Sentences for Social Wellness Mat

My friends and family are always there for me.

We moved to the south because the air is better for my lungs.

I do not have many friends because I don't understand differences in other cultures.

I can't live in the city because I feel trapped. That is why I live in the country.

I do not like where I live. It makes me feel unhappy.

I have many different kinds of friends.

I do not have any close friends. My family and I do not talk that much.
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<thead>
<tr>
<th>Examples of Social Wellness</th>
<th>Non-examples of Social Wellness</th>
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Name:____________________________________________________________

Social Wellness Scenario

Directions: Read the following scenario. Answer the question at the bottom of the page and then highlight parts of the scenario that supports your statement.

I have many different people in my life that support me. Even though my parents died a few years ago, I have an aunt and uncle who adopted me and love me like their own. I also have cousins my own age that love me and play with me. My school is great too! My teacher really supports me and helps me when I have problems. My community is diverse with many different cultures living together. I am able to get along with everyone because I respect their differences. Our community is clean and healthy. We are able to grow our foods without that many pesticides.

1. Is this scenario an example of social wellness?_______________

2. Remember HIGHLIGHT the parts in the scenario that supports your answer!
**Lesson Plan Health-Holocaust**  
**Day 3**

**Concept**  
Identify examples of mental health

**State Academic Standard**  
4.1.3-Identify examples of mental, emotional, social, and physical health during childhood.

**Objectives**  
Students will be able to identify examples of mental health.

**Prerequisite knowledge**  
3.1.3- Identify examples of mental, emotional, social, and physical health during childhood.

**Science Safety**  
Listen to all directions given.

**Materials List**  
Whiteboard and markers, baggies with examples, mat, highlighter, assessment worksheet

**Engagement**  
The teacher will review the idea of the “Dimensions of Wellness”. The teacher will ask the students, “What does the word mental mean?” The teacher will write the responses on the board. The teacher will then write the words “Mental Wellness” on the board. The teacher will ask the students, “What does mental wellness mean?” After listening to a few suggestions, the teacher will tell the students that mental wellness is “having the ability to keep a positive attitude about life in general. If you have mental wellness, you are able to look at things in a bright manner. You understand that you cannot be the best at everything and focus on what you are good at.”

The teacher will give the example of “Since I know my grades are not that great this quarter, I will have to ask questions help to understand and ask for more help.” The teacher will then ask the students for any other examples. The teacher will ask the students, “Why do you think it is important to be mentally well?” The teacher will tell the students that today the will be learning different aspects of mental health.

**Exploration**  
The teacher will place the students into groups of 2. The teacher will pass out baggies with examples of mental health and non-mental health and the corresponding mat. Students will have to place each example under the correct heading. The teacher will model how to do this activity by asking out loud “Is this an example of mental health or not?” The teacher will then place this example under the correct heading. The teacher will ask the students if they understand the process. If the teacher
needs to, he/she can repeat this until all students comprehend the activity. The teacher will then walk around the room checking for understanding and asking students, “Why did you place that answer under this heading?” The teacher will be asking for a justification to the placement of the examples.

**Explanation**

Once every pair is able to do the activity, the teacher will have the students go back to their seats. The teacher will ask the students “Which were examples of mental wellness?” and “Which were not examples of mental wellness?” The teacher will then ask, “How would you re-word the examples that did not have signs of mental wellness to having signs of mental wellness?” and “Do you think it would easy for the people in the work camps to have mental wellness? Why or Why not?”

**Evaluation**

The students will receive a scenario of another student in the school. They are to answer whether that student has mental wellness and to highlight parts of the scenario that support their statement.

**Gearing Up**

Students will evaluate their own mental wellness. They will look at the statements from the ENGAGEMENT section and ask themselves if they think like that. They must give examples whether they do have mental wellness or suggestions for themselves on how to improve it.

**Gearing Down**

If the class is having a hard time with the EVALUATION section, the whole class will complete that section together.
I know that I did not make the basketball team, but now I know what I need to work on so I can make the team next fall.

I wish I could draw flowers as nice as Suzy. It seems that I am just not good because I can’t draw flowers as good as she can.

Even though Dan is a better singer, I can play the drums fairly well.

I will never be able to understand this homework. I will never pass the fourth grade.

Even though I only have my mom for family, I am lucky to have one person who loves and cares about me.

