

## Teacher's Guide

This guide includes:

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## Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards:  
[www.cdc.gov/healthyschools/sher/standards/index.htm](http://www.cdc.gov/healthyschools/sher/standards/index.htm)



## Grades 3 to 5 • Personal Health Series

# Germs

Why should you wash your hands before you eat? Why should you cover your nose when you sneeze? One word: Germs! Germs are tiny living organisms that can cause disease. The following activities will help your students learn how they can avoid spreading germs and getting sick.

## Related KidsHealth Links

### Articles for Kids:

#### What Are Germs?

[KidsHealth.org/en/kids/germs.html](http://KidsHealth.org/en/kids/germs.html)

#### Why Do I Need to Wash My Hands?

[KidsHealth.org/en/kids/wash-hands.html](http://KidsHealth.org/en/kids/wash-hands.html)

#### What's Wrong With Biting My Nails?

[KidsHealth.org/en/kids/nails.html](http://KidsHealth.org/en/kids/nails.html)

#### The 5-Second Rule

[KidsHealth.org/en/kids/5-seconds.html](http://KidsHealth.org/en/kids/5-seconds.html)

#### Checking Out Cuts, Scratches, and Abrasions

[KidsHealth.org/en/kids/cuts.html](http://KidsHealth.org/en/kids/cuts.html)

#### Your Immune System

[KidsHealth.org/en/kids/immune.html](http://KidsHealth.org/en/kids/immune.html)

## Discussion Questions

*Note: The following questions are written in language appropriate for sharing with your students.*

1. Did you know there are four main kinds of germs? Can you name them?
2. Not all bacteria are bad for your body. When can some kinds of bacteria help keep you healthy?
3. When germs attack, your immune system comes to your body's defense! How does your body fight germs and infections? What can you do to protect yourself from infections?



## Activities for Students

*Note: The following activities are written in language appropriate for sharing with your students.*

### Student Survey

#### Objectives:

Students will:

- Survey, assess, and respond to knowledge of simple infection prevention methods among their peers

#### Materials:

- Computer with Internet access
- “Student Survey” handout

#### Class Time:

2 90-minute sessions (plus time for survey data collection)

#### Activity:

[Note to teacher: Have your class take the Germs quiz before starting this activity. Using the anonymous “Student Survey” handout, students can collect data in several ways. They can approach peers with survey sheets and pens or pencils, then ask respondents to answer the questions and return the sheets to the students, or to designated collection bins. You can also leave sheets in a hallway next to a collection bin. Students can also distribute sheets to neighborhood friends. Make sure to give students clear instructions about anonymity and how to distribute and collect the sheets.]

Let’s find out how much other kids in school know about germs and how to prevent infections. We’ll ask other students to fill out our survey, without asking them to write their names. Then as a class we’ll look at the answers they give us (the data), tally the number of times each of the four questions get answered incorrectly, and see which facts students seem to have the most trouble with. We’ll identify the trouble area by figuring out which of the four questions has the highest percentage of wrong answers. We can also assess the questions with multiple answers the same way, to see if students are missing some of the correct answers. Then we’ll create a public service announcement (PSA) for our school to address that specific infection prevention fact. In the PSA, we’ll make sure to include some of our data so students understand why we’re trying to spread the message about protecting ourselves from germs.

[Note to teacher: PSAs can be done individually, in small groups, or as a class, as posters for hallways, a podcast or script to be read for morning announcements, or a video to be shown at a school assembly.]

#### Extension:

Contact a local newspaper or blogger to see if they’d be interested in writing an article about your survey, the results, and the PSAs.



## Germ Art

### Objectives:

Students will:

- Explore how germs affect people in terms of transmission, symptoms, treatment, and prevention

### Materials:

- Computer with Internet access
- Art materials

### Class Time:

90 minutes

### Activity:

[Note to teacher: To provide examples, your students can check out some of the infections listed at [KidsHealth.org/en/kids/ill-injure](http://KidsHealth.org/en/kids/ill-injure), if necessary. You can choose the medium or media that students will use to create their own germs, or you can let them choose. Germs could be digital images made with graphic art software, drawings or collages on posterboard, digital 3D depictions, sculptures (clay, papier mâché, Styrofoam, etc.) or mixed-media creations.]

Today we're going to read the KidsHealth.org article, "What Are Germs?" Then we're going to invent our own germs. You can start by naming and describing your germ using the "Germ Art" handout, then creating it so we can see what it looks like, or you can create it first and describe it last.

### Extension:

Individually or in small groups, have students create a cartoon, comic book, short story, video, song, or poem about a scientist who develops a cure for one of the imaginary germs and the disease it causes. Make sure to cover transmission, symptoms, treatment, and prevention.

