Learning About COVID-19

Activity Guide

ages 10–12

Alaska Afterschool Network
Program of Alaska Children's Trust

NORTH CAROLINA NCCAP
CENTER for AFTERSCHOOL PROGRAMS
Public School Forum of North Carolina

50 STATE AFTERSCHOOL NETWORK

Learning About COVID, Ages 10-12

COVID-19, coronavirus, has impacted students and families throughout the world and has significantly altered our education systems, including out-of-school time programs. The activities and resources in the Learning About COVID-19 Activity Guides were intentionally designed to support youth-serving programs in engaging students in learning about the science of COVID-19 and developing greater social awareness and empathy. The guide includes 40 activities and challenges organized by four different age groups (5-9) (10-12) (13-15) (16-18). The activities were developed for in-person and virtual instruction, or a hybrid of both, as well as sent as take-home packets. All activities should be safely executed and aligned with state and local health guidelines.

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Build a Virus

ACTIVITY DESCRIPTION

In this arts and STEM activity, youth will build a model of a virus. This activity is designed to introduce youth to different parts of a virus and how it functions. This activity encourages the development of STEM literacy, inquiry and critical thinking skills.

SUPPLIES

Common items found around the home or at school, like:

- Playdough
- Construction paper
- Pipe cleaners or yarn
- Cotton swabs or toothpicks
- Small pom poms or cotton balls
- Scissors and glue or tape

STEPS

Viruses are very small, and when they get inside your body, they can make you sick. COVID-19 is a virus, so is the flu, measles and the common cold. If you've ever been sick, chances are you've had a virus. In this activity, you will learn more about what a virus is and what it does, and then you will build your own virus.

1. In this activity, we are going to build different parts of a virus to understand how it works, including:
    - **Playdough capsid** - The playdough is the tough outer shell of the virus (capsid)
    - **Paper DNA** - The paper is the genetic material (DNA) that give the virus instructions for how to attack our bodies
    - **Virus Spikes** - The cotton swabs or cotton balls are how the virus attaches itself to our bodies
2. Take a close look at the different kinds of viruses here: https://bit.ly/2EMfZQj. On the website, select "Launch Interactive"
3. Select the virus from the list you would like to create.
4. Start by making the capsid with playdough.
5. Use paper, cotton swabs or other materials you have available in your home to make the genetic material (DNA) and virus spikes.

ADAPTATIONS

- If you are delivering the activity virtually, encourage youth to post a picture of their virus model and post it to your organization's platform.
- If you are delivering this activity in-person, put youth in pairs and ask them to create the virus together and discuss the symptoms of the virus and how it is transmitted.

EXTENSIONS

- Look up information about the virus you made. How does it spread from person to person? When someone gets sick with this virus, what are the symptoms?
- Create a story or comic strip about your virus. Tell the story of how the virus makes someone sick and what that person does to feel better.
- Take a closer look at the viruses using BioInteractive's Virus Explorer (https://bit.ly/2EMfZQj). Select "launch interactive" to look at 3-D models and the inside of viruses.

QUESTIONS FOR DISCUSSION

- What surprised you to learn about viruses?
- How is the virus you made the same as the coronavirus? How is it different?
- What are the ways you can prevent viruses from infecting your body?
- Why do viruses affect some people more than others (ex. old vs. young people)? What can we do to help those people stay healthy?

CREDITS: Our Time to Learn's "Germ Fight" available at http://www.ourtimetolearn.com/blog/2014/06/01/germ-fight/

Build a Virus

FACTS FOR STAFF & FAMILIES

- Viruses are a microscopic collection of genetic material (DNA or RNA) surrounded by a protein coat.
- Viruses cannot replicate by themselves and need to live inside a host to survive. When the virus enters our healthy cells, it attacks the cells and replicates.
- COVID-19 is a type of virus and is spread through droplets released into the air when a person breathes, coughs or sneezes. Then, COVID-19 moves to the mouth, nose, throat and into the lungs, making it hard to breathe.
- The name “COVID-19” is short for coronavirus disease 2019. In COVID-19, ‘CO’ stands for ‘corona,’ ‘VI’ for ‘virus,’ and ‘D’ for disease.

CREDITS: Centers for Disease Control and Prevention (CDC) “COVID-19 Frequently Asked Questions” available at https://www.cdc.gov/coronavirus/2019-ncov/faq.html.

COVID Comics

ACTIVITY DESCRIPTION

In this health and literacy activity, youth will create a comic strip to share facts about coronavirus. As part of the COVID-19 unit, this activity is designed help ensure youth understand and can communicate basic information about the virus. This activity supports the development of health literacy and responsible decision-making.

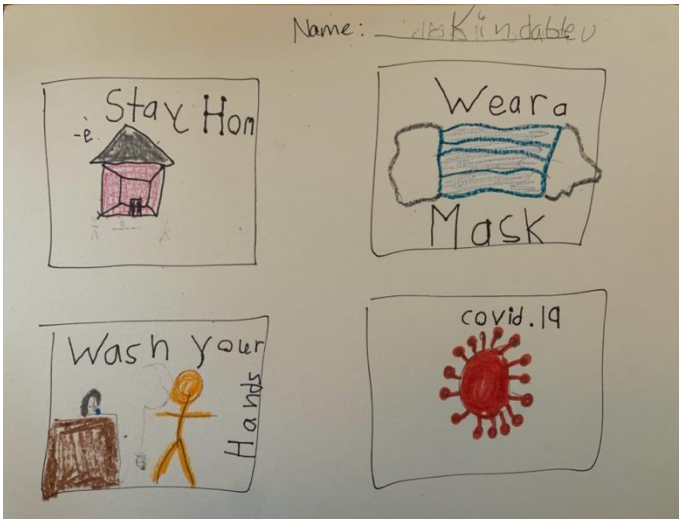
SUPPLIES

- Print out the comic strip template found here: https://bit.ly/3j615n3. Or you can use the COVID Comics Handout or make your own by drawing 6 boxes on a blank sheet of paper like this https://bit.ly/2Yoi2kG
- Pencil
- Markers or crayons

STEPS

In this activity you are going to learn some key facts about coronavirus and ways to prevent it. Then, you will create a comic strip about something important that you want others to know about the virus.

1. First, watch this video that is about the virus: https://bit.ly/3jliojX
2. Then, check out this comic about the virus: https://n.pr/2YgSgi4. The comic is also available in Spanish and Chinese. It may be helpful to have an adult read it with you.
3. What are some things that you learned about the coronavirus from the video and the comic strip? What is one thig you want others to know about the virus?
4. Now, you are going to make your own comic strip. In your comic strip, you are going to write a story about the coronavirus using something that you learned.
5. Before you start, decide on a story.
   - What will happen in the beginning of the story?
   - What will happen in the middle of the story?
   - What will happen at the end of the story?
6. Start drawing your story. You can draw pictures and write words or just draw pictures. Draw it in pencil first in case you want to change anything. Then you can color it in with markers or crayons.
7. Once you are done, share your story with someone. Read it to a family member or a friend to share what you learned.



ADAPTATIONS

- If you are delivering the activity virtually or digitally, youth can create and share digital comics and cartoons using ToonyTool: https://www.toonytool.com/.
- If you are delivering the activity virtually, consider breaking up the activity into multiple sessions. Session 1: Read the comic strip together and discuss learnings. Session 2: Come up with your own story and create a comic strip. Session 3: Show and discuss comic strips.

