Unit 4: Disease Prevention and Health Conditions

Content Area: **Health**
Course(s): **Health**
Time Period: **Week 32**
Length: **6 Weeks**
Status: **Published**

Unit Overview

In the Disease Prevention and Health Conditions unit, students will learn about communicable and noncommunicable diseases, as well as the difference between acute and chronic diseases. Topics include pathogens; the immune system; disease symptoms and treatments; diabetes; allergies; asthma; heart disease; and cancer.

Standards

HPE.2.1.4.C.1	Explain how most diseases and health conditions are preventable.
HPE.2.1.4.C.2	Justify how the use of universal precautions, sanitation and waste disposal, proper food handling and storage, and environmental controls prevent diseases and health conditions.
HPE.2.1.4.C.3	Explain how mental health impacts one's wellness.

Essential Questions

- How can we keep healthy?

Application of Knowledge and Skills...

Students will know that...

- a positive mental attitude can help one prevent and/or recover from an illness
- bacteria, fungi, viruses, and protists are pathogens that can cause disease
- eating a healthful diet, keeping a healthful weight, keeping blood pressure in a healthful range, getting regular physical activity, and keeping away from tobacco can reduce the risk of heart disease
- eating healthful foods, being physically active, getting sufficient sleep, and getting regular checkups can help protect them from many contagious diseases
- fever, swollen lymph nodes, coughing, sneezing, red eyes, and vomiting are signs of disease
- not smoking, not sunbathing to get a tan, not eating fatty foods, and eating plenty of fiber can reduce the risk of cancer

- pathogens, environmental factors, harmful habits, and inherited traits are four main causes of chronic diseases

Students will be able to...

- describe habits that keep germs from spreading
- explain how one's mental health can impact one's wellness
- explain how the body's defenses work
- list habits that protect one from diseases spread by pathogens
- list kinds of pathogens that cause disease
- list symptoms of and treatments for communicable diseases
- list ways to reduce the risk of heart disease and premature heart attack

Assessments

- Formative: Other written assessments Make a Comic Book- Draw a series of pictures in comic book format in which a friendly character describes how to wash your hands and how it reduces the risk of becoming ill. (2.1.4.C.1, 2.1.4.C.2)
- KWL Chart Diagnostic: Other oral assessments Pre-evaluation of student understanding about disease prevention and health conditions (2.1.4.C.1, 2.1.4.C.2, 2.1.4.C.3)
- Summative: Benchmark Assessment (2.1.4.C.1, 2.1.4.C.2, 2.1.4.C.3)

Activities

Make a Comic Book- Draw a series of pictures in comic book format in which a friendly character describes how to wash hands and how handwashing reduces the risk of becoming ill.

Learn About a Disease- Research the history of a disease such as smallpox, malaria, yellow fever, or cholera. Find out where the disease has occurred in different parts of the world and how it is treated.

Interview an EMT- Invite an Emergency Medical Technician to your class to explain the training that he/she undergoes. What types of work do EMTs perform in your community?

Role-Play - Act out a person recovering from an illness with a positive mental attitude and with a negative mental attitude. Compare and contrast the possible results.

Activities to Differentiate Instruction

General Modification for All Students May Include:

- Follow the differentiation pattern of:
    - Identification of Objectives
    - Pre-Assessment of student understanding
    - Differentiated Activity
    - Whole-Group Discussion
    - Post-Assessment
    - Flexible Grouping strategies:
        - Readiness Groups – "readiness" refers to a student's grasp of a particular concept or task
        - Student Choice Groups
        - Interest Groups
        - Learning Profile Groups
        - When working in groups, students may benefit from having assigned roles in the group, which could be differentiated based on student's ability. Examples include, "facilitator", "materials coordinator", "time keeper", and "task master".
        - Provide student choice for assignments and activities that may appeal to their interests or particular abilities
        - Provide visual and auditory learning supports

Content Specific Modifications for Special Education Students May Include:

- Modifications and accommodations as listed the student's IEP
- One-on-one supports
- Prioritize tasks
- Modified or reduced assignments

Differentiation for ELL's May Include:

- General modifications may include:
    - Integrate activities into thematic units
    - Trigger student's prior knowledge and experience, which may be different from other students in the class
    - Scaffold complex texts
    - Collaboration with ELL teacher
    - Content specific vocabulary important for ELL students to understand include: baceteria, fungi, viruses, protists, pathogen, disease, healthy, contagious, fever, environmental factors, inherited traits, chronic, tobacco

Differentiation to Extend Learning for Gifted Students May Include:

- diagram the pathways a pathogen needs to take in order to cause a disease

- When differentiating for gifted learners, consider the following three areas to differentiate: content, process, and product.

- Content – consider leveling of resources, using additional resources, or developing learning centers. If modifying the content for students, consider various ways to modify content including acceleration of delivery, providing more depth or complexity in the topic, or creating scenarios that utilize critical or creative thinking.
- Process – consider asking different questions or having students develop the questions, varying group patterns, or developing small groups that will enable you to target instruction
- Product – allow for student choice in work products, independent study options related to the content areas, or appealing to their particular strengths when considering the theory of multiple intelligences

Integrated/Cross-Disciplinary Instruction

Writing- Write a poem or create a saying that will remind you to wash your hands often and keep them away from your face.

Antibiotic Hopscotch- Write the names of illnesses on index cards. Write whether each illness is caused by bacteria, virus, or fungi. Mark five boxes on the ground or floor. On your turn, take a card. If the disease can be treated with antibiotics, hop forward one box. If it can't, stay in the same box. Can you get to the last box?

Design a Poster- Design a poster to encourage people to walk more. Walking is a form of exercise that helps prevent people from developing type-2 diabetes.

Resources

Health & Wellness Macmillian/McGraw-Hill 2008

www.mmhhealth.com

21st Century Skills

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
CRP.K-12.CRP3.1	Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice

	healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.
CRP.K-12.CRP4.1	Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.