

**Teacher Candidate:** Tracy Miller

**Lesson Topic:** Germs

**Date:** 3-26-2015

**Grade/Subject:** 5th grade/Health

## DAY 1

**Title of Lesson (History Of Germs and Vaccinations)**

**Instructional Objectives/Student Outcomes:**

- Students will explain the germ theory of Louis Pasteur.
- Students will explain why they need vaccinations.
- Students will define different types of vaccinations.
- Students will be able to list and explain types of diseases they can get if not vaccinated.

**WV CSOS**

- **HE.5.8.01** identify recommended and required vaccinations from birth through adulthood.
- **HE.5.6.01** describe disease prevention plans and strategies (e.g., diet, exercise, hygiene, habits, universal precautions, medical checkups, immunizations).

**NATIONAL STANDARDS:**

- **Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.
- **Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

**Technology Standards:**

**ISTE:**

**Communication and Collaboration-** Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

A. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

**Research and Information Fluency-** Students apply digital tools to gather, evaluate, and use information.

B. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

**21st Century**

21C.O.5-8.1.TT9 Student uses telecommunications tools (e.g., email, web pages, blogs, discussion groups, list-servs, etc.) to learn academic content and to gather, share and publish information to various audience.

21C.O.5-8.1.TT10s. Student uses Internet browsers, various search engines, book marking features, and advanced search techniques to gather information; student evaluates the information for validity, bias, appropriateness, content and usefulness.

### **TIME MANAGEMENT**

Overall Time: 60 minutes

Introduction: 10 minutes

Lecture/Power point: 15 minutes

Individual /group activity: 25 minutes

Closure: 10 minutes

### **Strategies:**

- Teacher led-instruction
- 
- Student led-instruction
- 
- Independent practice
- 
- Group practice
- 
- Guided instruction
- 

### **Differentiated Instruction/Adaptations/Interventions**

- **Learning disabilities:** Modified instruction- I will ask them simpler questions.
- 
- **Attention differences:** I will offer guided instruction to keep the students on task, focused, and interested in the lesson.
- 
- **Physical differences:** I will allow added time for the exercises.
- 
- **Sensory differences:** I will have a variety of ways to deliver the content. Power Point for visual learners, lecture/discussion for auditory learners, and hands on activities for kinesthetic learners.
- 

### **Procedures**

#### **Introduction:**

Every student in this class has a cell phone, so I will be using the class Dojo to let the students know if they are misbehaving during today's lesson.

- My attention getter will be pictures of children with various diseases (small pox, measles, chicken pox, etc..)
- 
- I will have these key terms written on the white board for today.
-

- Vaccination, disease,
- 
- I will continue to flip through pictures of people with diseases caused by germs.
- 
- BELL RINGER I will ask the students to answer these questions on a piece of paper, "what do you think caused these diseases and write down any disease you may know in the pictures?"
- 
- After everyone has a chance to answer I will explain what the diseases are in the pictures.
- 
- I will ask a few students to tell me what they have wrote down.
- 
- I will ask the students, "do you know if you are you protected against these diseases?" (Yes or No answer)
- 
- I will then ask the students to **list** ways that they think will protect them from such diseases.
- 
- I will have a few students to read some of their answers.
- 
- Throughout today's lesson I want you to think about this question and you can add to your list later in the day and week.
- 
- I will then state the objective for today.
- 
- "Today you are going to learn about the person who made it possible for people to be protected against diseases like these and how you can protect yourself from getting these diseases.
- 
- Then I will move onto the next slide.
- 

#### Body & Transitions:

- First, I will tell the students they may take notes.
- 
- The next slide is titled "Germ Theory" with a picture of an old laboratory.
- 
- I will ask students if they know what a theory is and give everyone a chance to answer.
-

- Next, I will give a definition and example of what a theory is. A concept that is not yet verified but that if true would explain certain facts or phenomena.
- 
- I will explain. The next two slides are about Louis Pasteur one of the most important scientists in history.
- 
- The next slide says, "his discoveries led to an understanding of microbes and diseases that has helped to save millions and millions of lives. "
- 
- I will read each slide to the students and further explain each if needed.
- 
- I will be asking questions throughout the PowerPoint.
- 
- (See attachment for the list)
- 
- The slides contain information of who Louis was and what he did. It also has pictures of him.
- 
- The main topics are:
- 
- 1. How he got the name "Father Of Germ Theory"
- 
- 2. How he used his knowledge of germs to investigate how beverages such as wine and milk were spoiled by microbes such as bacteria and molds.  
(Pasteurization)
- 
- 3. How he found that he could make a weak form of a disease that would cause people to become immune to the stronger form of the disease.
- 
- Next, on the PowerPoint I have a video for the students to watch on Louis Pasteur. It is only 3 minutes and 18 seconds long.
- 
- After the video the students will do an individual activity.
- 
- The slide after the video is titled "What Immunizations Do You Have?"
- 
- I will read the 3 questions, but not answer. This will allow them time to think about it before they do the research.
- 
- 1. You must have the correct immunizations before you can even start school. Why?