EXTENSIONS

- Host a virtual comic con. Comic con is an event where comics creators and other artists come together to share and discuss their art. Have youth show and describe their art. They can even dress up as one of their comic characters.

CREDITS: NPR's "A Comic Strip Exploring the New Coronavirus" available at https://n.pr/2YgSgi4. The Simple Parent's comic strip template available at https://n.pr/2YgSgi4

COVID Comics

QUESTIONS FOR DISCUSSION

- What are some things that you learned about the virus from the comic strip?
- What are some things that you would want to teach others about the virus?
- What was easy about this activity? What was challenging?
- Comic strips and cartoons are one fun way to teach others information about the virus. How else could you teach other people about the virus?

FACTS FOR STAFF & FAMILIES

- The term "coronavirus" refers to a family of viruses that causes many different types of diseases, including the common cold.
- COVID-19 is a "novel coronavirus," which means it's a new disease unfamiliar to scientists and doctors. Its name is actually a mash-up of the words "corona" (CO); corona means "crown" in Latin (coronaviruses are named for the crown-like spikes on their surface), "virus" (VI), and "disease" (D). The "19" comes from the year 2019, when the disease was first detected.
- COVID-19 can be transmitted by little droplets from coughs or sneezes, which is why doctors say you should always cover your mouth with your elbow when you cough or sneeze. You could also pick it up by touching doorknobs or countertops that an infected person has touched, and then touching your eyes, nose, or mouth.

CREDITS: National Geographic for Kids' "Facts About Coronavirus" available at https://bit.ly/2G37xNa

COVID Comics Handout

Instructions: Make your own comic strip about the coronavirus. First, decide on a story. Then, draw your story in the boxes below. You can draw pictures and write words or just draw pictures. Draw it in pencil first in case you want to change anything. Then you can color it in with markers or crayons.

Glitter Germs

ACTIVITY DESCRIPTION

In this STEM and health activity, youth will conduct a simple experiment to learn about how germs are spread. This activity is designed to introduce youth to how COVID-19 can transfer from person to person through surfaces. This activity encourages the development of health promotion behaviors and responsible decision-making.

SUPPLIES

- Glitter (Note: you can substitute cocoa powder or pepper)
- Baby oil or lotion
- Cup, mug, silverware and other common items you touch during the day
- Paper towel
- Hand soap
- Glitter Germs Handout

STEPS

Germs are everywhere, and because they are so small, you can't see them on your body or hands. Washing your hands is so important because the COVID-19 virus can enter through or nose, mouth or eyes when we touch our face with our dirty hands. (Most people touch their face 15 times an hour!) In this activity, you will conduct a simple experiment to show how germs, like the COVID-19 virus can get on our hands when we touch a surface.

1. Set out on a table a few items that you would pick up during the day, like a cup, fork, pencil or toy. Put a small amount of glitter in a shallow bowl. The glitter represents germs, like viruses and bacteria. (See Step 1 on the handout.)
2. Add a few drops of baby oil or lotion to your hands. Rub the oil or lotion all over your hands, including in between your fingers and on the back of your hands.
3. Sprinkle glitter on to your hand or place your hand in the bowl of glitter. Rub the glitter all over your hands.
4. Pick up an item on the table and move it around in your hand. Set it back down. What happened? Where did the glitter (aka germs) go? Repeat with the other items.
5. Let's try to get the glitter off our hands. First, use a paper towel to try to get the glitter off your hands. What happens? Did all the glitter come off easily?
6. Now, use just cold water to get the glitter off your hands. What happens? Did all the glitter come off?
7. Lastly, use warm water and soap and wash for at least 20 seconds. What happens? Did all the glitter come off?

CREDITS: A to Z Teacher Stuff's "Glitter Germs" available at https://bit.ly/330PwqC

ADAPTATIONS

- If you are delivering the activity in-person, use different color glitter for each person. Have youth pass objects or walk around a room for 2 minutes. See how the glitter moves around the room and mixes together.
- If you are delivering the activity virtually, conduct the experiment during the virtual session. Have youth make predictions about what will happen when you try to get the glitter off your hands.

EXTENSIONS

- Play germ tag with your friends and family! Put stickers (aka "germs") on the other people you tag. At the end of the game, see how many germs have spread to each other.
- To learn more about washing your hands to keep the virus out of your body complete the other activity available in this unit called, "Soap and Viruses Don't Mix", or if you want to learn about what germs do to living things over time, complete the activity "Growing Germs".

QUESTIONS FOR DISCUSSION

- Why did the paper towel not work as well as soapy water?
- What are some of the ways you can remind yourself to wash your hands frequently?
- How can you avoid touching your face or others throughout the day?
- How does washing your hands help others?

Glitter Germs

FACTS FOR STAFF & FAMILIES

- Frequent and thorough handwashing with soap is one of the best ways to protect yourself and others from COVID-19.
- You should wash your hands for at least 20 seconds. Make sure to get the backs of your hands, between your fingers and under your nails.
- You should wash your hands before meals, after using the bathroom, after sneezing or blowing your nose, and after touching potentially contaminated surfaces, like doorknobs.
- Regular soap is just as effective as antibacterial soap. If water and soap are not available, use alcohol-based hand sanitizer. The hand sanitizer should contain at least 60% alcohol.

CREDITS: Centers for Disease Control and Prevention's (CDC) "When and How to Wash Your Hands" available at https://www.cdc.gov/handwashing/when-how-handwashing.html

Glitter Germs Handout

Step 1: Set out on a table a few items that you would pick up during the day, like a cup, fork, pencil or toy. Put a small amount of glitter in a shallow bowl.

Step 2: Add a few drops of baby oil or lotion to your hands. Rub the oil or lotion all over your hands, including in between your fingers and on the back of your hands.

Step 3: Sprinkle glitter on to your hand or place your hand in the bowl of glitter. Rub the glitter all over your hands.

Step 4: Pick up an item on the table and move it around in your hand. Set it back down. Repeat with the other items.

Step 5-7: Try to get the glitter off your hands. First use just a paper towel. Then, use only cold water. Finally, use warm soapy water.

Growing Germs

ACTIVITY DESCRIPTION

In this STEM activity, youth will conduct a simple experiment to understand how germs work. This activity is designed to introduce youth to how germs can affect other living things. This activity encourages the development of STEM literacy, inquiry and critical thinking skills.

SUPPLIES

- 3 slices of bread
- 3 resealable plastic zipper bags
- Gloves
- Marker

STEPS

Germs are very small, living things that can cause people to get sick. These include viruses (like COVID-19) and bacteria. Germs are everywhere, and because they are so small, we can't usually see them with our eyes. In this activity, you will conduct an experiment to see what germs can do to bread and the importance of washing your hands.

1. Get out a loaf of bread that has not been touched. (Keep it in the bag for now).
2. Put on pair of clean rubber gloves. Open the bag and grab out one piece. Put the slice of bread in a bag and label the bag "Control" with a marker. Take off the gloves.
3. Get your hands dirty (put them in dirt or touch a bunch of things in your home). Grab another piece of bread and put your hands all over it for at least 10 seconds. Put the slice of bread in the bag and label the bag "Dirty Hands" with a marker.
4. Go to a sink and wash your hands with warm water and soap for at least 20 seconds. (Make sure to clean the back of your hands and in between your fingers.) Grab another piece of bread and put your hands all over it for at least 10 seconds. Put the slice of bread in the bag and label the bag "Clean Hands" with a marker.
5. Keep the bread in the bags for one week. Make a guess (hypothesis) about what you think will happen. Take a look at it every day and see how it changes.

