## 2021 Developed by Orange County Department of Education in partnership with Orange County Health Care Agency and supported by the California Department of Education

## Vaccines: Germs Don't Stand a Chance

## A Model Learning Activity





Explain how viruses and bacteria affect the immune system and impact health.

(Essential Health Concepts) 5.1.2.P



Demonstrate personal responsibility for health habits. (**Practicing Health-Enhancing Behaviors**) 5.7.2.P



**Social Awareness:** Students learn that their behaviors can help or hurt others around them.





**Responsible Decision-Making:** Students realize that their decisions to practice health behaviors to prevent the spread of disease (washing hands, etc) can positively affect their immune system and keep others healthy as well.



## **Evidence of Learning**



**Essential Health Concepts:** Student work product is in the form of a news broadcast explaining how viruses and bacteria affect the immune system.



**Practicing Health-Enhancing Behaviors:** Student work product is in the form of a broadcast that demonstrates 5 key health habits to stop the spread of germs.





## **Preparation**

## Be sensitive and prepared

Some children have chronic diseases that have affected their immune system and have been recommended to not get certain vaccines. Some children have difficulty getting access to proper health care that can monitor immunizations. Also, some children might have medical conditions surrounding their immune systems that are not related to germs. It is also recommended to share factual information that makes the student feel comfortable to ask questions and not be singled out.

Also, consider the recent pandemic. Discussing causes and results of COVID-19 can be traumatic for students who might have been affected. Make sure to introduce and provide an overview of the lesson before starting. Share mental health supports available.

## Review

- Video: Kids Health: *Immune System* 🔪
- Video: NOVA | Immunity and Vaccines Explained | PBS YouTube **★** (Recommended for 6th grade)
- Sci Kids Show: Why Do We Get Vaccines? **★**

## **Prepare**

■ Teacher Resource—Practicing Health-Enhancing Behaviors skills poster

### Provide

- Student Information Sheet—Vaccines: Germs Don't Stand a Chance, Orange County Health Care Agency
- Student worksheet—Student Rubrics for Self-Assessment



## Why Do I Need to Know This?



**UDL: Action and Expression ★** Facilitate managing information and resources

## **Rationale**

Read or paraphrase the following to students:

Strengthening your immune system protects your body from viruses and bacteria and the people you care about. Not only do vaccines lower your chance of getting certain diseases, they lower your chance of spreading disease to those who have not been vaccinated.

## 1. Watch the Video and Take Notes

## CoronaVirus \kappa

Tell students they are going to watch a video about viruses and Coronaviruses. They should take notes using a graphic organizer such as a K-W-L chart, labeling:

- Facts (*What I know*)—things I knew before I watched the video
- Questions (What I wonder)—things I still have questions about
- Answers (What I learned)—things I learned

## 2. Work in Groups to Share Notes

After the video, put students into small groups. Using their notes on the video, have each student in the group share:

- One **fact** (What I know). Something I knew before watching the video.
- At least one **question** (What I wonder). Something I still have questions about Coronaviruses.

The group should discuss and try to answer their questions. If the group cannot answer their questions, they will highlight them and bring them back to the entire class for a final discussion with the teacher.

■ At least one **answer** (What I learned). Something I learned from the video.

Students can also use a collaborative tool to capture their questions and share with class electronically.

- Google Docs
- Jamboard

## 3. Full Class Discussion

Put students back into the full group to process the activity. The teacher should answer all the questions that came from the groups. Then, ask for other questions that may still be outstanding.

## Partner with school

Learn what your school is doing to promote health habits that decrease the spread of disease.

## Partner with community

Using trusted sources, create a resource directory for where to receive free medical services within the community.



## What Do I Need to Know and Be Able to Do?



UDL: Action and Expression **★** Use multiple media for communication

Students first hear about the topic with a teacher led discussion. To deepen learning, age appropriate videos are used for another mode of communication.

## 1. Watch Immune System Video

Choose from the list below to show a video to introduce the immune system and how it works.

- Video: Kids Health: *Immune System* 🔪
- Video: NOVA | Immunity and Vaccines Explained | PBS YouTube ➤ (Recommended for 6th grade)
- Sci Kids Show: Why Do We Get Vaccines? **★**

## 2. Define Viruses, Bacteria, and Vaccine

Give students the **Vaccines: Germs Don't Stand a Chance** student information sheet from the Health Care Agency. Explain that viruses and bacteria are super tiny germs that can get inside your body and make you sick. Then, the immune system starts to fight off the germs. Have a student read each of the definitions for:

- virus
- COVID-19
- vaccine

## 3. Discuss Vaccines and How They Work

Have students refer to the student information sheet, **Vaccines: Germs Don't Stand a Chance.** Remind students that the immune system is a body system that fights germs. Vaccines help the immune system to do its job.

Read aloud the section in the student information sheet, **Vaccinations are safe – and they work.** Answer any question students may have.

Then read aloud the **Here's how they work** section:

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Vaccines train your immune system, which includes all of the parts of your body that fight disease. They create antibodies that can recognize and attack certain viruses if they enter your body and try to make you sick.

Summarize the learning with the following questions:

- What are viruses and bacteria?
- How do viruses and bacteria affect the immune system?
- How do vaccines work?