I wish that my family could be different. I wish my family was more like my best friend Ben’s family.

Since I did not do well on the last spelling test, I am going to ask my teacher for some study tips.

I know that I am not the best pitcher, but I can hit the ball really well!
| Examples of Mental Wellness | Non-examples of Mental Wellness |
Name: __________________________________________________

Mental Wellness Assessment

Directions: Read the following scenario. Answer the question at the bottom of the page and then highlight parts of the scenario that supports your statement.

This week has been pretty hard for me. I received my grade for Science. I received a D+ in that subject. I guess I will have start asking for more help in that subject so I can improve my grade. My mom and dad yelled at me last night because my room was really messy. I realized that I need to take responsibility for my stuff. Then, my friend got his painting in the art fair next month at the school. I know that my strength is not in art, but I can sing really well. Even though this week has not been the best for me, I know that things will get better. I am grateful for what I have in my life.

1. Is this scenario and example of mental wellness?____________________

2. Remember HIGHLIGHT the parts in the scenario that supports your answer!
Concept
Identify examples of physical health

State Academic Standard
4.1.3 - Identify examples of mental, emotional, social, and physical health during childhood.

Objectives
Students will be able to sort examples of physical health.

Prerequisite knowledge
3.1.3 - Identify examples of mental, emotional, social, and physical health during childhood.

Science Safety
Listen to all directions given.

Materials List
Whiteboard and markers, baggies of examples, mat, assessment worksheet, highlighter

Engagement
The teacher will review the concept of “Dimensions of Wellness”. The teacher will ask the students, “What does the word physical mean?” The teacher will write the responses on the board. The teacher will then write the words “Physical Wellness” on the board. The teacher will ask the students, “What does physical wellness mean?” After listening to a few suggestions, the teacher will tell the students that physical wellness is “having a healthy lifestyle. You refrain from doing things that are unhealthy to your body. You go to the doctor, eat right, exercise, and follow safety rules.”

The teacher will give the example of “I go to the eye doctor every year to check my vision.” The teacher will then ask the students for any other examples. The teacher will ask the students, “Why do you think it is important to be physically well?” The teacher will tell the students that today the will be learning different aspects of physical health.

Exploration
The teacher will place the students into groups of 2. The teacher will pass out baggies with examples of physical health and non-physical health and the corresponding mat. Students will have to place each example under the correct section on the mat. The teacher will model how to do this activity by asking out loud “Is this an example of physical health or not?” The teacher will then place this example under the correct heading. The teacher will ask the students if they understand the process. If the teacher needs to, he/she can repeat this until all students comprehend the activity. The teacher will then walk around the room checking for understanding and asking students, “Why
did you place that answer under this heading?” The teacher will be asking for a justification to the placement of the examples.

**Explanation**

Once every pair is able to do the activity, the teacher will have the students go back to their seats. The teacher will ask the students “Which were examples of physical wellness?” and “Which examples did not show physical wellness?” The teacher will then ask, “How would you change the examples that did not have signs of physical wellness to having signs of physical wellness?” and “Do you think it would easy for the people in the work camps to have physical wellness? Why or Why not?”

**Evaluation**

The students will receive a scenario of another student in the school. They are to answer whether that student has physical wellness and to highlight parts of the scenario that support their statement.

**Gearing Up**

Students will evaluate their own physical wellness. They will look at the statements from the ENGAGEMENT section and ask themselves if they think like that. They must give examples whether they do have physical wellness or suggestions for themselves on how to improve it.

**Gearing Down**

If the class is having a hard time with the EVALUATION section, the whole class will complete that section together.
Sentences for Physical Wellness Mat

I go to the doctor when I am sick.

I eat any food that I want, especially sweets.

I wear my seat belt in the car at all times.

I like to play video games instead of running around outside.

I don’t wear a helmet and knee pads when I ride my bike.

I never go to the dentist.

I try to eat healthy everyday.

I wash my hands before I eat.
<table>
<thead>
<tr>
<th>Examples of Physical Wellness</th>
<th>Non-examples of Physical Wellness</th>
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Assessment of Physical Wellness

**Directions:** Read the following scenario. Answer the question at the bottom of the page and then highlight parts of the scenario that supports your statement.