CREDITS: TeachStarter's "Tips to Reduce Germs in the Classroom" available at https://bit.ly/3gwT88x

"Moldy bread, 3rd place" by Benimoto is licensed under CC BY 2.0

ADAPTATIONS

- If you are delivering the activity in-person, sit the youth in a circle or in pairs and have them pass the bread to each other (with clean and dirty hands).
- If you are delivering the activity virtually, ask youth to conduct the experiment before your virtual session. Discuss how the activity went and the questions for discussion during your virtual session.

EXTENSIONS

- Take pictures of your bread each day. Write down what is happening to each slice on that day.
- Conduct the experiment again but this time put the bread on a dirty and clean surface (like a table) and see what happens.
- If you touch a dirty surface, the only way a virus or bacteria can enter your body is if you touch your eyes or mouth. To learn more about washing your hands to keep the virus out of your body complete the activity "Soap and Viruses Don't Mix".

QUESTIONS FOR DISCUSSION

- What happened at the end of the week? How are the slices of bread different?
- What are some of the ways you can remind yourself to wash your hands frequently?
- How can you avoid touching your face or others throughout the day?

Growing Germs

FACTS FOR STAFF & FAMILIES

- Frequent and thorough handwashing with soap is one of the best ways to protect yourself and others from COVID-19.
- You should wash your hands for at least 20 seconds. Make sure to get the backs of your hands, between your fingers and under your nails.
- You should wash your hands before meals, after using the bathroom, after sneezing or blowing your nose, and after touching potentially contaminated surfaces, like doorknobs.
- Regular soap is just as effective as antibacterial soap. If water and soap are not available, use alcohol-based hand sanitizer. The hand sanitizer should contain at least 60% alcohol.

CREDITS: Centers for Disease Control and Prevention's (CDC) "When and How to Wash Your Hands" available at https://www.cdc.gov/handwashing/when-how-handwashing.html

Lungs in a Bottle

ACTIVITY DESCRIPTION

In this health and STEM activity, youth will conduct a simple experiment to learn about how our lungs work. This activity is designed to introduce youth to how COVID-19 can impact our lungs and our breathing. This activity encourages the development of STEM literacy, inquiry and critical thinking skills.

SUPPLIES

- A plastic bottle
- 2 balloons
- 1 straw
- 1 rubber band
- Scissors
- Tape or playdough
- Lungs in a Bottle Handout

STEPS

The COVID-19 virus can enter through our nose or mouth and travel to our lungs. Our lungs help us to breathe, so when a virus attacks our lungs, it can cause coughing or pain in our chest. In this activity, you will conduct a simple experiment to show how the lungs work.

1. Ask an adult to cut the bottle in half using scissors. Use the top half of the bottle. See step 1 on the handout.
2. Get a balloon and tie a knot in one end of the balloon. Cut off the other end. Stretch the balloon around the bottom of your plastic bottle. See step 2 on the handout.
3. With the second balloon, insert a straw into the balloon, and then secure balloon to the straw using a rubber band. (Make sure to not tie it too tight – the air needs to flow through the straw.) You can test the balloon by blowing air into the straw to make sure the balloon inflates. See step 3 on the handout.
4. Put the straw and the balloon into the neck of the bottle. Add playdough around the straw to make a seal, so that air does not get in. See step 4 on the handout.
5. Now it's time to conduct our experiment. Hold the bottle and pull the knot of the balloon at the bottom. What happens to the balloon inside the bottle? What happens when you let go?

Explanation of the Science: The balloon inside of the bottle represents our lungs, and the balloon at the bottom is our diaphragm. A diaphragm is a big muscle that works with your lungs to move air in and out of your lungs. When we breathe, the air goes down into our lungs and the diaphragm moves down to create more space.

ADAPTATIONS

- If you are delivering the activity in-person, have youth make predictions about what will happen to the balloons before they conduct the experiment.
- If you are delivering the activity virtually, send home a kit with the activity supplies so that youth can conduct the experiment alongside of the facilitator.

EXTENSIONS

- Create another model of how lungs work. This time using plastic bags. Follow the instructions here: https://bit.ly/2D5x7jF
- When you need to cough or sneeze, you should do it in your elbow, instead of your hands. This helps stop the spread of disease. Make a poster to remind you and your family members to cough and sneeze into your elbow.

QUESTIONS FOR DISCUSSION

- When we breathe out, sneeze or cough, we can spread a virus to another person. What are some of the ways you help stop the spread if you are sick?
- What do you think happens to your lungs when you are sick? What happens to your balloon (a.k.a. lung)?
- Why should we try to stop the spread of the virus?

CREDITS: Science Spark's "How Do Lungs Work?" available at http://www.science-sparks.com/breathing-making-a-fake-lung/

Lungs in a Bottle

FACTS FOR STAFF & FAMILIES

1. The COVID-19 virus can enter through your nose or mouth and travel to your lungs. Your lungs help you to breathe, so when a virus attacks your lungs, it can cause coughing or pain in your chest.
2. COVID-19 can cause complications in the lungs, including pneumonia. When someone has pneumonia, their lungs become filled with fluid and inflamed, which makes it difficult to breathe. Pneumonia can be so severe in some people that they require treatment at a hospital with a ventilator.
3. People who have asthma or other breathing issues can be more at risk for having a severe reaction to COVID-19. These people should take extra precautions to protect themselves from getting infected with COVID-19.

CREDITS: Johns Hopkins Medicine's "What Coronavirus Does" to the Lungs available at https://bit.ly/3jnGvyG

Lungs in a Bottle Handout

Step 1: Ask an adult to cut the bottle in half using scissors. Use the top half of the bottle.

Step 2: Get a balloon and tie a knot in one end of the balloon. Cut off the other end. Stretch the balloon around the bottom of your plastic bottle.

Step 3: With the second balloon, insert a straw into the balloon, and then secure balloon to the straw using a rubber band. You can test the balloon by blowing air into the straw to make sure the balloon inflates.

Step 4: Get a balloon and tie a knot in one end of the balloon. Cut off the other end. Stretch the balloon around the bottom of your plastic bottle.

Picturing Empathy

ACTIVITY DESCRIPTION

In this social and emotional learning (SEL) activity, youth will learn about empathy and perspective-taking. As part of the COVID-19 unit, this activity is designed to help youth understand why these skills are especially important during the pandemic and to identify ways they can practice these skills. This activity supports the development of social awareness skills.

SUPPLIES

- Picturing Empathy Handout
- Scissors
- Timer
- Blank paper
- Writing utensil

STEPS

Note: This activity is best done with a group or at least one additional person (an adult, a peer or a sibling).

Do you know what the word 'empathy' means? Empathy means you are able to understand and care about another person's feelings. Here is a video that helps you to learn more about empathy: https://youtu.be/icIlUdTEQnU

Empathy helps you to connect and build positive relationships with other people and to understand more about people from different backgrounds and cultures. Some ways to show empathy are by learning about other people's needs, being kind to others, and being kind to yourself.

Why do you think that it is important to show empathy to others during this pandemic? What are some ways that you can show empathy to others right now?

In this activity, you are going to play a game where learn about ways you can practice empathy during the pandemic.

1. Cut out the cards on the Empathy Charades Handout. Each of the cards lists something that you can do to show empathy to others during the pandemic. Look at each card, one at a time, and talk about:
    - What is the action that is listed on the card?
    - How does doing this action show that you care about others?
2. Put your cards in a pile face down.