## 4. Identify Health Habits

Explain that there are things that they and we can do to help keep us well. Refer students to the bottom of the student information sheet, **Vaccines: Germs Don't Stand a Chance.** 

## Join the Fight Against Infections

- Wash your hands.
- Avoid touching your eyes, nose, and mouth.
- Exercise and eat healthy.
- Get plenty of sleep.
- Talk with your family and your doctor about vaccinations.
  - Note: Students may come up with other ideas such as social distancing and wearing a mask. Those are certainly responsibilities during a pandemic. They can be added to the list.

## Partner with family

Share created projects with family and encourage students to start a conversation about creating health habits in the home.

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## 5. How to Take Personal Responsibility for Health Habits.

Post the **Practicing Health-Enhancing Behaviors** poster and call attention to it. Walk through the steps of the skill with students. Point out that we already have Step 1 done. We have identified the health behaviors we want to engage in.



Take each of the health habits and discuss the steps of the skill.

For example:

Step 1	🔾 Step 2	🛠 Step 3	Step 4
Wash your hands	Water and soap	Do it	Before and after the bathroom, eating, preparing food



## Let Me Show You What I Know and Can Do



## **UDL: Representation ▶** Perception

Students are able to use their own language and talents to represent their learning of how to prevent the spread of disease and demonstrate health behaviors.

## 1. Assessment Project

### Create News Broadcast

Put students into groups to create an informational news broadcast that will be produced as a video.

Everyone in the group should help with the script (so they are all contributing to the work and answering the questions. Then have specific roles.

## Example:

- Scriptwriters (everyone in the group will contribute)
- Videographer/Producer
- Broadcaster(s)
- Editor

### Broadcast must include:

- Explanation of how viruses and bacteria affect the immune system and impact health.
- Explain the purpose and importance of vaccinations.
- Demonstration of how to take personal responsibility in continuing five health habits that prevent the spread of disease.

## 2. Students Do Self-Assessment Before "Producing" Video

Give students the opportunity to assess their work and make changes if necessary. Use the **Student Rubrics and Self-Assessment** worksheet.



## **Assessment**

Use the criteria to assess evidence in student work from the writings and discussions on their research findings and in their journal.



**Criteria for Essential Health Concepts:** Student work product in the form of a news broadcast including scripts will demonstrate evidence of essential health concepts:

- Accurate information about germs and the immune system
- Complete factual information about the purpose and importance of vaccines
- Accurate information about vaccines



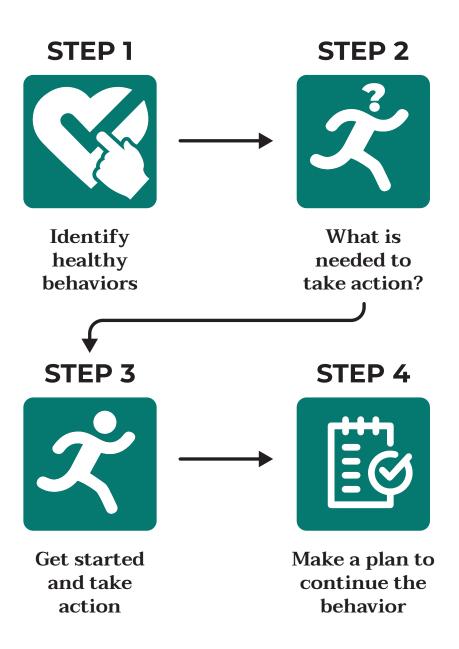
**Criteria for Practicing Health-Enhancing Behaviors:** Student work product in the form of a news broadcast including scripts and a visual demonstration, will show evidence of the skill around stopping the spread of viruses and bacteria:

- Five health habits are demonstrated
- Habits identified are accurate health habits
- Steps needed to engage in **each** health habit are demonstrated



## **Practicing Health-Enhancing Behaviors**

Grades 4-6



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## **Student Rubrics for Self-Assessment**

These questions will help you prepare your work so you can show what you know and what you can do.



needed for each health habit?

## GERMS DON'T STAND A CHANCE

## - ESSENTIAL-**VOCABULARY WORDS**

## Virus (

Viruses are super tiny germs that can get inside your body and make you sick.

## COVID-19

Covid-19 is a disease caused by a newly discovered virus that spreads from person to person when they are in close contact, typically from coughing, sneezing or talking.

## Vaccine \( \frac{\pi}{2} \)



Vaccines are substances that help your body protect against certain diseases, creating what's known as immunity. Scientists recently created new vaccines to help prevent COVID-19.



## Vaccinations are safe – and they work

Strengthening your immune system protects your body and the people you care about. Not only do vaccines lower your chance of getting certain diseases, they lower your chance of spreading disease to those who haven't been vaccinated.

## Here's how they work

Vaccines train your immune system, which includes all of the parts of your body that fight disease. They create antibodies that can recognize and attack certain viruses if they enter your body and try to make you sick.

## JOIN THE FIGHT AGAINST INFECTIONS



Wash your hands.



Avoid touching your eyes, nose and mouth.



Exercise and eat healthy.



Get plenty of sleep.



Talk with your family and your doctor about vaccinations.



TO LEARN MORE, VISIT link.ocde.us/vaccination-education

