

## Lesson #2

### Grades

1 and 2

### Suggested Pacing

20+ min

### Group Size

Teacher Led

Individual



### Lesson Slides

<https://tinyurl.com/bdz6npt8>

### What You Need

From Lysol® Minilabs Module #1:

- 30 Student Journals
- 5 Long fluffy pipe cleaners
- 1 Sheet of googly eyes
- 60 Template Microbe ID Cards
- 90 Blank Index Cards
- 30 Take-Home Activity Sheets

Sourced Materials:

- Coloring and writing tools

Optional Sourced Materials:

- Arts and crafts materials

### Digital Only Option

If you don't have the physical Lysol® Minilabs Science Kit, check out the "Digital Kit Implementation Guide" at the end of this lesson plan with links to free printables and list of materials you need to source.

# Microbes in Schools

### Overview

This lesson has three essential parts, (1) Review Together: **facts about germs learned in lesson #1**, (2) Read & Watch Together: **A short comic strip from Chapter 2 of Minilabs Journals, plus a short video introducing students to a real microbiologist**, and (3) A Hands-On Activity for students to build a model of a microbe (Beginner and Advanced Level) and design ID cards for microbes they think might be found in a school (Advanced Level). In addition, you may implement some of the optional extensions and the optional section, titled "Check Understanding."

### Session Planning

- Lesson Difficulty: **If you are teaching early readers/non-readers, we recommend you to implement "Beginner" level for the Hands-On Activity (focused on building microbe models). For more advanced classrooms, you may implement both beginner and advanced activities (model making and design ID cards).**
- Time Management: **If you have 20-30min, we recommend focusing on "Read Together" and one model making (beginner) and one ID Card design (advanced) for the "Hands-On Activity". If you have 30min+, you can do the full lesson (Beginner or Advanced).**

### Learning Goals

- Understand that microbes can be found everywhere, including different surfaces in the classroom and around the school.
- Develop awareness of "germ hotspots" in a school.
- Develop a simple sketch or physical model of a microbe.
- Learn when it's important to wash hands.

### Key Vocabulary

- Science Concepts: **Microbe, Hotspots**
- Science Practices: **Discover, Sketch diagrams, Develop models**

### Standards

- **NGSS** K-2-ETS1-2. **NHES** 1.2.2, 1.2.3, 1.2.4, 1.2.6; 2.2.1, 2.2.2, 2.2.3; 4.2.1, 5.2.1, 5.2.3, 5.2.4; 6.2.1, 6.2.4; 7.2.1. **CCSS.ELA-Literacy.** RI.2.1, W.2.6, W.2.8, SL.2.5, L.2.4, L.2.4e. **TEKS** S.1.1.D, S.1.1.G, S.1.4.B, S.1.5.F, S.2.1.D, S.2.1.G, S.2.4.B, S.2.5.F, ELA.1.1.C, ELA.1.2.F, ELA.1.3.B, ELA.1.3.D, ELA.1.7.E, ELA.1.11.E, ELA.2.1.C, ELA.2.7.E, ELA.2.11.E



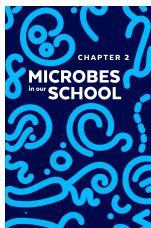
# Getting Ready



- Please review the student-facing slides, and get them ready to project on your classroom board. Please note that you may make a copy of the slides and edit based on your classroom's needs and lesson difficulty you choose (Beginner or Advanced).
- Have copies of student Minilabs Journals, fluffy pipe cleaners, and googly eye sheet to pass along to your students. For advanced level, have Microbe ID Template Cards and blank index cards ready to pass along to students.
- Have copies of "Take Home" sheets to pass along to students. Spanish translated copy: <https://tinyurl.com/mhdfahu7>
- IMPORTANT: Please remember to collect all student Minilabs Journals at the end of the session.

