

Teachers: Mrs. Awuah, Mr. Galdamez, Mrs. Johnson, Ms. Teng, Mrs. Wallace

Third Grade's Coronavirus Project

Dear Student,

During the week of May 18-22, you will make a poster related to the coronavirus. Our hope is that you will have a deeper understanding of the coronavirus and be able to explain how it has impacted you and your community.

The chart below explains which activities to complete on each day. To submit your final poster on Friday, email or text a picture of your work to your teacher. You may choose to bring the work to school and turn it in that way too.

We hope you and your family are safe, healthy and happy.

Please call if you have any questions.

Your Third Grade Teachers

Monday	Tuesday	Wednesday	Thursday	Friday
Reading & ELA	Science	Social Studies	Math	Art
1. What is Coronavirus? How does coronavirus impact your life and society?	2. How does the Coronavirus affect the body?	3. What are essential workers? How do "essential workers" keep our communities safe?	4. How many recovered cases of Coronavirus are there among the United States, Mexico, and Canada? Create a graph you choose and summarize the data.	5. Create a mask that can prevent a person from catching the Coronavirus when they are in public.

Coronavirus Project Poster is due no later than Friday, May 22.



Play it safe: What kids should know about the coronavirus outbreak

By Washington Post, adapted by Newsela staff on 03.25.20

Word Count 665

Level 590L



Image 1. Children draw a rainbow and the slogan of hope being shared in Italy, "Andrà tutto bene" (Everything will be alright), during quarantine measures amid the novel coronavirus COVID-19 pandemic on March 13, 2020, in Milan, Italy. Photo: Pietro D'Aprano/Getty Images

Schools are closing because of the coronavirus. Many students might be happy about this. Others might be worried, scared or confused.

Ralph Waldo Emerson was a writer. He once wrote that knowledge cures fear. Let's get some knowledge by answering common questions about coronavirus.

Everybody keeps talking about "coronavirus" and "covid-19." Which is it?

Both of these terms are correct. They are different things, though. The name of the virus is "SARS-CoV-2." SARS-CoV-2 causes a disease. The disease is called "novel coronavirus." This can be shortened to "covid-19." It is novel because scientists have not seen this type of disease before.

How does covid-19 affect people?

Covid-19 usually causes fever, cough and difficulty breathing. Someone with the virus might not feel sick right away. It could take 2 to 14 days for an infected person to feel sick. Others may not feel sick at all.

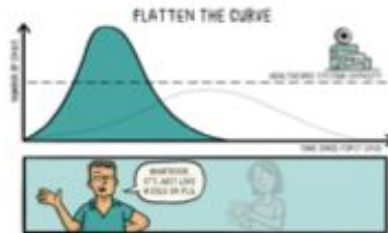
Scientists say most healthy people can fight off the virus. However, it is harder for people who are older or have health problems to fight it off. In serious cases, covid-19 can cause death. However, death is very uncommon among infected children.

Can pets get covid-19?

There has only been one dog so far who has tested positive for the coronavirus. It has no symptoms, though. Scientists do not think dogs can give the virus to people. Still, keeping your animals inside will help protect them from getting the virus.

Why are schools, stores and restaurants closing?

SARS-CoV-2 is a new virus. Our bodies do not know how to fight it yet. This makes it easy for the virus to spread fast to many people. A lot of people are usually at schools and stores. This makes them perfect places for the virus to spread. It is important to close them to keep the virus from spreading.



Experts worry many people could get covid-19 at the same time. It would be hard for hospitals to treat all those people at the same time. It would also be hard for people with other health problems. They might not be able to see a doctor.

Can this coronavirus be stopped?

Scientists are working on a coronavirus vaccine. Vaccines help the body learn to fight the virus. The vaccine will take time, though. For now, communities can help slow the spread of the virus.

Why do we have to wash our hands so often?

Hand-washing can help prevent illness. It also helps stop the spread of covid-19. Wash your hands with warm or cold water and soap. Scrub your hands, fingers and wrists. Scrub them for as long as it takes to sing "Happy Birthday to You" twice. Remember to cover your cough with a tissue or your elbow, too.