2.

1. Do you know what diseases you are protected from?

2.

1. What immunizations should you currently have?

2.

1. Do you think germs cause these diseases?

2.

- The Next slide says "Activity" I have the directions on this slide, and I will continue to read aloud. Each student will receive a hand copy. (see attachment)
- 
- Using myself as an example I will give the students a demonstration of what they are to do using the smart board for everyone to see.
- 
- All the students will work on their own computers.
- 
- I will assign each student a partner to share with on Google Docs. They can help each other answer questions and discuss the activity on Docs.
- 
- This way they are not interrupting other students working.
- 
- Students will go to this website  
[http://kidshealth.org/parent/growth/medical/immunization\\_chart.html](http://kidshealth.org/parent/growth/medical/immunization_chart.html)
- 
- This site has the immunization schedule from birth to age 16.
- 
- Students will read the recommended immunizations and does' for each age.
- 
- They will write down at least one vaccine that they don't know, but should have received as a small child or infant.
- 
- (Each partner should have a different vaccine wrote down.)
- 
- Using the internet site below they will look up the immunizations they wrote down.
- 
- They will figure out what disease the vaccination protects them from.
- 
- This page is called ([A Look Of Each Vaccine](#))
- 

(<http://vec.chop.edu/service/vaccine-education-center/a-look-at-each-vaccine/>)

- Once they have looked up and read about the vaccinations, they will use the two websites I have provided to type 2-3 paragraphs about the vaccine they chose and answer the 3 questions on slide 11.
- 
- Students are to write their papers in Google Docs with a partner and then share with me when they are finished.
- 
- It will be written on the board and on the handout
- 
- While the students are working I will be walking around the room making sure everyone is on task and provide assistance if need.
- 
- Once the students are finished in their groups I will tell the students to make sure they have shared their work with me.
- 
- I will have them to exit the computers properly.
- 
- Next, they will do an individual activity.
- 
- I will ask the students to go back to their desk, and I will pass out a quiz with the questions listed below.
- 
- I will read each question aloud and give them until the end of class to work.
- 
- *Explain Louis Pasteurs theory and what he did in your own words?*
- 
- *Why do you need vaccinations?*
- 
- *Define one of the vaccinations you looked up in your own words?*
- 
- *List the different types of diseases you can get if not vaccinated?*
- 

### Closure

- I will ask the students to hand in their papers.
- 
- I will restate the objective for today.
- 
- I will show the students a website where they can take a quiz about Vaccinations at home or if we have time they will do this in class.
-

- I will have the website written on the board and they can write it down if they want.
- 
- QUIZ - <http://life.familyeducation.com/health-and-safety/immunizations-and-vaccines/vaccines-and-immunizations-quiz.html>
- 

**Assessment:**

- **Diagnostic:** Class discussion, data collection sheet
- 
- **Formative:** Small group discussions/ Data Collection Sheets.
- 
- **Summative:** Data collection sheets.
- 
- **Materials**
- 
- Smart board or some type of projector for the power point, pictured, and video.
- 
- Handouts of Activity Directions.
- 
- Copies of power point, links to the videos, and websites.
- 

**Extended Activities:**

**If student finishes Early** I will have that student to play the vaccination game on a computer.

**If Lesson Finishes Early** I will have each student to explain the vaccination and disease they learned and have class discussions on each.

**If technology Fails** Prior to the lesson I will have the PowerPoint, web pages, and handouts all printed out. This way the students can also have copies to take home in case they don't have internet to finish the assignment.

**Teacher Candidate:** Tracy Miller

**Lesson Topic:** Germs

**Date:** 3-26-2015

**Grade/Subject:** 5th grade/Health

**Title:** (Spreading Germs)

### **Instructional Objectives/Student Outcomes**

- Students will explain where germs live.
- 
- Students will explain how a germ (virus) is spread.
- 
- Students will demonstrate how germs are spread from person to person and surface to surface.
- 

### **WV CSOS**

**HE.5.1.04** describe different organisms (e.g., viruses, bacteria, protozoa, worms, fungi) that causes diseases.

**HE.5.6.01** describe disease prevention plans and strategies (e.g., diet, exercise, hygiene, habits, universal precautions, medical checkups, immunizations).