3. Take turns pulling a card from the top of the pile, one at a time. Don't show the others what is on your card.
4. Set your timer for 2 minutes.
5. You will have 2 minutes to try to draw what is listed on the card on a blank piece of paper. The other people will try to guess what you are drawing (like the game Pictionary). Start your timer when you start drawing.
6. If others guess it correctly within the 2-minute timeframe, the guesser gets a point. If time runs out and no one has guessed it correctly, no one gets a point.
7. After the time is up, switch roles and the next person will take a turn to draw.

ADAPTATIONS

- If you are delivering the activity in person or virtually, you can pause after each turn and discuss the following 2 questions:
    - How does that action show others that you care about their feelings?
    - Why is it so important to do that action during the pandemic?
- If you are delivering the activity in person, group youth into 2 teams that can play against each other.
- If you are delivering the activity digitally, encourage families to play together so that there is at least one person who can draw and one person who can guess.

Picturing Empathy

EXTENSIONS

- Have youth come up with their own ideas and add cards to the game.
- Use the cards (and add more to the pile) to play charades- a game where someone acts on what is listed on the card while the others try to guess what the actor is doing.

QUESTIONS FOR DISCUSSION

- What does the word 'empathy' mean?
- What are some ways that people have shown you empathy?
- What are some ways that you can show empathy to others right now?
- Why do you think that it is important to show empathy to others during this pandemic?
- How does empathy help you to understand the thoughts, feelings and perspectives of people that are different than you?
- What are some ways you can show empathy and be kind to yourself during the pandemic?

FACTS FOR STAFF & FAMILIES

The best ways to teach youth empathy is to model it for them and engage them in experiences that demonstrate empathy. Here are some ways to practice empathy during the pandemic:

- Stay socially connected. For example, reaching out to friends by phone, writing a supportive note to someone who may be struggling, and donating things to those in need are some ways to show concern that also help you stay connected.
- Consider some of the ways that the pandemic has affected the lives of other people. Think about work, access to housing and other basic needs, schooling, etc. Discuss some of the ways the pandemic has affected other's lives with your kids.
- Be kind to yourself. You are managing a lot and everyone copes with stress, anxiety and fear differently. Practice self-compassion.
- Be considerate. It can be easy to criticize others without making the effort to understand how their situation and experiences are impacting their choices. Remind yourself and your kids that everyone copes differently. Consider and seek to understand how people's life experiences influence their decisions.
- Keep yourself and others safe. Kindly ask others to observe your physical distance and try to gently encourage friends and family to stay home, wash their hands frequently, practice social distancing, and self-isolate if they experience symptoms. Talk to children about how these actions show concern for other's well-being.

CREDITS: Very Well Mind's "How to Practice Empathy During the COVID-19 Pandemic" available at https://bit.ly/2DnnQDJ

Picturing Empathy Handout

Instructions: Cut out the cards below and put them in a pile face down. Each of the cards lists something that you can do to show empathy to others during the pandemic.

Call a friend or family member on the phone to ask how they are doing.	Help your family by doing something to make their day easier (like making your bed, putting the dishes away, cleaning up the house, etc.)	Wear a mask.
Kindly ask people to keep 6-feet of distance from you.	Help a friend or a sibling with their schoolwork.	Tell your teacher how much you appreciate them.
Teach people about things they can do to stay safe during the pandemic.	Wash your hands frequently.	Say nice things to yourself.
Say “hi” to someone new.	Share something with a friend, classmate, or sibling.	Talk to an adult or a friend if you are feeling scared, worried or sad.
Thank the person who works in the checkout line at one of the stores you go to for work they do.	Speak up if you hear someone saying mean things about someone else.	Give someone a nice compliment.
Sneeze and cough into your elbow.	Smile at someone who looks like they are having a bad day.	Give something that you no longer use to someone who could use it.

Roadmap to Calm

ACTIVITY DESCRIPTION

In this social and emotional learning (SEL) activity, youth will create a calm down path. As part of the COVID-19 unit, this activity is designed to teach youth the steps they can use to manage their emotions when they are exposed to potentially frightening media about the virus. This activity supports the development of self-awareness and self-management skills.

SUPPLIES

- 2 pieces of blank paper
- Tape
- Scissors
- Markers or crayons
- Roadmap to Calm Handouts

STEPS

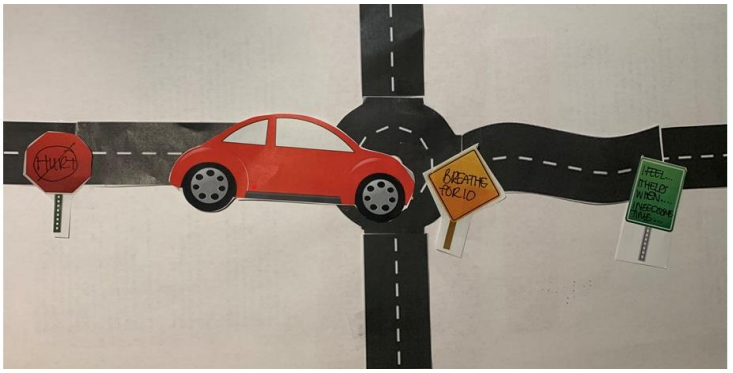
Hearing about coronavirus on the television, internet, radio and from other people can make you feel some big emotions. What are some of the things you might feel when you hear news about the virus? [scared, angry, worried, calm, confused, happy, sad].

It is normal to have big emotions when you hear certain news about the virus. It is helpful to learn how to manage these emotions in ways that are healthy for you and don't hurt others.

Today you are going to create a roadmap to calm. A roadmap to calm is the 4 steps that you can take to manage big emotions that you feel. After you make the roadmap you are going to practice these steps.

The 4 steps in the roadmap to calm are:

1. Remind yourself that it is never okay to hurt yourself, others or to destroy things. This includes hurting others with our words.
2. Do something that helps you to slow down and recognize how your body is feeling – like taking 10 deep breaths or counting slowly to 10.
3. Use your words to say what you feel and say what you wish will happen.
4. Talk to an adult or a friend about some things you can do to solve the problem or some things you can do to feel better.



Here is how you make your roadmap:

1. Tape your 2 pieces of paper together longways.
2. Cut out the pieces of road on the Roadmap to Calm Handout and tape or glue them across your 2 pieces of paper to make a long road.
3. Now you are going to make 4 road signs along your road. Each sign will be a reminder of one of the 4 steps that help you calm down. You can use the road signs on the Roadmap to Calm Handout or you can draw your own with crayons or markers.
4. On the first sign, write a word or draw an image that reminds you that it is never okay to hurt yourself or others. Then, tape that sign near the beginning of your road.
5. On your second sign, write a word or draw an image of something that you can do to help you slow down and recognize how your body is feeling.

CREDITS: Childhood 101's "5 Steps to Managing Big Emotions" available at https://bit.ly/2QNPvk6

Roadmap to Calm

STEPS continued

6. On your third sign, write a few words that help you remember to talk about how you are feeling, like:
   - I feel
   - I wish…
   - I hope that…
   - It helps when…

   Then, tape that sign on your road to the right of your other signs.
7. On your fourth sign, write a word or draw a picture of an adult or a friend that you trust that you can talk to. Then, tape that sign on your road to the right of your other signs.
8. Cut out the car on the Roadmap to Calm Handout. Pretend you are driving down your road. Stop your car at each sign. See if you can remember that calm down step by saying it out loud.