I have been feeling really tired lately. I have been staying up playing my new computer game. I have been drinking a lot of caffeine to keep myself awake during the day. I don't eat breakfast in the morning because I overslept. At school, I normally buy chips and cookies for my lunch. I think I might have a cavity from all of the sugar, but I don't go to the dentist. I got hurt a few weeks ago. While riding my bike, I hit a pothole. I did not wear a bike helmet, knee pads, and elbow pads.

1. Is this scenario an example of physical wellness? 

2. Remember HIGHLIGHT the parts in the scenario that supports your answer!
Lesson Plan Health-Holocaust
Day 5

Concept
Identify examples of emotional health

State Academic Standard
4.1.3-Identify examples of mental, emotional, social, and physical health during childhood.

Objectives
Students will be able to sort examples of emotional health.

Prerequisite knowledge
3.1.3- Identify examples of mental, emotional, social, and physical health during childhood.

Science Safety
Listen to all directions given.

Materials List
Whiteboard and markers, baggies of examples, mats, assessment worksheet, highlighter

Engagement
The teacher should review the concept of “Dimensions of Wellness”. The teacher will ask the students, “What does the word emotional mean?” The teacher will write the responses on the board. The teacher will then write the words “Emotional Wellness” on the board. The teacher will ask the students, “What does emotional wellness mean?” After listening to a few suggestions, the teacher will tell the students that emotional wellness is “understanding and accepting our feelings. You are able to cope well with stress. You are able to express your emotions in a healthy way and manage them. You also have a support system of friends and family.”

The teacher will give the example of “I know that it is okay to laugh when something funny happens.” The teacher will then ask the students for any other examples. The teacher will ask the students, “Why do you think it is important to be emotionally well?” The teacher will tell the students that today the will be learning different aspects of emotional health.

Exploration
The teacher will place the students into groups of 2. The teacher will pass out baggies with examples of emotional health and non-emotional health and the corresponding mat. Students will have to place each example under the correct heading on the mat. The teacher will model how to do this activity by asking out loud “Is this an example of emotional health or not?” The teacher will then place this example under the correct heading. The teacher will ask the students if they understand the process. If the
teacher needs to, he/she can repeat this until all students comprehend the activity. The teacher will then walk around the room checking for understanding and asking students, “Why did you place that answer under this heading?” The teacher will be asking for a justification to the placement of the examples.

**Explanation**

Once every pair is able to complete the activity, the teacher will have the students go back to their seats. The teacher will ask the students “Which were examples of emotional wellness?” and “Which ones were not examples of emotional wellness?” The teacher will then ask, “How would you change the examples that did not have signs of emotional wellness to having signs of emotional wellness?” and “Do you think it would easy for the people in the work camps to have emotional wellness? Why or Why not?”

**Evaluation**

The students will receive a scenario of another student in the school. They are to answer whether that student has emotional wellness and to highlight parts of the scenario that support their statement.

**Gearing Up**

Students will evaluate their own emotional wellness. They will look at the statements from the ENGAGEMENT section and ask themselves if they think like that. They must give examples whether they do have emotional wellness or suggestions for themselves on how to improve it.

**Gearing Down**

If the class is having a hard time with the EVALUATION section, the whole class will complete that section together.
Sentences for Emotional Wellness Mat

I understand that it is okay to cry when I am sad.

I don’t know how I can handle the stress of everyday life!

I am very close to my family and I can tell them anything.

I don’t understand why I am feeling sad today.

I don’t like to tell people how I am feeling.

I know that my friends are very close to me and support me everyday.

I know that I have to calm down when I am angry so I do not say something I will regret.

I am not that close to my family and I feel alone most of the time.
| Examples of Emotional Wellness | Non-examples of Emotional Wellness |
Emotional Wellness Assessment

Directions: Read the following scenario. Answer the question at the bottom of the page and then highlight parts of the scenario that supports your statement.

This week has been very interesting. I found out that my cat has cancer. I don’t like to talk about. I refuse to cry or be upset about it. My family does not like to talk about these kinds of things either. School is very stressful this quarter. I have quite a few projects due this week. I don’t know what I am going to do! I think I might just give up. I should probably ask for help, but I don’t like to do that. I would rather try to work it out on my own.

1. Is this scenario and example of emotional wellness? ________________

2. Remember HIGHLIGHT the parts in the scenario that supports your answer!
Lesson Plan Science-Holocaust
Day 6

Concept
Identify how germs keep the body from working and how they are spread.