### **National Standards**

**Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.

**Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

### **Technology Standards:**

**Communication and Collaboration-** Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

A. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

B. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

**Research and Information Fluency-** Students, apply digital tools to gather, evaluate, and use information,

D. Process data and report results.

### **21st Century**

21C.O.5-8.1.TT9 Student uses telecommunications tools (e.g., email, web pages, blogs, discussion groups, list-servs, etc.) to learn academic content and to gather, share and publish information to various audience.

21C.O.5-8.3.LS1 Student manages emotions and behaviors, engages in collaborative work assignments requiring compromise, and demonstrates flexibility by assuming different roles and responsibilities within various team structures.



## Management Framework

**Introduction & MythBuster video:** 10 minutes

**Explaining /demonstrating the Glow Germ Kit:** 5 minutes

**Explaining directions of activity:** 5 minutes

**Grouping:** 5 minutes

**Activity:** 30 minutes

**Closure:** 5 minutes

**Overall time:** 60 minutes

### Strategies

- Whole Group Instruction
- 
- Collaborative Grouping
- 
- Teacher-led Instruction
- 
- Student -led Instruction
- 
- Peer tutoring
- 

### Differentiated Instruction/Adaptations/Interventions

- **Learning disabilities:** Modified instruction- I will ask them simpler questions.
- 
- **Attention differences:** I will offer guided instruction to keep the students on task, focused, and interested in the lesson.
- 
- **Physical differences:** I will allow added time for the exercises.
- 
- **Sensory differences:** I will have a variety of ways to deliver the content. Power Point for visual learners, lecture/discussion for auditory learners, and hands on activities for kinesthetic learners.
- 

### Procedures

#### **Introduction:**

**I will be using the Class Dojo throughout the activity.**

- I will ask the students, "If only one person in the room is sick what are the chances of you getting their germs?" "How easily are germs spread?"
- 
- Write down if you can see germs? Why or Why not?" If you don't know guess or just put a question mark.
-

- I will have pictures of different scenes of people sick in a room on the smart board. (See Attachment)
- 
- I will give them a minute or so to answer and then I will ask for answers and discussion.
- 
- I will explain to the students that MythBusters is a show that puts myths and legends to the test using scientific methods.
- 
- I will ask if anyone has seen the show and give them time to answer.
- 
- Then I will show this clip that shows how germs are easily spread through an experiment that was done on MythBusters.  
[https://www.youtube.com/watch?v=k1j8bh8\\_O\\_Q](https://www.youtube.com/watch?v=k1j8bh8_O_Q)
- 

**Body & Transitions:**

- After the clip I will tell the students that today they will be performing a similar experiment in class to the one they just watched.
- 
- Next, I will bring out the glow germ kit and explain how the lotion and lights work.
- 
- I will explain that the lotion contains tiny particles that fluoresce, or glow, under ultraviolet light.
- 
- I will say “today we’re pretending that these tiny particles in the lotion are germs.
- 
- You can’t see germs unless you look at the under a microscope.
- 
- I will show the students a short clip (1:13) of germs (VIRUS) under a microscope that are moving.
- 
- <https://www.youtube.com/watch?v=-sxlVbqBGg>
- 
- I will demonstrate to the students how the lotion works by putting the lotion on my hands and turning off the lights.
- 
- I will then put my hands under the black light.
-

- Next, I will state today's objective and explain to the students what they are going to do in class today.
- 
- Today's objective is that you will be able to understand and explain how germs are spread from person to person and where germs like the Virus in the video live, .
- 
- I will say, "first, everyone will pick a popsicle stick out of the cup."
- 
- I will tell them that only two of the popsicle sticks are marked with "red" on the bottom where no one can see.
- 
- I will tell them that all the popsicle sticks are marked with either #1 or #2
- 
- The two people that pick the marked popsicle stick will be the "sick" hostess who has a virus.
- 
- I will split the class into two groups. (2 groups of 8)
- 
- I will say, " if you got a stick with the number 1 go to the right side of the room and if you got a two go to the left side of the room." (I will point where to go)
- 
- Both sections of the room will have a large table with chairs where students can sit together and play the game.
- 
- I will continue explaining as we go through each step as a class.
- 
- Then I will say, " before we get started everyone write down your prediction.
- 
- I want you to write down where you think you will find germs and do you think the sick person will infect everyone in your group?
- 
- Each group will have one hostess who has a virus.
- 
- Once everyone is in their groups and sitting down I will continue to explain, and I will stop after each step to ask if there are any questions.
- 
- First I will say, "you will be graded on participation and cooperating in this activity."
-