ADAPTATIONS

- If you are delivering the activity in-person, youth can work as a group to create a giant road that spans your program area or classroom. Youth can create 3-D road signs using cones as the base with a pole and poster board. Youth can walk along the roadway every day, stopping at the signs to practice the 4 steps.

EXTENSIONS

- The more opportunities that youth get to practice using these strategies, the more they will be able to use the steps when big emotions arise. Make this practice part of your daily routine. Start or end your programming or your routine at home by practicing these steps.
- Continue supporting youth's emotion management and social awareness by implementing the Picturing Empathy activity in this unit.

CREDITS: NPR's "What to Say to Kids When the News is Scary" available at https://n.pr/2QMhAZm

QUESTIONS FOR DISCUSSION

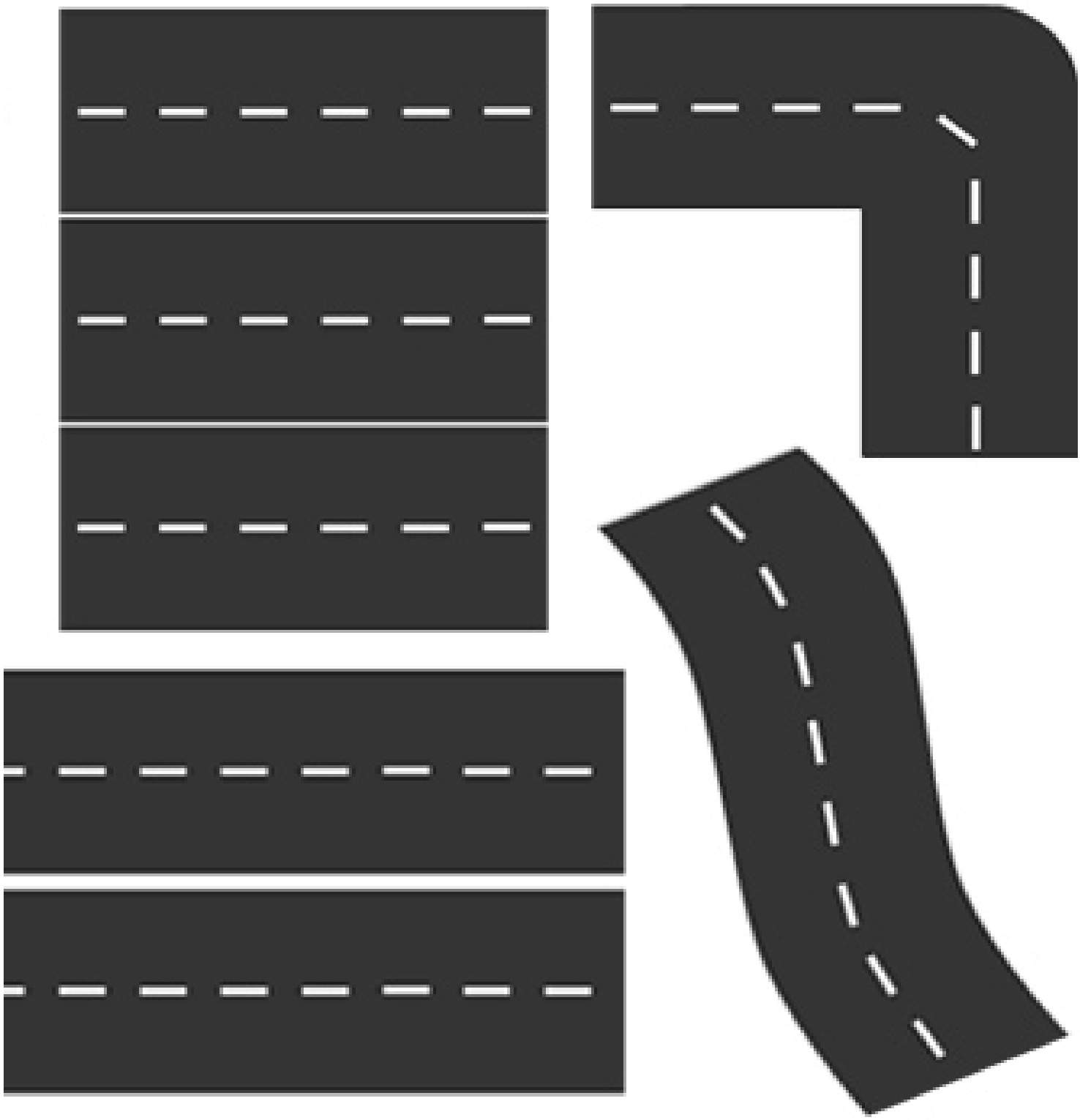
- Hearing about coronavirus on the television, internet, radio and from other people can make you feel some big emotions. What are some things that kids might feel when they hear things about the virus?
- What are some healthy things that you can do to help yourself calm down when you are feeling big emotions?
- It can be hard to talk about our feelings. What are some words that you can use to start talking about your feelings? (E.g., I feel…, I hope…, I wish…). Let's practice saying those things.
- Who are some adults or friends that you can talk to when you are feeling big emotions?

FACTS FOR STAFF & FAMILIES

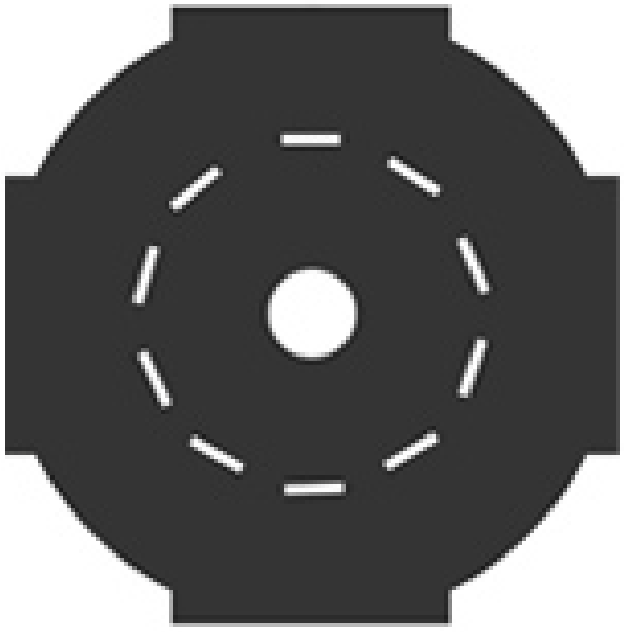
Families, caregivers, youth development professionals, and teachers play an important role in helping to prepare and protect kids from potentially frightening media. Here are some tips for supporting your youth:

