

Grade 9 Sample Lesson Plan: Pathogen Plan

Objectives/Goals

- The student will demonstrate skills to advocate for personal health
- The student will apply knowledge of pathogens to remain free of communicable diseases
- The student will use skills for communicating effectively with peers to enhance health.

Materials

- Pathogen Personal Plan assignment
- Hand Wash Rap Video https://youtu.be/0Tao33mBRVk (Andy Horne)
- Preventing Infectious Diseases slideshow

Steps

- Students should have had successfully completed the <u>Communicable Diseases</u> <u>Kinesthetic Word Web</u> lesson the day before.
- Activity #1 "Speed Communication" or "Disease Speed Dating" To review from the day, have students create small groups of four. Each student will be an "expert" on one of the pathogens based on their research from the previous day. One student will know Bacteria, one will know Viruses, one will know Protozoa, and one will know Fungi.
- represent one of the four pathogens
 - Activity #1 Show the <u>Hand Wash Rap Video</u> to hook the students. You might preface the video by saying something like "Today we will discuss different things one can do to limit the risk of contracting communicable diseases. Here's one of the easiest things you can do each day...washing your hands!"
 - After the rap video, ask students to brainstorm some of the key aspects to washing their hands.

- Using a writing prompt or discussion question, ask "What are some things we can do to minimize our risk of contracting a pathogen?" In other words, "What are important steps we can take to limit germ transmission?"
- Have students brainstorm as a class answers to the question(s) above.
- Go over some of the functional knowledge from the <u>Preventing Infectious Diseases</u> slideshow
- Activity #2 "Speed Communication" or "Disease Speed Dating" -To review from the day, have students create small groups of four. Each student will be an "expert" on one of the pathogens based on their research from the previous day. One student will know Bacteria, one will know Viruses, one will know Parasites, and one will know Fungi.
- One suggestion would be to review effective communication and listening skills.
- Working in pairs now from the group of four, students will attempt to "role play" a conversation as if they were the actual pathogen. Conversations should be one-on-one. A suggestion would be to give students about 2 mins to have a conversation from the following questions:
 - Tell me a little about yourself?
 - Where do you come from?
 - How are you transmitted?
 - *How are you cured or treated?*
 - What are some examples of this pathogen?
 - How can a human being prevent from contracting you?
- Once students have enough time to practice communicating about their pathogen and learning more about the other pathogen (their partner), have them switch with someone else in the group so they have a new pathogen partner and learn about a new pathogen category. You should conduct a total of 3 rounds so every student learns more about each pathogen category.
- To conclude class and assess SOL 9.3D, have students develop a personal plan for remaining free of communicable diseases. See Pathogen Personal Plan

Resources

- Handwashing: Clean Hands Save Lives CDC - <u>https://www.cdc.gov/handwashing/index.html</u>
 - Handwashing PDF from the CDC https://www.cdc.gov/handwashing/pdf/handwashing-poster.pdf
 - Minnesota Department of Health Cover Your Cough -

http://www.health.state.mn.us/divs/idepc/dtopics/infectioncontrol/cover/

- Food Safety & Sanitation Tips
 http://www.foodqualityandsafety.com/article/five-essential-tips-for-effective-sanitation/
- CDC Vaccines https://www.cdc.gov/vaccines/vpd/vpd-vac-basics.html
- Andy Horne, M.Ed., New Trier High School

Handout

The next page includes a handout for the lesson. The handout is designed for print use only.

Pathogen Personal Plan

In grade 9, it is suggested that students know how to develop a personal plan to remain free of communicable diseases. Your task is to come up with a plan to do so.

Part 1- Self-Assessment

Assess your risk for infectious disease by answer the following questions:

1.	I get my flu vaccine each year	YES	NO
2.	I wash my hands before I eat or handle food	YES	NO
3.	I use "respiratory etiquette" when I sneeze and cough	YES	NO
4.	I eat regular nutritious meals	YES	NO
5.	I get enough sleep each night	YES	NO
6.	I understand how germs and common infections are transmitted	YES	NO
7.	I do not share food or drinks with people	YES	NO
8.	I understand how to store and prepare food safely	YES	NO

^{*}Add up your number of yes answers to assess your risk for acquiring or transmitting infectious diseases. The more no answers you have, the higher your risk for infection.

Part 2 - What do you touch?

Make a list of some of the things you touch each day. Is it likely these objects are touched by others?

List the ways you avoid catching or transmitting infectious diseases during a typical day at school?

List the ways you prevent infectious diseases at home

If you have an illness such as a cold, what can you do to prevent spreading the infection to other people?

Part 3 - Developing a Plan to Be Disease Free

Create a poster summarizing your answers to Part 1 and Part 2. Also include images and a catching slogan to remind yourself (and others) about the importance of remaining disease free.