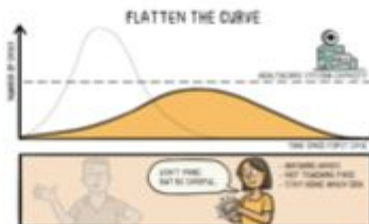
What is "social distancing"?

Your parents might not let you play with friends these days. This is because of social distancing. It might feel like a bummer. It is a very important thing to do right now, though. Experts say social distancing can help slow the coronavirus.

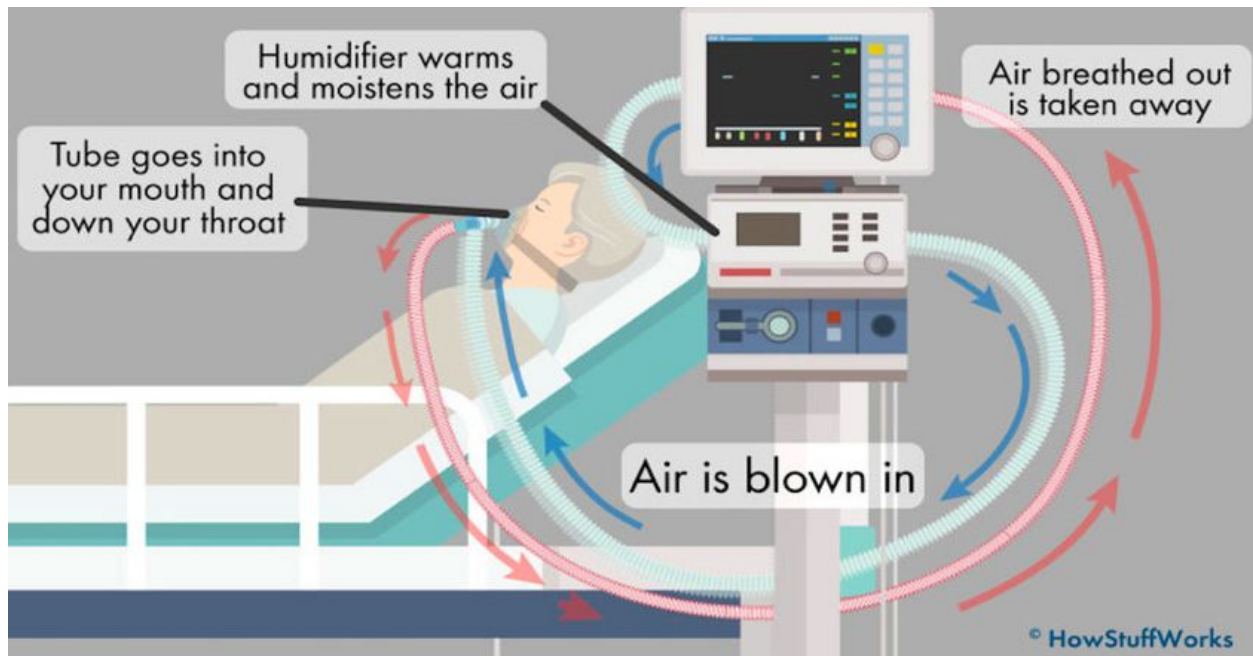
Social distancing means not being around that many people. It also means not being close to them, either. The Centers for Disease Control studies diseases. It is called the CDC for short. The CDC says people should stay six feet away from each other. This makes it harder for the virus to spread. Social distancing can protect you and others.

How long will this last?

No one knows how long this will last. The CDC says large events should be canceled for at least eight weeks. Your parents and teachers will help think of creative ways to pass the time.



How do ventilators work?



A flu-like illness has been spreading across the world since December 2019. It is called COVID-19, and it has infected more than 2 million people so far. Common symptoms of COVID-19 include fever, coughing and trouble breathing.

Many hospitals are struggling to care for all the sick people. They don't have enough equipment for everyone who needs them at the same time. One important device is the ventilator. It helps patients who have difficulty breathing on their own.