- I will explain that the hostess will pretend that they are having a game night at their house just like in the video you watched in the beginning of class.
- 
- When I say so the two hostess will put on the germ glow lotion.
- 
- After applying the lotion the hostess will be shaking everyone's hand as they enter the house (pretend).
- 
- The hostess will first serve drinks and snacks to everyone and then he or she will sit down to play as well. (Empty cups, plates, plastic spoons, and fake snacks)
- 
- The hostess will pass out the playing cards.
- 
- Everyone will pretend to drink and eat while they are playing Uno.
- 
- I will explain in this experiment you are going to see how far the germs are spread after 10 minutes of playing.
- 
- Once the 10 minutes are up I will turn off the lights.
- 
- Using your hand held black lights on the table search for the germs.
- 
- Look on yourself, others, cards, table, cups, plates, etc..
- 
- Next I will say, " if there aren't any questions I will set the timer for 10 minutes"
- 
- I will observe the students as the play/work making sure everyone stays on task.
- 
- Once the 10 minutes are up I will turn off the lights and so they can begin their search.
- 
- I will give them 2-3 minutes to search for germs.
- 
- While the students are searching for Germs I will lay eight handouts on each table.
- 
- When the students are done searching I will flip the lights back on.
- 
- I will ask the students to get their papers with their predictions on it and write down the actual results.

- 
- Next, I will tell the students to write their predictions and actual results on the class face book page.
- 
- I will say, find a computer and work quietly.
- 
- I will also have the page up on the board, and I will have control of when and what gets posted on the timeline.
- 
- Once the students are finished posting I will read the handout aloud.
- 
- I will have 6 questions, directions, the objective for today, and a recap of what they did in class today on this handout. (See attachment)
- 

### **CLOSURE**

- I will have students to exit the computers properly and tell them that anything that wasn't finished they will do as homework.
- 
- I will tell the students as homework they are to go back and look on both websites they have posted on to read my comments.
- 
- Next, I will recap what they did today and restate the objective.
- 

### **Assessment:**

**Diagnostic:** Data collection sheets/class discussion

**Formative:** Discussion post on class page/predictions & results on Facebook

**Summative:** Collections data sheets through e-mail

### **Materials**

- 2 bottles of glow germ lotion
- 
- 2 or more hand held black lights/lamps
- 
- 2 games of Uno
- 
- 16 cups and plates
-

- Pretend foods
- 
- Facebook Page
- 
- Class website page
- 
- Class Dojo
- 
- e-mail
- 
- Directions handout
- 

**Extended Activities:**

**If student finishes Early** I will have this student to play this game called Germinator online.  
<http://pbskids.org/fetch/games/germinator/index.html>

**If Lesson Finishes Early** I will bring up the class page and face book page on the smart board to ask the students questions and discuss what they wrote. If we don't do this in class I will post back to the students on the web pages.

**If technology Fails** I will send the link home to the video with the students, so they can watch it at home or in the library on another day. I will explain what happens in the video and explain what the show MythBusters is.

**Teacher Candidate:** Tracy Miller

**Lesson Topic:** Germs

**Date:** 3-26-2015

**Grade/Subject:** 5th grade/Health

Title (Germs in Our food !?!)

**Instructional Objectives:**

- Students will explain and define food borne illnesses.
- 
- Students will be able to list the types diseases that germs in food cause.
- 
- Students will explain what cross contamination is.
- 
- Students will demonstrate how to prepare food using proper hygiene habits.
- 

**WV CSOS**

**HE.5.6.01** describe disease prevention plans and strategies (hygiene, habits, diet, universal precautions, checkups, immunizations).

**HE.5.7.05** demonstrate a variety of strategies to avoid or reduce health risks.

**HE.5.1.04** describe different organisms (viruses, bacteria, protozoa, worms, fungi) that cause diseases

**National Standards**

**Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.

**Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

**Technology Standards**

**ISTE**

**Creativity and Innovation-** Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

**Communication and Collaboration-** Students use digital media and environments to communicate and work collaboratively, including, at a distance, to support individual learning and contributes to the learning of others.

**Technology Operations and Concepts -** Students demonstrate a sound understanding of technology concepts, systems , and operations.

**21st Century:**

**21C.0.5-8 TT5** Students uses advanced features and utilities of spreadsheet software, e.g. functions, formulas, filters, sorts, creates graphs and charts), to perform calculations and to organize, analyze and report data.

**21C.O.5-8.3.LS4** Student demonstrates ethical behavior and works responsibly and collaboratively with others, in academic and social contexts, to accomplish both individual and team goals related to improved academic, extracurricular and co-curricular performances.