State Academic Standard
4.4.10-Explain that if germs are able to get inside the body, they may keep it from working properly. Understand that for defense against germs, the human body has tears, saliva, skin, some blood cells, and stomach secretions. Also note that a healthy body can fight most germs that invade it. Recognize, however, that there are some germs that interfere with the body’s defenses.

Objectives
Students will be able to construct and implement how germs keep the body from functioning properly and how they are spread.

Prerequisite knowledge
3.4.9 Explain that some diseases are caused by germs and some are not. Note that diseases caused by germs may be spread to other people. Also understand that washing hands with soap and water reduces the number of germs that can get into the body or that can be passed on to other people.

Science Safety
Listen to all directions given.

Materials List
Whiteboard, markers, sheets of paper (4 per group), pencils, bowl (one for each group), flour, observation sheets, directions, worksheets, Venn Diagram poster

Engagement
At the beginning of the lesson, the teacher will ask the students, “Have you ever been sick with a cold or the flu?”. The teacher will ask if the students know what caused them to get sick. The teacher will write the word “Germ” on the board. The teacher will ask the students, “What is a germ?” The teacher will explain that germs are tiny organisms that invade the body and can make a person sick. Germs sneak inside the body to eat and live in it. The teacher will then ask if the students have heard the terms “Bacteria and Viruses”. The teacher will pull out a poster with a Venn Diagram about bacteria and viruses. The teacher will explain that both of these types of germs multiply in your body and invade the body. Bacteria will kill the surrounding body cells with poisons while viruses take control of the healthy body cells and change the cell into a virus making machine. It changes the function of that cell from a healthy cell to producing multiple virus filled cells. The teacher will have filled in the Venn Diagram through the discussion and asked students where to place the information on the diagram.
The teacher will then explain that these germs are contagious. The teacher will ask “Do you know what contagious means?” The teacher will then explain that many germs can be passed to person to person.

**Exploration**

The teacher will now instruct the class that today they will be exploring how germs are spread from person to person. The teacher will have four different pieces of paper for each group. Students will be grouped into groups of 4. Each sheet of paper will be lettered from A to D. The teacher will have a bowl of flour for each group. The teacher will model to the students how to do the following activity. The teacher will place his/her hand in the bowl of flour and shake the hand of another student. The teacher will then place the student’s hand dipped in flour on sheet A. The second person will then shake the hand of a third person in the group and place the soiled hand on sheet B. The third person should shake hands with the fourth person in the group and placed their soiled hand on sheet C. The last person should just place their hand on sheet D. The teacher will tell the students that the flour is representing contagious disease that can be passed from person to person.

The teacher will call one student from the group to grab the materials and an observation sheet. The students will be instructed to write down their observations under each step.

**Explanation**

The teacher will direct the students to go back to their seats when the activity is finished. The teacher will ask comprehension questions such as, “What did you observe?”, “What can you infer(come up with) from the model and how germs are spread from person to person?”, “what are some other ways to prevent the spread of diseases?”, and “What types of things could you do to prevent the spread of disease?”.

**Evaluation**

Students will now receive a worksheet with the questions from the science lesson. Students should receive an 80% or higher to fully comprehend the information.

**Gearing Up**

Students will create their own quiz to give to the other students in the class. They could consist from asking what jobs require knowing about germs to how do you prevent the spread of germs.

**Gearing Down**

If the class is having a hard time with the assessment worksheet, the entire class will complete the EVALUATION part together.
Observation Sheet for Germs

Directions: The first person will place his/her hand in the bowl of flour and shake the hand of another student. The first student will then place the hand dipped in flour on sheet A. The second person will then shake the hand of a third person in the group and place the soiled hand on sheet B. The third person should shake hands with the fourth person in the group and placed their soiled hand on sheet C. The last person should just place their hand on sheet D. Draw what each sheet looks like next to the letter.