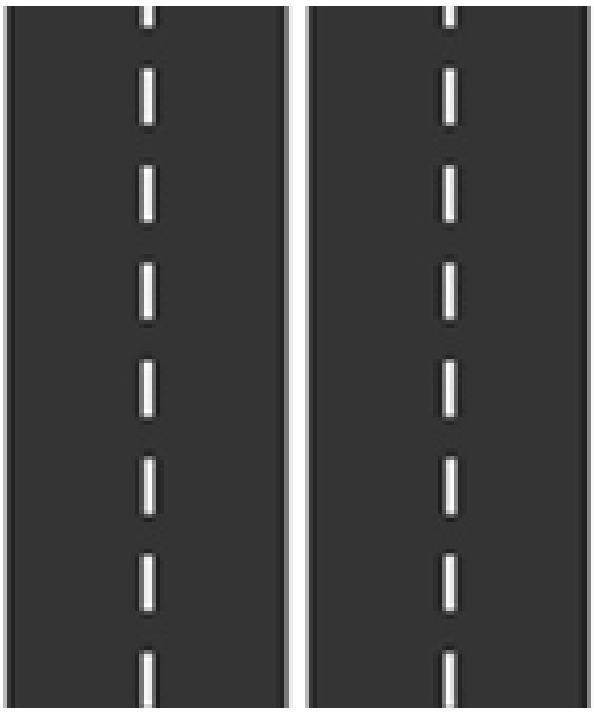
- Limit kids' exposure to breaking news and try not to let your children experience the news without you so that you are aware of what they have seen and heard.
- Check in with kids by asking: "What have you heard and how are you feeling?" Create a safe space to talk where kids can ask questions about what they're seeing, how they're feeling and what they think.
- During these check-ins, provide kids with the facts and context. Take the time to debunk memes, myths and misconceptions.
- When they ask why something happened, avoid labeling others. Labels like "bad people" can increase fear and confusion.
- It's ok to not have all of the answers and to say "I don't know why that happened" to some of kids' questions.
- Encourage kids to "look for the helpers" when something frightening is happening. Encourage them to identify and focus on how people are supporting each other.

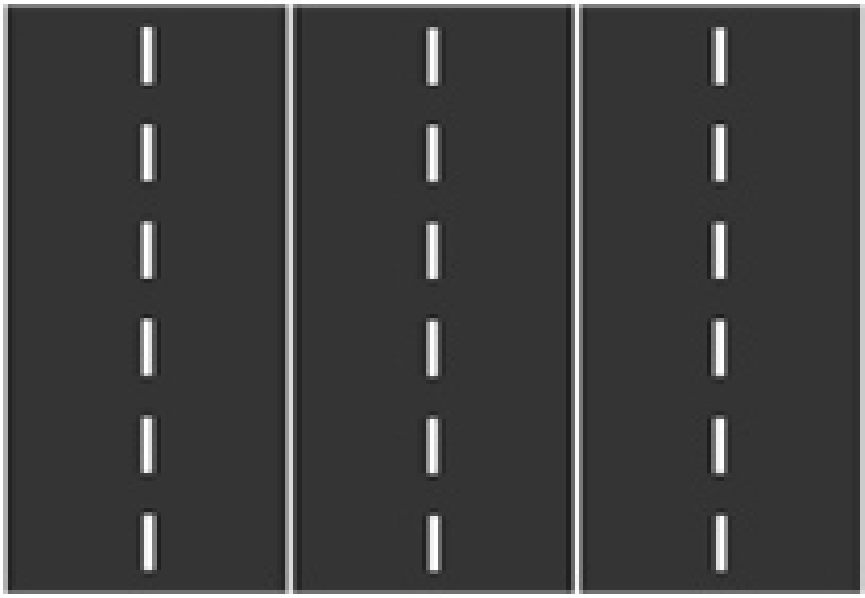
Roadmap to Calm Handout



Roadmap to Calm Handout







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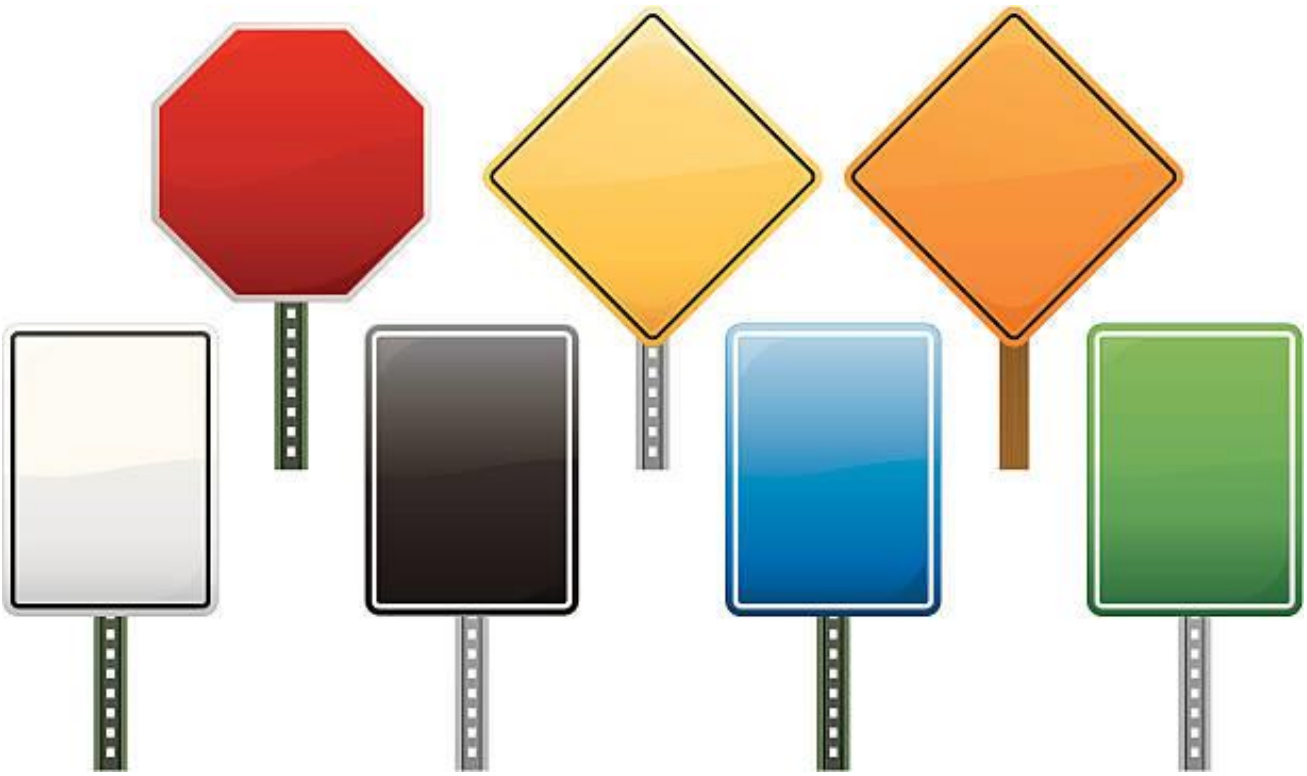

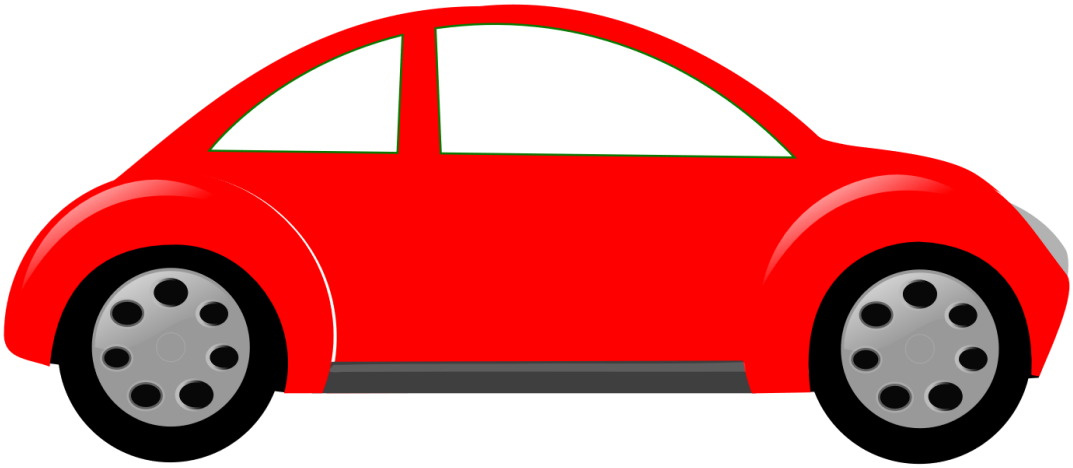

Soap and Viruses Don't Mix

ACTIVITY DESCRIPTION

In this health activity, youth will conduct a simple experiment to learn about how soap protects us from viruses. This activity is designed to build wonder and excitement while introducing youth to the science behind handwashing. This activity supports the development of health promotion skills and responsible decision-making.