## Reproducible Materials

### Handout: Student Survey

[KidsHealth.org/classroom/3to5/personal/hygiene/germs\\_handout1.pdf](http://KidsHealth.org/classroom/3to5/personal/hygiene/germs_handout1.pdf)

### Handout: Student Survey Answer Key

[KidsHealth.org/classroom/3to5/personal/hygiene/germs\\_handout2.pdf](http://KidsHealth.org/classroom/3to5/personal/hygiene/germs_handout2.pdf)

### Handout: Germ Art

[KidsHealth.org/classroom/3to5/personal/hygiene/germs\\_handout3.pdf](http://KidsHealth.org/classroom/3to5/personal/hygiene/germs_handout3.pdf)

### Quiz: Germs

[KidsHealth.org/classroom/3to5/personal/hygiene/germs\\_quiz.pdf](http://KidsHealth.org/classroom/3to5/personal/hygiene/germs_quiz.pdf)

### Answer Key: Germs

[KidsHealth.org/classroom/3to5/personal/hygiene/germs\\_quiz\\_answers.pdf](http://KidsHealth.org/classroom/3to5/personal/hygiene/germs_quiz_answers.pdf)



## Student Survey

Instructions: Please answer these questions. Do not write your name on this sheet.

1. The best way to protect yourself from germs, and to avoid spreading germs to other people, is to (choose one):
  - a) wear a surgical mask and gloves
  - b) stay inside
  - c) wash your hands
  - d) keep a bar of soap in your backpack
  - e) sneeze into your desk
  
2. Underline the times when it's important to wash your hands (choose one or more):
  - a) before eating
  - b) before putting on gloves
  - c) after using the bathroom
  - d) after blowing your nose or coughing
  - e) after taking a shower
  - f) after playing outside or with a pet
  - g) after being with someone who's sick
  
3. If you have to cough or sneeze, you should cover your mouth and nose with (choose one or more):
  - a) a tissue
  - b) your elbow
  - c) your hands
  - d) a book
  
4. True or false: It's OK to eat food if it's on the floor for less than 5 seconds.
  - a) true
  - b) false



## Student Survey Answer Key

1. The best way to protect yourself from germs, and to avoid spreading germs to other people, is to (choose one):
  - a) wear a surgical mask and gloves
  - b) stay inside
  - c) **wash your hands**
  - d) keep a bar of soap in your backpack
  - e) sneeze into your desk
  
2. Underline the times when it's important to wash your hands (choose one or more):
  - a) **before eating**
  - b) before putting on gloves
  - c) **after using the bathroom**
  - d) **after blowing your nose or coughing**
  - e) after taking a shower
  - f) **after playing outside or with a pet**
  - g) **after being with someone who's sick**
  
3. If you have to cough or sneeze, you should cover your mouth and nose with (choose one or more):
  - a) **a tissue**
  - b) **your elbow**
  - c) your hands
  - d) a book
  
4. True or false: It's OK to eat food if it's on the floor for less than 5 seconds.
  - a) true
  - b) **false**



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Germ Art

Instructions: Use this sheet to describe your imaginary germ. (Optional: Use an online translator to find the Latin name of your germ.)

### Germ name

*English:* \_\_\_\_\_

*Latin:* \_\_\_\_\_

**Type** (circle one):      Bacterium      Virus      Fungus      Protozoan

**Transmission** (how people get infected):

**Symptoms** (how it affects the body):

**Treatment** (what people do to feel better):

**Prevention** (how people can avoid getting infected):



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Quiz

1. Name at least two of the four major types of germs:
  
2. True or false: Germs can spread through the air when someone coughs or sneezes.
  
3. The best way to protect yourself from germs, and to avoid spreading germs to other people, is to:
  - a) wear a surgical mask and gloves whenever you leave your home
  - b) stay inside all the time
  - c) wash your hands
  - d) keep a bar of soap in your backpack
  
4. Underline the times when it's important to wash your hands:
  - a) before eating
  - b) before doing the wave at a sports event
  - c) before putting on gloves
  - d) after using the bathroom
  - e) after blowing your nose or coughing
  - f) after taking a shower
  - g) after playing outside or with your pet
  - h) after being with someone who's sick
  
5. True or false: It's OK to eat food if it's on the floor for less than 5 seconds.



## Quiz Answer Key

1. Name at least two of the four major types of germs:  
(any two of these: **bacteria, viruses, fungi, protozoa**)
2. **True** or false: Germs can spread through the air when someone coughs or sneezes.
3. The best way to protect yourself from germs, and to avoid spreading germs to other people, is to:
  - a) wear a surgical mask and gloves whenever you leave your home
  - b) stay inside all the time
  - c) **wash your hands**
  - d) keep a bar of soap in your backpack
4. Underline the times when it's important to wash your hands:
  - a) **before eating**
  - b) before doing the wave at a sports event
  - c) before putting on gloves
  - d) **after using the bathroom**
  - e) **after blowing your nose or coughing**
  - f) after taking a shower
  - g) **after playing outside or with your pet**
  - h) **after being with someone who's sick**
5. True or **false**: It's OK to eat food if it's on the floor for less than 5 seconds.