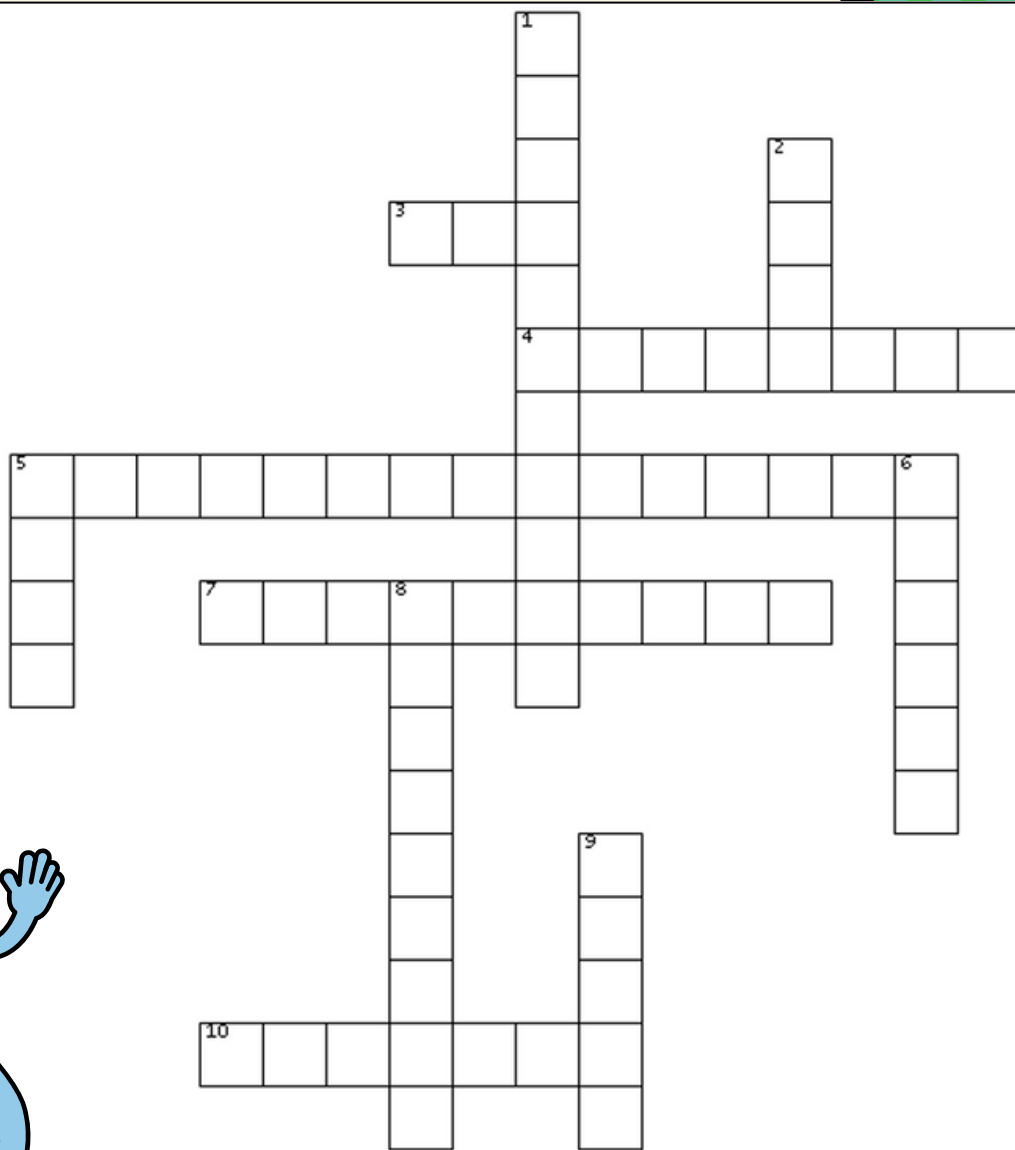
CACENVI

ANSWERS: Vector, Coronavirus, Mask, Antibodies, Variant, Immunizer, Moderna, Emergency, Vaccine.



CROSSWORD

20



ACROSS

3. Experts who make sure your food, medicine, and vaccines are safe.
4. Ash will learn about this in their next adventure!
5. Ash will be _____ two weeks after his second COVID-19 vaccine (two words!).
7. Helps fight COVID-19 and other diseases.
10. The FDA gave an Emergency Use Authorization to Johnson & Johnson; Pfizer; and _____ (hint: it starts with an M).

DOWN

1. The technology used to develop the Johnson & Johnson vaccine.
2. The Moderna and Pfizer vaccines use this to give your immune system instructions on how to fight COVID-19.
5. The vaccine is _____ for everyone, regardless of immigration or health insurance status.
6. Ash schedules an appointment with them to learn more about vaccines.
8. The superhero who helps Ash learn about COVID-19 vaccines.
9. Ash's Sister.

ANSWERS: 1. Viral Vector, 2. mRNA, 3. FDA, 4. Variants, 5. Fully Vaccinated, 6. Doctor, 7. Antibodies, 8. Immunizer, 9. Asa, 10. Moderna



Department of
Public Health
CITY OF PHILADELPHIA

4 SCRUFFY

FOR MORE INFORMATION VISIT
PHILA.GOV/COVID