How A Machine Helps Sick Lungs

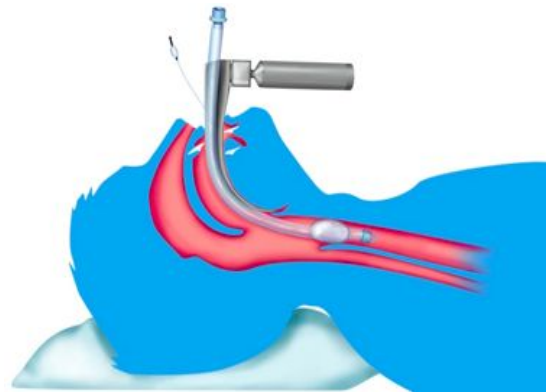
Ventilators help many different patients. During an operation, doctors give patients a medicine to keep them from being awake and feeling pain. For these patients, ventilators keep them breathing evenly during a normal surgery, such as getting an appendix removed. But COVID-19 patients need ventilators for a different reason. The virus attacks the lungs. A small number of people with COVID-19 develop inflammation in their lungs. It is the body's response to infection or injury. The lungs can swell or fill up with fluid. But some patients become even more sick. Their lungs stop working properly and they need help breathing. Think of the lungs like a balloon, says Kenneth Lutchen. He is a scientist at Boston University in Massachusetts. When we breathe, muscles in our chest pull away from our lungs, he says. The lungs have room to get bigger and draw in air. There, oxygen passes into the blood. Carbon dioxide passes from the blood into the lungs so that you breathe it out. However, in a person

with COVID-19, the lungs might fill with fluid, Lutchen says. The lungs might also become inflamed. Normal breathing doesn't happen because the lungs can't expand enough. The person can't get enough oxygen in and carbon dioxide out.

A ventilator helps by pushing air into the lungs, Lutchen says. Hopefully, this will keep levels of oxygen in the blood close to normal. It gives the body time to heal until they can breathe on their own again.

A Tube: Uncomfortable but Needed

For someone who can't get air into his or her lungs, a ventilator can be a lifesaver. Ventilators often sit on a cart next to a patient's bed. The patient is connected to the device by a breathing tube. During intubation, a doctor places a tube down a patient's throat. It rests in the trachea, which connects the mouth to the lungs. This is so the air goes directly into the lungs. Having a tube down your throat isn't exactly pleasant. But it's important. If the ventilator simply blew air into a person's mouth, it might not go into their lungs, Lutchen says. It might just expand their cheeks or leak out of their nose, which is connected to the mouth.



Hurry! Make More Ventilators!

U.S. hospitals have about 160,000 ventilators. The federal government stores 12,700 more for public health emergencies. However, people worry that there won't be enough ventilators. Hospitals might need many more to help everyone who gets seriously ill. Manufacturers are working to make more ventilators quickly to help hospitals.

YOUR BODY NEEDS OXYGEN TO LIVE. THE RESPIRATORY SYSTEM IS A GROUP OF BODY PARTS THAT HELP GET OXYGEN FROM THE AIR INTO YOUR BODY SO THAT YOU CAN KEEP RUNNING, SINGING, AND STAYING ALIVE!



What is that funky looking worm thing?
It's a muscle, and it plays a very important role in breathing. But now that we are on the subject of worms, did you know they need oxygen to live too? Yep, most all living things need oxygen... like trees, cats, lizards, and ladybugs! But their respiratory system might look a little different than ours.

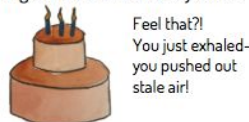
HOW DO THESE 4 BODY PARTS WORK TOGETHER?

Let's find out! Put one hand on the middle of your chest.

Now pretend you are taking a big sniff of a beautiful flower ...

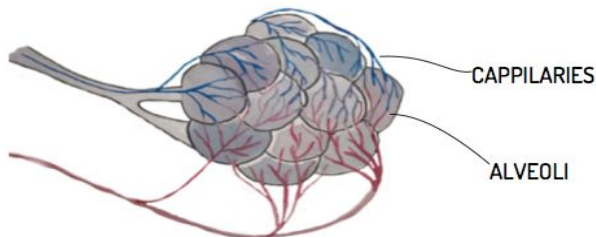


Now pretend you are blowing out some flaming candles on a birthday cake...