### **Management Framework**

**Introduction:** 10 minutes

**Body &Transitions:** 40 minutes

**Closure:** 10 minutes

**Overall Time: 60 minutes**

#### **Strategies**

Teacher /student led discussions

Independent/group practice

Guided Instruction

Teacher Demonstration

### **Differentiated Instruction**

- **Learning disabilities:** Modified instruction- I will ask them simpler questions.
- 
- **Attention differences:** I will offer guided instruction to keep the students on task, focused, and interested in the lesson.
- 
- **Physical differences:** I will allow added time for the exercises.
- 
- **Sensory differences:** I will have a variety of ways to deliver the content. Video & power point for visual learners, lecture/discussion for auditory learners, and hands on activities for kinesthetic learners.
- 

**Students will do this part of the lesson at home. It shouldn't take them no longer than an hour.**

**The students will watch a power point & video about food poisoning and how to prepare foods in the kitchen to prevent cross contamination. SEE ATTACHMENT FOR POWER POINT!**

### **Procedures**



- **Before class I will have prepared:**
- 
- **Slices of cucumber into 1/8" thick slices, enough to provide two slices per team of students plus one.**
- 
- **I will have lettuce leaves cut into pieces roughly the size of a playing card, enough for one slice for each team of students plus one.**
- 
- **I will place the cucumber slices into one plastic bag, sealed, and set aside without glow germ powder.**
- 
- **I will place the lettuce leaf slices into another bag and will shake a little Glo Germ powder onto the lettuce leaves, and then I will shake the bag to coat all of the pieces.**
- 
- **I will remove and check one leaf under the UV lamp to make sure it has been sufficiently "contaminated."**
- 
- **Then I will wash my hands to remove any traces of the powder.**
- 
- **I will make sure that I have not contaminated any of the cutting boards, knives etc. with the powder prior to class. (knives will be plastic knives)**
- 
- **I will make sure that the cucumber slices have not been contaminated as well.**
- 

### **Introduction**

- I will tell the students exactly what we are going to do step by step.
- 
- First, I will ask for their papers from the power point.
- 
- I will explain to the students that they will be placed into groups of 2.
- 
- I will already have wrote down who will be in each team.
- 
- I will have the students to all stand on one side of the room.
- 
- I will call out team #1 is bob and sally, and I will tell them where to sit.
- 
- I will do this until all the teams are sitting together.
-

- Once the students are in their teams I will give each team a plastic knife, cutting board, and a dinner plate.
- 
- I will give each team a lettuce leaf from the bag.
- 
- I will tell each team to slice the leaf into very tiny pieces, on the cutting board, then scrape the lettuce pieces onto the dinner plate.
- 
- Next, I will give each team one cucumber slice.
- 
- I will tell the students to let the other team member cut the cucumber into tiny pieces as they did with the lettuce, but leave these pieces on the cutting board.
- 
- I will go through this slowly and make sure everyone can hear me.
- 
- Next, I will tell the students to discard the lettuce pieces into the garbage, and return with the plate to their stations.
- 
- Finally, I will place a cucumber slice directly onto each now empty dinner plate.
- 
- Now I will darken the room so that the fluorescence from the contaminated items are more easily seen.
- 
- I will place the lettuce leaf remaining in the plastic bag under the UV light.
- 
- I will tell the students these lettuce leaves were dusted with a harmless powder that glows under ultraviolet light just like the lotion we used this week.
- 
- The powder represents bacteria like e coli or salmonella.
- 
- I will ask the students where do you think the lettuce got the bacteria from?
- 
- There will be many possible answers but, I will tell the students this lettuce has bacteria from where it was grown and then was transported here.
- 
- Next, I will place the remaining cucumber slice under the UV light to show that it was not contaminated by the bacteria.
- 
- I will ask each team to turn over the intact cucumber slice on their dinner plate.
-

- I will give each team a UV light to shine on the objects to investigate for themselves.
- 
- Next, I will ask each team to wash and dry their hands and cutting boards.
- 
- When they are finished I will then again turn off the lights and they will check their hands and cutting boards with the UV light to see if they got them clean.
- 
- I will tell the students to get on the computers and bring up **Inspiration**. (They have used this before.)
- 
- Next, I will tell the students to make a concept map of what they have learned in the flip lesson and activity.
- 
- I will explain to the students that they can put germs in the middle, they can put diseases like E coli in the middle, they can put foods in the middle and why to wash them, etc.. and branch off on each one.
- 
- I want them to use pictures and text in their concept maps.
- 
- Next, I will tell the students to get onto Google Docs. (They have used this before)
- 
- Using Google Docs each student in the groups will write at least 1 paragraph to discuss what they observed and consider how this activity related to safe food preparation practices.
- 
- When they are finished I will tell them to share with me, and they will return to their seats.
- 
- I give the students a test.
- 
- The students will answer each question on a handout individually.
- 
- (See attachment for Handout)
- 
- 
- 
- 

