Grade 4 Sample Lesson Plan:
Unit 3 – Spread Love, Not Germs

SOLs
● 4.1.j Describe how viruses, bacteria, parasites, and fungi are spread.

Objectives/Goals
● The student will be able to
  o identify the two main types of diseases
  o recognize four common disease-causing organisms
  o describe how germs are spread

Materials
● Spread Love, Not Germs Slides/Presentation
● Speakers
● Spread Love, Not Germs Notes
● Spread Love, Not Germs Disease Hand
● Spread Love, Not Germs Disease List
● Coloring and cutting supplies
● *Access to computer or library (or prior to class print class copy of information about the list of diseases)
Procedure

Step 1
Give each student notes pages “Spread Love, Not Germs” and have them complete the notes as you provide the answers in the Slides/Presentation.

Step 2
Slide 2  1. Disease – condition that affects the mind and/or body. 2. Communicable Disease – diseases that can spread.

Step 3
Slide 3  3. Noncommunicable Disease – diseases that DO NOT spread. Help them to recognize the common mistake of mixing the two types of diseases up – NONcommunicable = NOT communicable or passable. 4. Pathogen – an organism that causes a communicable disease.

Step 4
Slide 4 Pathogens are also what we call GERMS. Express that ALL pathogens, no matter the type, are COMMUNICABLE…they spread.
  5. Virus
  6. Bacteria
  7. Protozoa
  8. Fungi

Step 5
Slide 5 Pathogens are spread in 4 ways:
  10. Direct
  11. Indirect
  12. Eating
  13. Bite

Step 6
Slide 6 Show the video on an example of how easily pathogens can spread.

Step 7
Slide 7 and Slide 8 assist in explain the “Spread Love, Not Germs Disease Hand” assignment.
- Use the “Spread Love, Not Germs Disease List” to assign each student a different disease to research. Cut them into little slips of paper and have them pull them out of a basket to make it ‘fair.’
- After they know their assigned disease explain the Hand project.
  - They will first complete the worksheet by doing research. This can be done on the computer, in the library, or if students don’t have access to these print-out a copy of each disease prior to class from the kidshealth.org website.
  - Once they’ve completed the entire worksheet have them neatly transfer the information to the disease hand. They can decorate the hand by adding what they think germs look like or making an abstract design.
  - Have them cut out the hand and hang them in the shape of a heart with the title of “Spread Love, Not Germs.”

Assessments
- Bronson, M.H. (2007). Glencoe Teen Health Course 1
- The Sneeze: How Germs Spread [https://www.youtube.com/watch?v=yToii3-p-NI](https://www.youtube.com/watch?v=yToii3-p-NI)
- Stacy Adams, Shaler Area Elementary School

**Handout**

The next page includes a handout for the lesson. The handout is designed for print use only.
DIRECTIONS: You will be assigned a communicable disease to complete the information below. Once your worksheet is complete, you will then create a hand to add to the disease hand chain we will make in class!

1. Name of the disease:__________________________________________________________

2. List 2 or 3 of the symptoms (how does it affect the human body?) __________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

3. How does the pathogen spread? _____________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

4. What type of pathogen is it (circle one)? Virus Bacteria Protozoa Fungi

5. How can someone prevent the spread of this disease? _________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

6. What is the treatment for this disease? _______________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
DIRECTIONS: Use the information from your research on your assigned disease to complete your own ‘disease hand.’ An example is shown below.

Color (make sure to not cover your words, cut out the hand, and write your name on the back before turning in.)

**Disease:** Leprosy  
**Symptoms:** Skin sores and nerve damage  
**Spreads by:** Contact with infected person  
**Type of Pathogen:** Bacteria  
**Prevention:** No contact with infected person  
**Treatment:** Antibiotics
DIRECTIONS: Complete the notes with the correct definitions/information.

1. DISEASE:

2. COMMUNICABLE DISEASES

3. NONCOMMUNICABLE DISEASES

4. PATHOGEN (ALSO CALLED A GERM):

These pathogens are also called GERMS. There are 4 types of pathogens:

5. ____________________________

6. ____________________________

7. ____________________________

8. ____________________________

9. All pathogens are ___________________ diseases; or they can spread easily.
Pathogens are spread in 4 ways:

10. ____________
    physical contact.
    Examples:

11. ____________
    contact passing through the air.
    Examples:

12. ____________
    or drinking contaminated foods.
    Examples:

13. ____________
    by animal or insects.
    Examples:

Draw a picture of one of the ways germs can spread below:
Spread Love, Not Germs ~ LIST OF DISEASES

If students have access to the internet, they can do a kidshealth.org site search on their assigned disease.

If the internet is not accessible, the teacher can print out a copy of each disease prior to the class lesson.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
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</thead>
<tbody>
<tr>
<td>Lyme Disease</td>
<td>Measles</td>
</tr>
<tr>
<td>Strep Throat</td>
<td>Anthrax</td>
</tr>
<tr>
<td>E. Coli</td>
<td>Food Poisoning</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>Typhoid Fever</td>
</tr>
<tr>
<td>Pinworms</td>
<td>Diphtheria</td>
</tr>
<tr>
<td>Botulism</td>
<td>Pinkeye</td>
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<tr>
<td>West Nile Virus</td>
<td>Impetigo</td>
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<tr>
<td>Pneumonia</td>
<td>Smallpox</td>
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<tr>
<td>Bronchitis</td>
<td>Fifth Disease</td>
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<tr>
<td>Athlete’s Foot</td>
<td></td>
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<tr>
<td>Chickenpox</td>
<td></td>
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<tr>
<td>Cellulitis</td>
<td></td>
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<tr>
<td>Mad Cow</td>
<td></td>
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</tbody>
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