<table>
<thead>
<tr>
<th>Sheet</th>
<th>Drawing of Observation</th>
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<tr>
<td>Sheet A</td>
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</tr>
<tr>
<td>Sheet B</td>
<td></td>
</tr>
<tr>
<td>Sheet C</td>
<td></td>
</tr>
<tr>
<td>Sheet D</td>
<td></td>
</tr>
</tbody>
</table>
1. Compare and Contrast the Differences between Bacteria and Viruses

2. In the experiment that we did in class, how could we have prevented the germs (flour) from spreading to each person?

3. Why is it important to prevent the spread of germs?

4. Why do you think it is important that doctors wash their hands after seeing each patient?
Lesson Plan Science-Holocaust
Day 7

Concept
Identify how the Body’s Defenses against germs

State Academic Standard
4.4.10-Explain that if germs are able to get inside the body, they may keep it from working properly. Understand that for defense against germs, the human body has tears, saliva, skin, some blood cells, and stomach secretions. Also note that a healthy body can fight most germs that invade it. Recognize, however, that there are some germs that interfere with the body’s defenses.

Objectives
Students will be able to identify how the human body protects itself against germs.

Prerequisite knowledge
3.4.9 Explain that some diseases are caused by germs and some are not. Note that diseases caused by germs may be spread to other people. Also understand that washing hands with soap and water reduces the number of germs that can get into the body or that can be passed on to other people.

Science Safety
Listen to all directions given.

Materials List
Rubric, construction paper for organizer, model for class to look at, pencil, pre-writing worksheet, Science textbook, crayons/color pencils/markers, KWL chart, assessment worksheet

Engagement
The teacher will pull out a KWL Chart. The teacher will ask students, “What do you know about our body’s defenses?” The teacher will pass out post-it notes for the children to write their answers on. The teacher will call on a few students to recite their statements to the entire class and place their questions under the “What We Know” section of the chart. The teacher will then ask, “What do you want to learn about our body’s defenses?” The teacher will then have the students write their questions on the post-it notes and call on a few to share their questions with the rest of the class. The teacher will have the students place their questions under the heading “What We Want to Learn”.

The teacher will ask students, “Do you know what germs are?”. The teacher will remind the students of the previous lesson. Many of these germs are microorganisms. The teacher will then ask students, “Why are they called microorganisms?”. The teacher will then explain that some of these germs do not cause any harm to the body, while others create diseases that make your body sick.
The teacher will explain that today the students will learn about their body’s natural defenses to these germs and microorganisms. The teacher will instruct the students to open their text books to page 156.

**Exploration**

The teacher will explain that today, the students will be making graphic organizers about the different natural defenses our human bodies have to protect ourselves against germs and microorganisms. The students be given a model made by the teacher to show how to dived the paper and what needs to be in each square (Name, Title: Body’s Natural Defenses, Skin-how it protects and picture, Tears-how it protects and picture, Mouth-how it protects and picture, Stomach-how it protects and picture, Throat/Nose/Lung-how it protects and picture).

The students will receive a worksheet to do their pre-work on (finding the definitions and spelling) before given the construction paper to make their organizers. When the teacher checks off on the pre-writing worksheet, the students will be able to start working on their graphic organizers. The teacher will then give the students a rubric to follow on how the graphic organizer will be graded.

**Explanation**

Once the students finish creating their graphic organizers, the teacher will ask some basic questions such as, “What do the lungs do to prevent germs from entering”, “What does the nose do to prevent germs from entering?”, and “What does the skin do to prevent germs from entering?”. The teacher will then ask, “What will happen if these defense do not work?”.

**Evaluation**

Students will be graded on the rubric for the graphic organizer. They will be graded on completeness, neatness, correct information present, completed pre-writing worksheet and turned it in. Students will also receive an assessment worksheet over the body’s defenses. The students should receive an 80% on the worksheet to show comprehension.

**Gearing Up**

Students will create their own quiz to give to the other students in the class. They could consist from asking what each part of the body in the graphic organizer does to help prevent germs invading the body.

**Gearing Down**

If the class is having a hard time finding all of the information for the graphic organizer, the entire class will find the information together, but create their own organizers.
Lesson 4

How does the body defend itself?

*The human body has many ways to prevent disease-causing organisms from getting into tissues.*

**Microorganisms in Your Body**

When you get a cut or scrape, you should clean it and cover it with a bandage so the wound will not get infected. You get an infection when disease-causing organisms enter, live in, and multiply within your body. Most organisms that cause diseases are so small that they can be seen only with a microscope. That's why they are called microorganisms.

Not all microorganisms that live in your body cause disease. In fact, many microorganisms are in your body all the time and cause no problems. Microorganisms are on your skin, in your mouth, and in your digestive system. Most of them are harmless as long as they stay where they belong.