**CLOSURE**

- Once they are finished I will have random students to come up to the smart board and write an answer. I will announce to the class that if they don't have an answer fill in the blank and take notes from what the other classmates are writing.
- 
- For example, I will write number one on the smart board and then I will call out a name to come answer it. Then I will call out another name to write their answer under it.
- 
- I will continue this until everyone has written at least one response on the board.
- 
- When the students are finished I will copy the information and send it to each student through Google docs or e-mail.
- 
- I will ask the students to turn in their papers for grading.
- 
- I will give a brief review of today's lesson, and I will go over the objective for today.
- 

### **Assessment**

**Diagnostic:** Collection data sheet and discussion

**Formative:** Collection Data sheet

**Summative:** Collection and data sheets and class discussion

### **Extended Activities**

**If student finishes early:** If a student finishes early they will play this game about germs.

<http://germsaway.ca/game.html>

**If lesson Finishes early:** Students will write down and discuss different ways someone could kill germs in the kitchen.

**If technology fails:** I will have the power point printed out before hand and each student will have a copy. I will have the handout of questions printed as well. If they can't use Google docs or inspiration they will write and draw with their partner.

**Teacher Candidate:** Tracy Miller

**Lesson Topic:** Germs

**Date:** 3-26-2015

**Grade/Subject:** 5th grade/Health

## Day 4

Title: (Germ WebQuest)

This is the link to the WebQuest I created <http://zunal.com/webquest.php?w=278794>

### **Instructional Objectives/Student Outcomes**

- Students will be able to define and describe 4 different types of germs.
- Students will be explain where these germs live, what they look like, and the diseases they cause.
- Students will be able to demonstrate proper hand washing skills.
- Students will be able to explain when and why they are supposed to wash their hands.

### **WV CSOS**

HE.5.1.04 describe different organisms (e.g., viruses, bacteria, protozoa, worms, fungi) that causes diseases.

HE.5.6.01 describe disease prevention plans and strategies (e.g., diet, exercise, hygiene, habits, universal precautions, medical checkups, immunizations).

HE.5.8.01 identify recommended and required vaccinations from birth through adulthood.

### **National Standards**

**Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.

**Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

### **Technology Standards**

#### **ISTE**

1. **Creativity and Innovation-** Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

2. **Communication and Collaboration-** Students use digital media and environments to communicate and work collaboratively, including, at a distance, to support individual learning and contributes to the learning of others.

3. **Research and Information Fluency-**Students apply digital tools to gather, evaluate, and use information.

4. **Critical Thinking, Problem Solving, and Decision Making-** Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

### **21st Century Skills**

**21C.O.5-8.1.LS3** Student presents thoughts, ideas, and conceptual understanding efficiently, accurately and in a compelling manner and enhances the oral or written presentation through the use of technology.

**21C.O.5-8.1.TT4** Student uses audio, video, pictures, clip art, moviemaker programs, webpage design software, electronic documents, and other files to create and publish electronic products to communicate with various audiences inside and outside the classroom.

**21C.O.5-8.1.TT10** Student uses Internet browsers, various search engines, book marking features, and advanced search techniques to gather information; student evaluates the information for validity, bias, appropriateness, content and usefulness.

**21C.O.5-8.2.TT4** Student formulates a plan and uses technology tools and multiple media sources to compare and analyze information in order to solve real-world problems.

### **Management Framework**

**Overall Time: 60 minutes**

**Introduction: 10 minutes**

**Body & Transition:**

**Web Quest: 30 minutes**

**Games : 15 minutes**

**Closure: 5 minutes**

### **Strategies**

- Teacher led discussion
- 
- Student led discussion
- 
- Teacher demonstration
- 
- Student demonstration
- 
- Guided Instruction
- 
- Collaborative Grouping
- 
- Teacher-led Instruction
- 
- Student -led Instruction
- 
- Independent Practice
- 

### **DIFFERENTIATED INSTRUCTION:**

- **Learning disabilities:** Modified instruction- I will ask them simpler questions.
- 
- **Attention differences:** I will offer guided instruction to keep the students on task, focused, and interested in the lesson.
- 
- **Physical differences:** I will allow added time for the exercises.
- 
- **Sensory differences:** I will have a variety of ways to deliver the content. power point for visual learners, lecture/discussion for auditory learners, and hands on activities for kinesthetic learners.
- 

## **Procedures:**

### **Introduction**

- To gain their attention, I will say today you will be an expert who is investigating germs and you will do so in a team of professionals.
- 
- First, I will go over the directions for today's activity. **(See attachment)**
- 
- On the handout there will be a list of who is in each team and what their team number is.
- 
- I will demonstrate by taking them through the Germ WebQuest on the smart board.
- 
- Then I will ask, "Does anyone have any questions before we get started?"
- 

