



SAMPLE LESSON PLANS

Grade 9 – Body Systems

Unit 3

SOLs:

- 9.1F Identify types of pathogens that cause disease.
- 9.2A Identify health risks and other factors that affect the function of the endocrine system.

Title: Communicable Diseases Kinesthetic Word Web

Objectives/ Goals:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- The student will be able to identify all types of pathogen.
- The student will be compare and contrast different pathogens that lead to illness

Materials:

- [Pathogen Worksheet](#)
- [Pathogen Notecards](#)
- [Pathogen Slides Show](#)

Procedure:

- Instant Activity – Start class by putting a writing or discussion prompt on the board such as *What is a pathogen? How do you think a pathogen might go about creating a disease? What are some examples or names of pathogens that you know about?*
- Distribute a pathogen notecard to each student. Depending on class size, you will have probably 3-5 students with the same pathogen notecard.
- Working alone at first, have students begin to fill out what they might know on the Pathogen worksheet.

- Next, have them combine with the other students who have the same pathogen notecard and give them additional time to brainstorm answers to the questions on the worksheet.
- As the teacher, now lead the Pathogen Kinesthetic Word Web activity to discuss the most functional knowledge needed for your students. *See Sample*
- Kinesthetic Pathogen Word Web Activity – Start with one of the four main pathogens and have a student come to the front or middle of the room and hold a notecard identifying that particular pathogen category (Bacteria, Viruses, Fungi, Parasites (Protozoa & Worms)). For example, if you start with Bacteria, this would be a good time to have a student or perhaps a teacher define the term for the entire class. Highlight some of the other questions/points on the student worksheet as you teach the functional knowledge at this point so all students are taught the information. You could physically link other students together at the elbow extending off of each notecard by providing examples of each category. For example, you might link terms/types of bacteria like E. coli, Staphylococcus aureus, MRSA, pneumonia, etc. and do this for each subsequent pathogen.
- By the end of the activity, you should have probably half or so of your class standing depicting a physical “Pathogen Word Web.”
- Once students have an understanding of the main pathogen categories, have them go back to their groups and do some research on how their pathogen impacts other parts of the body (immune system, endocrine system, etc). You could also have them draw a general picture of what each microorganism looks like.

Assessments, References, & Sources

- [Pathogen Worksheet](#)
- What are Germs? Kidshealth.org - <http://kidshealth.org/en/parents/germs.html?ref=search&WT.ac=msh-p-dtop-en-search-clk>
- CDC – Foodborne Pathogen Data - <https://www.cdc.gov/foodborneburden/PDFs/scallan-estimated-hospitalizations-deaths-foodborne-pathogens.pdf>
- Andy Horne, M.Ed., New Trier High School

Pathogen Word Web Worksheet

The goal for you this lesson is to identify types of pathogens that cause disease and identify health risks and other factors that affect the function of the endocrine system.

<p>Type of Pathogen:</p> <p><i>What do you know about this?</i></p> <p><i>Where does it come from?</i></p> <p><i>How is it transmitted?</i></p> <p><i>How is it cured or treated?</i></p> <p><i>What might be an example of this pathogen?</i></p>	<p>Type of Pathogen:</p> <p><i>What do you know about this?</i></p> <p><i>Where does it come from?</i></p> <p><i>How is it transmitted?</i></p> <p><i>How is it cured or treated?</i></p> <p><i>What might be an example of this pathogen?</i></p>
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How do you think these pathogens might affect other parts of the body?

For next class...think of answers to this: How can we minimize the risk of contracting pathogens?

Pathogen Notecards

Bacteria	Virus
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Fungi	Parasites
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You could make additional notecards with the following examples.

Bacteria Examples

- E. coli
- Staphylococcus aureus (staph infections)
- MRSA
- Pneumonia

Virus Examples

- Colds
- Flu
- HPV
- HIV

Fungi Examples

- Athlete's foot
- Yeast infections

Parasite Examples

- Protozoa (malaria and dysentery)
- Worms (tapeworm or pinworm)