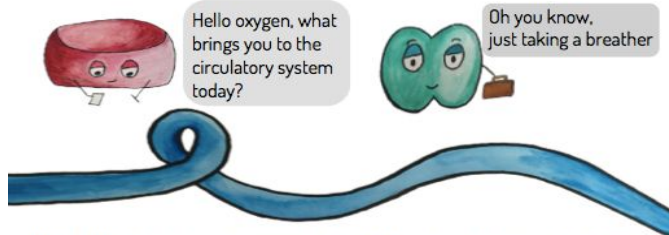


USING YOUR MOUTH, NOSE, LUNGS, AND DIAPHRAGM TO BREATHE IS SO EASY, YOU CAN DO IT IN YOUR SLEEP!

The bronchi are like little tree branches that keep branching and spreading . They get tinier and tinier until they end in this grape-like cluster called - ALVEOLI. Alveoli are so teeny-tiny that there are 300 million in each lung! These grapes are filled with microscopic little blood vessels called- CAPILLARIES



The oxygen molecule can then be picked up by a red blood cell, transferred into the blood stream, and travel all the way around the body!



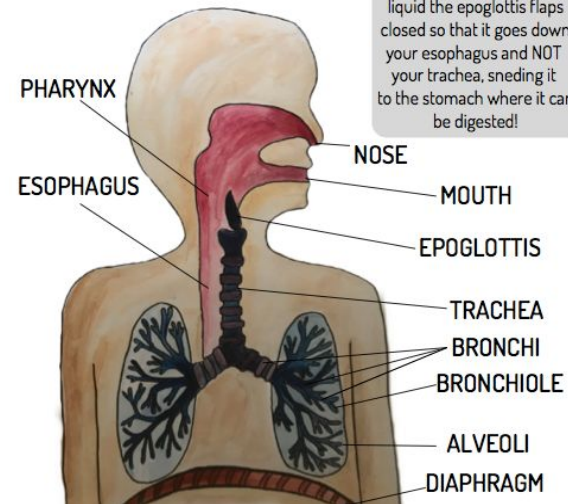
Think of the circulatory system and the red blood cells as a train that comes to pick up the oxygen molecules from the lungs and bring them to the heart. When the train comes to the lungs it drops off CARBON DIOXIDE molecules to make room for the oxygen molecules. Carbon dioxide is waste that is produced by the body and can be poisonous in large volumes so we must get rid of it, our bodies get rid of it by expelling it in the air we exhale. Oxygen hops on the circulatory train, and carbon dioxide hops off. This is called - GAS EXCHANGE.

LET'S TAKE A LOOK AT WHAT HAPPENS WHEN WE INHALE

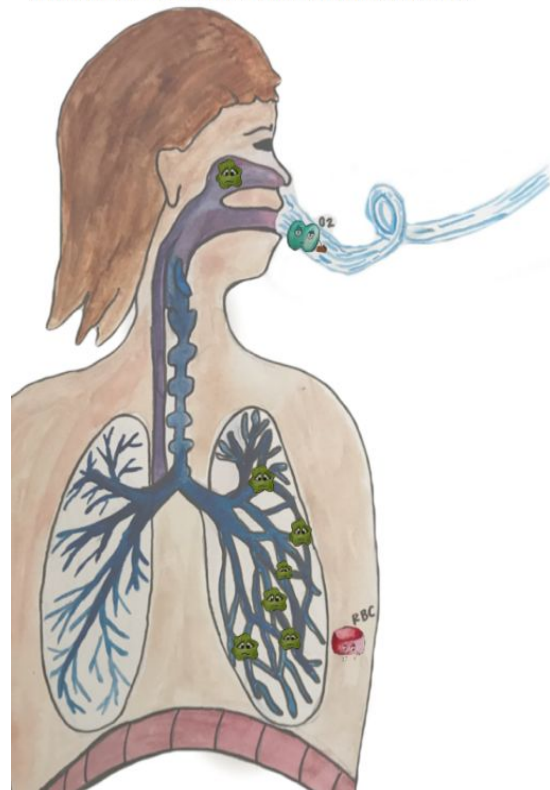
1. The air goes in through your mouth or nose
2. It goes down to your pharynx/ throat
3. Your epiglottis flaps open
4. Allowing air to travel down the trachea
5. Through the bronchi and bronchioles
6. into the Alveoli for gas exchange



DON'T CHOKE!
When you swallow food or liquid the epiglottis flaps closed so that it goes down your esophagus and NOT your trachea, sending it to the stomach where it can be digested!