### **Body & Transitions**

- Next, I will tell students to sit at a computer, but close to your partners.
- 
- Once each student is sitting at a computer I will pass out their research sheets. (See atachment)
- 
- They can use these sheets as a guide and also to take notes on if they want to.
- 
- They will be answering these questions on Google Docs and share with their team members and me.
- 
- I will give each group a cup.
-

- Each cup has three sticks and each stick has a different role written on it. (Microbiologist, News Reporter, and Hand Washing Expert)
- 
- Each member in the team will pick a stick.
- 
- Whatever they pick is the role they will be.
- 
- When everyone knows what role they will be.
- 
- Each group will then locate the site on the computers.
- 
- I will have the WebQuest already up on the smart board so they will know what it looks like.
- 
- I will ask everyone to raise their hand once they are on the site.
- 
- I will ask if there are any questions and if not I will say you have until the end of the class to finish this Quest.
- 
- I will be walking around making sure everyone is on task and help guide them if needed.
- 
- I will tell the students once they are finished with their WebQuest to play the Quizlet game I have made and also the game below.
- 
- <http://pbskids.org/fetch/games/germinator/>The game is called Germinator. In this game students play as a germ and are trying to infect a person. The "germ" has to make it to an opening in the body and beat their immune system. For example, they get into the nose, but then have to fight boogers to make their way in. The second game is a Quizlet game on germs I made.

**Closure:**

- I will have the students to exit the computers properly.
- 
- Students will make sure they have shared their research papers and discussions on Google Docs with their team members and me.
- 
- I will explain to the students if they did not finish their WebQuest they will have to do so at home.
-



- I will inform the students again that they will be creating group power points based on the information they have learned from this WebQuest and previous lessons on Friday.
- 
- They can use their notes from the WebQuest and notes from the previous lessons.
- 
- The students will present their power points in my class on Monday for more feedback on their speaking and demonstrations.
- 
- They will be presenting these power points and teaching the kindergarten classes on Tuesday.
- 

**Extended Activities:**

**If student finishes Early-** They will have games/quizzes that tests their knowledge about germs.

<http://pbskids.org/fetch/games/germinator/index.html>

<http://www.primarygames.com/science/germhunter/start.htm>

[http://www.gojo.com/united-states/market/k-12/resources/educational-materials/cleangenevideogames.aspx?sc\\_lang=en](http://www.gojo.com/united-states/market/k-12/resources/educational-materials/cleangenevideogames.aspx?sc_lang=en)

<http://www.gamesheep.com/game/sleepy-germs/>

**If Lesson Finishes Early-** Students will start working on their power points and make their plan of who, what, and how they will present their power point and their demonstration. (See attachment for directions to power point)

**If technology Fails-** Before I even do this assignment I will print off every website the students will be using including the Web Quest itself. I will have enough for each group. I will also have books and magazines that can help them during their quest.

**Teacher Candidate:** Tracy Miller

**Lesson Topic:** Germs

**Date:** 3-26-2015

**Grade/Subject:** 5th grade/Health

## **DAY 5 “Friday”**

Title Lesson: Game Day

### **Instructional Objectives**

- Students will list and demonstrate different ways to kill germs.
- Students will create power points of what they have learned about germs.
- Students will present their presentations to the class in an organized and orderly fashion.
- Students will demonstrate one technique they have learned about germs to show how easily germs are spread, how to kill germs, how to wash hands properly, **or** how to be clean when handling food.

### **WV CSOs**

HE.5.1.04 describe different organisms (e.g., viruses, bacteria, protozoa, worms, fungi) that causes diseases.

HE.5.6.01 describe disease prevention plans and strategies (e.g., diet, exercise, hygiene, habits, universal precautions, medical checkups, immunizations).

HE.5.8.01 identify recommended and required vaccinations from birth through adulthood.

### **National Standards:**

**Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.

**Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

### **Technology Standards:**

#### **21st Century**

21 C.S.5-8.1 The student will access, analyze, manage, integrate, evaluate, and create information in a variety of forms using appropriate technology skills and communicate that information in an appropriate oral, written, or multimedia format.

21C.O.5-8.1.LS3 Student presents thoughts, ideas, and conceptual understanding efficiently, accurately and in a compelling manner and enhances the oral or written presentation through the use of technology.