SUPPLIES

- Bowl or plate that can hold 1-2 cups of water
- Water
- 2 tablespoons of pepper
- A few drops of dish soap or regular soap

STEPS

You have probably heard that it is important to wash your hands during the pandemic, but you might not know why. In this activity, you will do a simple experiment that shows how soap protects us from viruses, like COVID-19.

1. Get a bowl or plate and add 1 to 2 cups of water.
2. Sprinkle 2 tablespoons of pepper on to the water. (We are going to pretend the pepper is a virus.)
3. Stick your finger in to the water and hold it there for 5 seconds. Notice what happens to the pepper. What happens to your finger when you pull it out of the water?
4. Find a sink and wash your hands with soap for at least 20 seconds, or put a drop of dish soap on your finger.
5. Stick your finger in the water again and hold it for 5 seconds. Notice what happens to the pepper. What happens to your finger when you pull it out of the water?

Explanation of the Science: When we touch our eyes, nose or mouth with our hands, germs can get in and make us sick. Soap can "pick up" things, like germs, on our skin and carry them away when mixed with water. In this experiment, the soap carried away the pepper from our finger. Though soap cannot kill germs, like an antibiotic, it does a good job of removing as many possible viruses away from our skin.

CREDITS: Mommy Poppins' "Pepper and Soap Experiment" available at https://bit.ly/2Qxx17k

ADAPTATIONS

- If you are delivering the activity virtually, send home a kit with the activity supplies so that youth can conduct the experiment alongside of the facilitator.
- If you are delivering the activity in-person, put youth in small groups or pairs. Have them take turns conducting the experiment and discussing what happened to the pepper.

EXTENSIONS

- Do the experiment again, but change it up. For example, wash your hands for only 5 or 10 seconds, instead of 20. What happens to the pepper and your finger this time?
- Try a different handwashing experiment using glitter and hand sanitizer that contains at least 60% alcohol. You can find instructions for the activity here: https://bit.ly/3jqGEBr
- You should always wash your hands for at least 20 seconds. Instead of counting to 20, try singing a song! Make up your own song to sing, or pick a song that is about 20 seconds long (ex. "Happy Birthday" sung twice).

QUESTIONS FOR DISCUSSION

- When are the times that you should wash your hands?
- What are some of the ways you can remind yourself to wash your hands frequently?
- How can you avoid touching your face or others throughout the day?
- How does washing your hands help others?

Soap and Viruses Don't Mix

FACTS FOR STAFF & FAMILIES

- Frequent and thorough handwashing with soap is one of the best ways to protect yourself and others from COVID-19.
- You should wash your hands for at least 20 seconds. Make sure to get the backs of your hands, between your fingers and under your nails.
- You should wash your hands before meals, after using the bathroom, after sneezing or blowing your nose, and after touching potentially contaminated surfaces, like doorknobs.
- Regular soap is just as effective as antibacterial soap. If water and soap are not available, use alcohol-based hand sanitizer. The hand sanitizer should contain at least 60% alcohol.

CREDITS: Centers for Disease Control and Prevention's (CDC) "When and How to Wash Your Hands" available at https://www.cdc.gov/handwashing/when-how-handwashing.html

Stay Safe Hat

ACTIVITY DESCRIPTION

In this STEM activity, youth will create a social distancing hat. As part of the COVID-19 unit, this activity is designed to teach youth why physical distancing helps to stop the spread of the virus and why 6-feet is the recommended metric. This activity supports the development of health literacy, social awareness and responsible decision-making.

SUPPLIES

- Ruler or tape measure
- Tape
- Supplies for making and decorating a hat such as construction paper, cardboard, plastic bottles, masking tape, markers, etc.
- Note: It may be helpful to use a long item such as a cardboard tube from a roll of wrapping paper, a pool noodle, sticks, rolled-up poster board or newspapers, etc. to add length to your hat.

STEPS

During this pandemic, experts are helping us learn how to stop the spread of the virus by doing things like washing our hands, wearing masks, and trying to stay at least 6 feet apart from each other. One question you may have is "Why 6 feet?"

Doctors and scientists have learned that people can catch the virus from others when they cough, sneeze or even talk. The virus can spread through the droplets that come out of people's mouths and noses. Sometimes, these droplets can travel through the air up to 6 feet (or 2 meters).

So, how far is 6 feet?

- First, use your ruler or tape measure and a few pieces of tape to mark of a distance of 6 feet (or 2 meters).
- Is 6-feet seem longer or shorter than you thought it would be?
- Now, find or name 5 things that are about as long as 6 feet. (E.g., a couch, the height of a door, the length of a bed)

CREDITS: Social Distancing Hats by Nexus Learners. See https://bit.ly/3h0wllQ

- Now that you know how far 6 feet is, you are going to make 'stay safe hat' that keeps you 6 feet away from others when you put it on. Check out the photo above for some ideas.
- You can make your hat out of any supplies that you have. Your challenge is to make your hat as close to 6 feet in length as you can while still being able to wear it without it tipping over.
- Once you are done, measure your hat's length. Were you able to make it 6 feet long? Does it still stay on your head?
- If you are doing this activity with others, compare your hat with theirs:
    - Whose hat is the longest?
    - Whose hat is the sturdiest (doesn't look like it is going to tip over or fall apart)?
    - What were some of the designs that worked the best? Why?

ADAPTATIONS

- If you are delivering the activity digitally, have youth take a photo of themselves wearing their hats and upload the photo to your program platform or Facebook page.
- If you are delivering the activity in person or virtually, have youth wear their hats for a portion of your program time in order to compare designs using the questions above and to discuss, as a group, the questions on the next page.

Stay Safe Hat

EXTENSIONS

- Spraying water from a spray bottle is a lot like droplets traveling through the air. Try spraying water from bottle and measure and graph the distances that the water travels. You can use different kinds of liquid to simulate different kinds of respiratory droplets. Would the length of the hats keep you far enough away from the droplets?

QUESTIONS FOR DISCUSSION

- How does staying 6 feet away from others keep you safe? How does it keep others safe?
- It can be hard when you can't give someone you care about a hug or a high five. What are some other ways that you can show people that you care about them while staying 6 feet away?
- A large hat can remind you to keep space between you and others. How else can you remind yourself to stay 6 feet away from others?
- It can be easy for people to forget to keep a safe distance from others. What are some nice ways to ask people to stay a safe distance away without hurting their feelings?