HELP OXYGEN FIND HIS WAY FROM THE AIR TO HIS RED BLOOD CELL FRIEND IN THE LUNGS, BUT DON'T GET STUCK IN THE PESKY GREEN MUCUS!



THANK YOU TO ALL ESSENTIAL WORKERS!



List of Essential Workers

- **Truck Drivers**
- **Retail Workers (grocery stores, Walmart, Home Depot, LOWE)**
- **Warehouse Workers**
- **Factory Workers**
- **Nurses**
- **Doctors**
- **Postal Workers (UPS, Fed-Ex, USPS, DHL)**
- **Yellow Cab Drivers, Uber**
- **Construction Workers**

Math Reference Sheet - Different Types of Graph

Types of Graphs

Bar Graph

compares choices by how much or how many

April Snack Sales

Snack	Sales
candy	55
chips	65
soda	75
fruit	40
nuts	25

Line Graph

shows one variable over time

January Book Sales

Week	Book Sales
Week 1	150
Week 2	300
Week 3	250
Week 4	350

Circle or Pie Graph

shows parts to the whole (percentages)

How Students Get to School

Mode	Number of Students
Bus Riders	180
Walkers	90
Parents Drop Off	30

Pictograph

shows how many with an icon or picture

Pets Owned at Hill School

Each picture equals 10 animals

Pet Type	Number of Animals
Dogs	60
Cats	40
Fish	30
Birds	30
Rabbits	20

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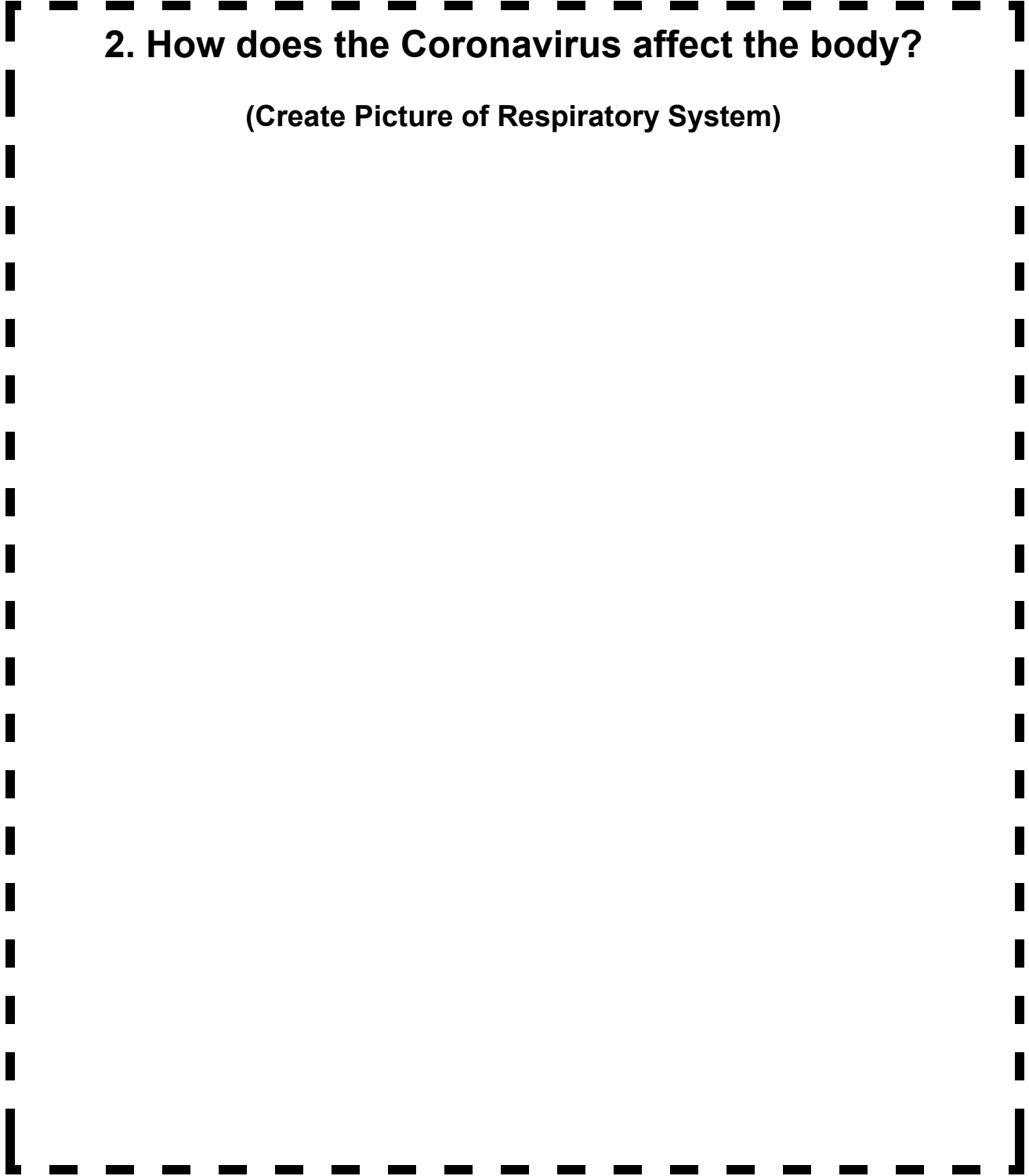
Cut the dotted line and paste it on the poster