## **ISTE**

**1. Creativity and Innovation-** Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

**3. Research and Information Fluency-**Students apply digital tools to gather, evaluate, and use information.

**4. Critical Thinking, Problem Solving, and Decision Making-** Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

### **Management Framework:**

**Introduction power point:** 10 min

**Kahoot Game:** 15 minutes

**Grouping/ Directions:** 3 minutes

**Power point Activity:** 27 minutes

**Closure:** 5 minutes

**Overall Time:** 60 minutes

### **Strategies**

- Teacher/student led discussion
- 
- Teacher/student demonstration
- 
- cooperative groups
- 
- Independent practice
- 

### **Differentiated Instruction/Adaptations/Interventions**

- **Learning disabilities:** Modified instruction- I will ask them simpler questions.
- 
- **Attention differences:** I will offer guided instruction to keep the students on task, focused, and interested in the lesson.
- 
- **Physical differences:** I will allow added time for the exercises.
- 
- **Sensory differences:** I will have a variety of ways to deliver the content. Powerpoint for visual learners, lecture/discussion for auditory learners, and hands on activities for kinesthetic learners.
- 

### **Procedures**

## **Introduction**

This part of lesson is a power point. (SEE ATTACHMENT)

- As I go through each power point I will be reading aloud and asking questions.
- 
- First, I will start with power point #1 and ask students to write down a list of ways to kill germs and beside of each write down how affective they think this method is.
- 
- I will continue to explain everything on the power point.
- 
- Then I will explain to them that we are going to play game called Kahoot and then they will work on their power point presentations.
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## **BODY AND TRANSITIONS**

- I will explain that this game will have all the information you have learned this week about germs.
- 
- You will play individually using your cell phone.
- I will give each student the website and code to play the game.
- This is a multiple choice game and you will have 30 seconds to answer.
- 
- When the time is up it will show the percentage of students who got it wrong and right.
- And the percentage of how many students picked that answer.
- 
- Next, I will tell the students once the game is over you will get with your group from the WebQuest.
- 
- Please sit beside your partners at the computers, so that you can work on your power points and demonstrations.
- 
- I expect each team to have at least one demonstration.
- If you did your homework you should already have some ideas.
- Remember this presentation will be for the kindergarten classes, so you can use it to help teach them about germs.
- You will also be presenting these power points in class next week.
- 
- When you are finished with your power points e-mail them to me for grading and feedback [tmiller10@wvstateu.edu](mailto:tmiller10@wvstateu.edu)
- If you do not complete your power points today we will finish them on Monday.

- Now, I will bring up the game on the smart board and we will play.
- Next, I will tell the students to get with their WebQuest team members and sit at the computers to start on their power points.
- When the students are sitting I will explain they can only use the websites, power points, games etc.. That I have provided this week.
- Each person in your team will create slides! Take turns.
- Work together to figure out the best images, videos, information, etc.. to put on the slides.
- Think about how you will begin your presentation.
- Who will speak first? Everyone will have a part of the presentation where they will speak.
- You may speak about the role you played and the slides you created, but all teams members will help each other.
- I will have all of this information on handouts to give to the students.
- When I am done talking a I will pass out the handouts and tell them to begin.

### CLOSURE

- I will be walking around the room as they work, so I can make sure everyone is on task and help if needed.
- Five minutes before it is time to go I will have the students to save their work and e-mail it to themselves and me, so they can work on it at home if they need to.
- Next, I will have them to close out of the computers, and then I will give a quick review of what they did today, the objective and what they are to finish as homework.
- 
- Today's objective is that you will be able to work as a team to organize and create a presentation based on the information you have learned this week about germs.
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### ASSESSMENT

**Diagnostic:** Their homework from the flip lesson and during the Jeopardy game. During the game I will be listening to the students in their groups to see who comes up with the correct answers.

**Formative:** I will be watching them as they work on their power points and watching and listening to what each student and group are saying and doing on their power points.

**Summative:** My summative assessment will be based on what the students put on their power points and what each student explain and demonstrates about germs during their presentations.

## Materials

- power point
- 
- Handout with links of the games.
- 
- Games that I have created.
- 
- Kahoot game already set up.
- 
- Cell phones for all students
- 
- Enough computers for the students to work on their power points.
- 
- Internet/wifi
- 
- The program for power point.
- 
- Items/objects for the students to use for their demonstrations. (Hand sanitizer, Clorox wipes, soap, foods, glow germ powder and lotion, UV lights, etc..)
- 

## Extended Activities

**If student finishes early:** student could not finish early in this lesson. If a group finished early I would have them to practice their presentations. Who will say what, when, and how.

**If lesson finishes early:** I will have all the groups to practice their presentations and bring up a few on the smart board to look at.

**If technology fails:** I will play the game anyway, but I would do it differently. Prior to this lesson I will print the questions and answers. I would have the students to get into groups and then just give each group a question if they get it wrong the next group will get a chance to answer. For the power points I would have the students to write out their plan on pieces of paper. They could do a sketch of what they want their power points to look like with construction paper, crayons, markers, glue etc..