FACTS FOR STAFF & FAMILIES

- Social distancing, also called "physical distancing," means keeping a safe space between yourself and other people who are not from your household.
- To practice social or physical distancing, stay at least 6 feet (about 2 arms' length) from other people who are not from your household in both indoor and outdoor spaces.
- COVID-19 spreads mainly among people who are in close contact (within about 6 feet) for a prolonged period. Spread happens when an infected person coughs, sneezes, or talks, and droplets from their mouth or nose are launched into the air and land in the mouths or noses of people nearby. The droplets can also be inhaled into the lungs.
- Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19. Since people can spread the virus before they know they are sick, it is important to stay at least 6 feet away from others when possible, even if you—or they—do not have any symptoms.
- COVID-19 can live for hours or days on a surface, depending on factors such as sunlight, humidity, and the type of surface. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or eyes. However, this is not thought to be the main way the virus spreads. Social distancing helps limit opportunities to come in contact with contaminated surfaces and infected people outside the home.

CREDITS: CDC's "Social Distancing" available at https://bit.ly/2Z7TzAx

Virus Detectives

ACTIVITY DESCRIPTION

In this health activity, youth will do a scavenger hunt to learn more about where a virus lives on surfaces in the home. This activity is designed to introduce youth to surface transmission of COVID-19. This activity encourages the development of health literacy, responsible decision-making and inquiry skills.

SUPPLIES

- A pen or pencil
- Post-its or Virus Cards and tape
- Virus Scavenger Hunt Handout

STEPS

The COVID-19 virus is spread from one person to another through two ways.

The first way is through the air through respiratory droplets, like when someone sick coughs or breathes and someone else inhales that air or the droplets land on their nose or mouths. (Note: people who are sick may not be showing symptoms, so it's best to keep at least 6 feet of distance from others.)

The second is way is by touching surfaces, like a table, that have the virus on them, and then touching our eyes or mouth. In this activity, we will look for the surfaces in our homes where germs like viruses and bacteria can live.

1. Find all six clues on the Virus Scavenger Handout. Mark each clue with post-its or cut out the Virus Clue Cards and use tape (see handout). You can also draw the object or write your answer in the square.
2. Talk with a parent or loved one in your home about what you found and what you can do to keep your home clean and safe from the virus.

ADAPTATIONS

- If you are delivering the activity in-person, modify the handout to find places in your building or school. Have youth work in pairs to find the surfaces together.
- If you are delivering the activity virtually, ask youth to do the activity before your virtual session. Discuss how the activity went and the questions for discussion during your virtual session.

EXTENSIONS

- Draw a map of the inside of your home. Label each room, like kitchen or bedroom. Mark the spots on your map where the germ hotspots are, like on the toilet or kitchen table.
- Create signs to remind you and the people you live with to wash their hands. Hang these signs in areas where the germs are most likely to be.
- Ask an adult to show you how to clean surfaces with warm water and soap to make sure they are free from germs.
- If you touch a dirty surface, the only way a virus or bacteria can enter your body is if you touch your eyes or mouth. To learn more about washing your hands to keep the virus out of your body complete the activity "Soap and Viruses Don't Mix".

QUESTIONS FOR DISCUSSION

- What surprised you to learn about viruses that could be in your home?
- What are the ways you can keep the surfaces in your home clean?
- How can you remind yourself not to touch surfaces that might have a virus on them?
- Outside of your home, what are the surfaces where the virus is most likely to live?

Virus Detectives

FACTS FOR STAFF & FAMILIES

- The COVID-19 virus is spread from one person to another through two ways. The first way is through the air, like when someone sick coughs or breathes and someone else breathes in that air. The second is way is by touching surfaces, like a table, that have the virus on them, and then touching our eyes or mouth.
- In one study conducted by the National Institutes of Health, COVID-19 can live up to three days on stainless steel and plastic and five days on metal. You should regularly clean surfaces and objects that are touched often, like tables, countertops, light switches and doorknobs.
- You should wash your hands for at least 20 seconds with warm soapy water. It's especially important to wash:
    - Before eating or preparing food
    - Before touching your face
    - After using the restroom
    - After leaving a public place
    - After blowing your nose, coughing, or sneezing
    - After handling your mask
    - After touching animals or pets
- There have been no reports of COVID-19 spreading through swimming pools or hot tubs, but it's still a good idea to keep physical distance (6 feet) between you and the people you do not live with. When you're not in the water, wear a face mask.

CREDITS: WebMD's "How Long Does the Coronavirus Live" on Surfaces? available at https://wb.md/2DyFbcU

Virus Detectives Handout

Instructions: Read the clues and find the places in your home where viruses can live. Mark the spot in your home with Post-its or cut out the Virus Clue Cards. You can also draw or write your answer in the square.

Clue #1: COVID-19 can live on places where people touch often. Find the door knob that people touch the most in your home.	**Clue #2:** COVID-19 can live on a surface for hours or up to several days. Find a place in your home where you think the virus could live the longest.
Clue #3: Electronics (keyboards, remotes and phones) can be a good hiding place for germs. Find an electronic where the virus could live.	**Clue #4:** The virus can live in places longer that are dark and cold. Find a place in your home that is dark or cold where the virus could live.
Clue #5: Bathrooms can be full of germs. Find the place in the bathroom where you think the virus could live.	**Clue #6:** COVID-19 can live longer on hard, smooth surfaces. Find a place in your home that is hard and smooth where the virus could live.

The 50 State Afterschool Network

The Learning About COVID-19 Activity Guide has been developed for the 50 State Afterschool Network with leadership from the Alaska Afterschool Network to engage and support children and youth nationwide.

In each state, the afterschool network is broadening opportunities for youth. Seeking equitable outcomes for underserved children to succeed in school and future jobs, a statewide afterschool network brings together cross-sector leaders with a common vision and coordinated strategy to advance quality afterschool and summer learning programs

Alabama Afterschool Community Network
Alaska Afterschool Network
Arizona Center for Afterschool Excellence
Arkansas Out of School Network
California AfterSchool Network
Colorado Afterschool Partnership
Connecticut After School Network
Delaware Afterschool Network
Florida Afterschool Network
Georgia Statewide Afterschool Network
Hawai'i Afterschool Alliance
Idaho Afterschool Network
Afterschool for Children and Teens Now (ACT Now) Coalition (IL)
Indiana Afterschool Network
Iowa Afterschool Alliance
Kansas Enrichment Network
Kentucky Out-of-School Alliance
Louisiana Center for Afterschool Learning
Maine Afterschool Network
Maryland Out of School Time Network
Massachusetts Afterschool Partnership
Michigan After-School Partnership
Ignite Afterschool (MN)
Missouri AfterSchool Network
Mississippi Statewide Afterschool Network
Montana Afterschool Alliance
Beyond School Bells (NE)
Nevada Afterschool Network
New Hampshire Afterschool Network
New Jersey School- Age Care Coalition
NMOST (New Mexico Out of School Time) Network
New York State Network for Youth Success
North Carolina Center for Afterschool Programs
North Dakota Afterschool Network
Ohio Afterschool Network
Oklahoma Partnership for Expanded Learning Opportunities
OregonASK
Pennsylvania Statewide Afterschool/Youth Development Network
Rhode Island Afterschool Network
South Carolina Afterschool Alliance
South Dakota Afterschool Network
Tennessee Afterschool Network
Texas Partnership for Out of School Time
Utah Afterschool Network
Vermont Afterschool, Inc.
Virginia Partnership for Out-of-School Time
Washington Expanded Learning Opportunities Network
West Virginia Statewide Afterschool Network
Wisconsin Afterschool Network
Wyoming Afterschool Alliance