**1. What is Coronavirus? How does Coronavirus
impact your life and society?**

Cut the dotted line and paste it on the poster

2. How does the Coronavirus affect the body?

(Create Picture of Respiratory System)



Cut the dotted line and paste it on the poster

3. What are essential workers? How do “essential workers” keep our communities safe?

Cut the dotted line and paste it on the poster

**4. How many recovered cases of Coronavirus are there among the United States, Mexico and Canada?
Create a graph and summarize the data.**

Cut the dotted line and paste it on the poster

5. Create a Mask that can prevent a person from catching the Coronavirus when they are in public.

Coronavirus Project Grading Rubric

Subject	Question and Create	Score				
		20	15	10	5	0
English Language Art	What is coronavirus? How does coronavirus impact your life and society?					
Science	How does the coronavirus affect the body?					
Social Studies	What are essential workers? How do "essential workers" keep our communities safe?					
Math	How many recovered cases of coronavirus are there among the United States, Mexico, and Canada? Create a graph you choose and summarize the data.					
Art	Create a mask that can prevent a person from catching the coronavirus when they are in public.					
Column Total						
Total Score						

Coronavirus Project Checklist

Make sure you check off the list before turning in your Poster

- My name and date is on my project.
- I gave my project a title.

Reading & English Language Art:

- I read and comprehend the article.
- I read and comprehend each question.
- I answered each question in complete sentences.

Science:

- I have created a picture of my respiratory system with names for important parts of the system.
- I have provided an explanation on how the respiratory system works and how the Coronavirus is affecting the system in a negative manner.
- I have also included the importance of cleanliness, standing 6 feet apart, wearing a mask, and constantly washing our hands.

https://newsela.com/read/lib-how-do-ventilators-work/id/2001007325/?collection_id=341&se_arch_id=e6ce7fc8-8cf8-4620-a5ed-7e63ead8a18b

Social Studies:

- I have defined what essential workers are.
- I have provided information on what essential workers services are.
- I have provided a list of the essential workers in our community.

Math:

- I have researched the data on Coronavirus recovery cases (United States, Mexico and Canada) using the link below.
- <https://news.google.com/covid19/map?hl=en-US&gl=US&ceid=US:en>
- I have created a graph using the data from the map.
- I have provided a written summary explaining the information in my graph.

Art:

- I have researched the different types of masks.
- I have designed the mask of my choice.
- I have turned in an awesome project.