# Start Your Lesson

Suggested Time: 10min



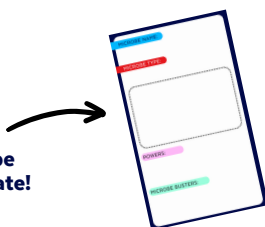
- REVIEW TOGETHER: **Go through lesson slides 8 to 23 which will help them recall previously learned key facts and then introduces students to the lesson.**
- READ & WATCH TOGETHER: **Go to Chapter 2 in the journal and read the graphic novel, shown on the lesson slides. Students can follow along on pages 18-21 of their Minilabs Journal. You'll also find a lesson video (embedded on lesson slides) which introduces students to a real microbiologist. The video challenges students to play the role of a scientist and discover "microbes" that may be found in schools.**

# Hands-On Activity

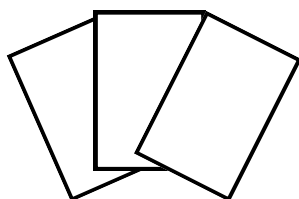
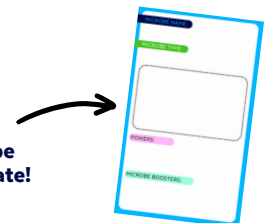
Suggested Time: 10 to 20min



Bad  
microbe  
template!



Good  
microbe  
template!



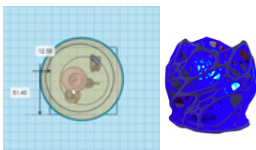
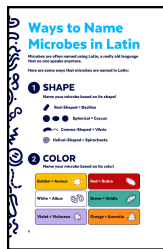
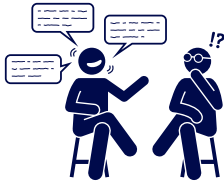
- **MAKE 3D MODELS OF MICROBES:** Invite your students to play the role of a “scientist” and think about what microbes might be found in school. Using the prototyping materials for this lesson (pipe cleaners and googly eyes sticker sheet) plus other materials you might have in your classroom, students can make 3D models of a good and/or bad microbe.
- **DESIGN YOUR OWN MICROBE ID CARDS:** Once they are done with their 3D models, ask them to design an ID card for their microbe using the good (green) or bad (red) microbe template. They will need to add:
  - A drawing of their microbe showing its shape and color
  - Name of the microbe (they can invent their own names)
  - The family they belong to (Bacteria, Virus, Fungus, or Protozoa)
  - Its powers (how it makes people sick or how it keeps people safe)
  - Microbe boosters or busters (ways to strengthen microbes or stop them)
- **BEGINNER LEVEL:** Students who are early writers may need your support to write on their template cards. You may also suggest to them to simply draw their ideas instead of writing.
- **ADVANCED LEVEL:** More advanced students can write on their templates independently. Students may design their Microbe ID Cards using scientific or fictional facts (based on classroom’s preferences). They may refer to Microbe ID Cards from the previous lesson or Minilabs Journal for inspiration.
- **ADVANCED CHALLENGE:** Give each of your students blank index cards, provided in your Lysol® Minilabs Science Module #1, and invite them to create more Microbe ID Cards. They can do scientific research to create cards for real microbes or design ones for “imaginary” microbes.

## Bonus

- **PUBLISH YOUR CLASSROOM’S WORK:** Submit photos of your students’ projects, and we’ll turn them into books, trading cards, and more!  
[www.thegiantroom.com/giant-remix-minilabs](http://www.thegiantroom.com/giant-remix-minilabs)



# Optional Extensions



- (15-20min activity) GALLERY WALK: **Students work in small groups, share about the models and/or Microbe ID Cards they have designed, ask questions, and respond.**
- (15-20min activity) PLAY SCAVENGER HUNT: **Invite your students to hide their Microbe Models or Microbe ID Cards around the classroom and challenge their classmates or their teachers to find them! This activity reinforces the idea that germs can be found all over their classroom.**
- (20-50min activity) DO SCIENTIFIC RESEARCH: **As students design their cards, they may do background research about microbes using a variety of resources including books and/or online research with the support of their teacher. In addition, they may check out this optional digital resource with tips on how to name their “newly discovered” germs using Latin words: <https://tinyurl.com/ydwbv59a>**
- (10-30min activity) MAKE A HOME FOR A MICROBE: **Invite your students to think where their microbe might live and create a “home” for it. A chair, a piece of candy, a dirty banana for a bad microbe or a bowl of yogurt for a good microbe. They can use arts and crafts materials or paper and a drawing tool to make their microbe’s home.**
- (30-40min activity) DESIGN A DIGITAL 3D MODEL: **Students may design a 3D model of their microbes in a 3D modeling software. Here is an example designed by The GIANT Room they may “remix”: <https://tinyurl.com/fmw7sefk> (You’ll need a free Tinkercad account to access this link.)**
- (15-20min activity) DRAW A MURAL: **Put down a piece of craft paper. Invite your students to turn it into a map of their classroom and draw the microbes they modeled on all the HOTSPOTS. Alternatively, they can place the ID cards on the mural.**

# Check Understanding

Suggested Time: 5 - 10min



After...



- **FILL IN THE BLANK:** Go through lesson slides with a set of fill-in-the-blank questions. These questions are designed to highlight the importance of washing your hands before or after certain activities. These tips are also printed in students' Minilabs Journals at the end of Chapter 2 as a reference.
- **REFLECT TOGETHER:** Optionally, you may review definitions of keywords with students, challenge them to define the words, or draw a diagram in their journal (Appendix) to further define their meaning.

# Take Home Activity

Suggested Time: 10 - 30min



- **I SPY MICROBE HOTSPOT MAP:** In your Lysol® Minilabs Module #1, there are thirty (30) copies of "Take Home" sheets. Give each student a copy to take home and engage with the I Spy game on one side and the Microbe Hotspot Map on the other.

# Lesson Glossary

Below is a glossary of all keywords covered in Lesson #2. Please note that students can go to the Appendix of their Minilabs Journals to check out the glossary.

## HOTSPOT

Places you can find many bad microbes like toilets, touch screens, or keyboards!

## MICROBIOLOGIST

A scientist that studies microbes and their behaviors.

## MODEL

A representation of an object, living thing, process, or system.



# Digital Kit Implementation Guide

If you don't have the physical box, you can still implement the Lysol® Minilabs Science Kit! Here are links to free printables and a list of materials you need to source.



## FREE PRINTABLES

### Take-Home Activity

English: <https://tinyurl.com/29657hav>

Spanish Translation: <https://tinyurl.com/mhdfahu7>

Answer Key: <https://tinyurl.com/ydjz5ytm>

### Chapter 2 Only

<https://tinyurl.com/48ryeab7>

### Microbe ID Card Templates

<https://tinyurl.com/yc2a647b>



## MATERIALS TO SOURCE

- **Pipe cleaners**
- **Googly eyes**
- **Paper or blank index cards**
- **Coloring and writing tools**
- **Arts and crafts materials** (Optional)

Check out page 7 for all the Online Resources for this lesson.



# Online Resources



## SLIDES: LESSON #2

<https://tinyurl.com/bdz6npt8>



## SCHOOL-HOME COMMUNICATION PACK

<https://tinyurl.com/32wh3cx2>



## VIDEO: READ & WATCH CHAPTER 2

<https://tinyurl.com/4yjanvsa>

## VIDEO: MICROBIOLOGIST MISSION

<https://tinyurl.com/9j6cserm>



## E-BOOK: CHAPTER 2 ONLY

<https://tinyurl.com/2jps7625>



## PRINTABLE: TAKE HOME ACTIVITY

English: <https://tinyurl.com/29657hav>

Spanish Translation: <https://tinyurl.com/mhdfahu7>

Answer Key: <https://tinyurl.com/ydjz5ytm>

## PRINTABLE: CHAPTER 2 ONLY

<https://tinyurl.com/48ryeab7>

## PRINTABLE: MICROBE ID CARD TEMPLATES

<https://tinyurl.com/yc2a647b>

## PRINTABLE: OPTIONAL RESOURCE - NAMING MICROBES

<https://tinyurl.com/ydwbv59a>