**Your Body’s Defenses**

Your body uses special cells, tissues, organs, and chemicals to keep disease-causing microorganisms from causing harm. Your skin, breathing passages, mouth, and stomach are just some of your body’s defenses against invading microorganisms.

Your skin is your body’s first defense. Your skin is more than a layer of physical protection. It also provides chemical protection. Acids in your sweat kill many microorganisms that can cause disease.

Your body has other special means of protection. For example, your tears wash away disease-causing microorganisms that touch your eyes. Your tears contain chemicals that kill certain microorganisms. In your mouth, mucus and saliva can trap and then wash away microorganisms that can cause disease.
Names: __________________________________________________ 

Directions: This is the rubric that you will be graded with. Follow this rubric and you should receive a high grade. Remember to turn in your pre-writing worksheet for points!!!

Rubric for Body Defenses Graphic Organizer

<table>
<thead>
<tr>
<th></th>
<th>Excellent (4)</th>
<th>Above Average (3)</th>
<th>Average (2)</th>
<th>Poor (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness</td>
<td>The graphic organizer is complete. Name, Name, Title, and each defense are located on the organizer.</td>
<td>1-2 things are missing on the organizer.</td>
<td>3-4 things are missing on the organizer.</td>
<td>5 or more things are missing on the organizer</td>
</tr>
<tr>
<td>Neatness</td>
<td>Lots of color and easy to read</td>
<td>Contains color but hard to read</td>
<td>Easy to read but no color</td>
<td>No color and hard to read</td>
</tr>
<tr>
<td>Content</td>
<td>All content (information) is correct on the organizer includes spelling and grammar.</td>
<td>Some content (information) is correct on the organizer includes spelling and grammar.</td>
<td>Majority of content (information) is incorrect on the organizer includes spelling and grammar.</td>
<td></td>
</tr>
<tr>
<td>Pre-writing Worksheet</td>
<td>Turned in.</td>
<td></td>
<td></td>
<td>Not turned in.</td>
</tr>
</tbody>
</table>

Total: ____/16
Pre-Writing Worksheet

Directions: Fill out this Pre-writing worksheet. Raise your hand when you are finished and the teacher will check your information. When everything is correct, you may begin on the organizer. Remember to keep this and turn it in with the organizer and rubric.

First Defense: ____________________________________________
How it protects: __________________________________________

Second Defense: __________________________________________
How it protects: __________________________________________

Third Defense: ___________________________________________
How it protects: __________________________________________

Fourth Defense: __________________________________________
How it protects: __________________________________________

Fifth Defense: ____________________________________________
How it protects: __________________________________________

Remember!!!!!!!!!!! On the organizer, write your name in one box, the title in another, the five defense, how they protect, and a picture in the five other boxes.
Name: __________________________________

Our Body's Defenses Assessment

1. How does the mouth protect the body against germs and microorganisms?

_________________________________________________________________________

_________________________________________________________________________

2. Acids in your _________________ kills any germs that touch it.

3. How does the mouth protect the body against germs and microorganisms?

_________________________________________________________________________

_________________________________________________________________________

4. Your skin provides the body with two types of protection:

_________________________ protection and ____________________________
protection.

5. How do your tears protect your body from invading germs and microorganisms?

_________________________________________________________________________

_________________________________________________________________________
Concept
Identify how the Immune system works

State Academic Standard
4.4.10-Explain that if germs are able to get inside the body, they may keep it from working properly. Understand that for defense against germs, the human body has tears, saliva, skin, some blood cells, and stomach secretions. Also note that a healthy body can fight most germs that invade it. Recognize, however, that there are some germs that interfere with the body’s defenses.

Objectives
Students will be able to identify how the immune system works in the human body.

Prerequisite knowledge
3.4.9 Explain that some diseases are caused by germs and some are not. Note that diseases caused by germs may be spread to other people. Also understand that washing hands with soap and water reduces the number of germs that can get into the body or that can be passed on to other people.

Science Safety
Listen to all directions given.

Materials List
Computer, Nametags of the cells in the immune system, sticky notes, worksheets, glue, scissors, construction paper, pencils

Engagement
At the beginning of the lesson, the teacher will review key terms from the previous lesson. The teacher will ask, “What is a microorganism?” and “What are pathogens?” The teacher will explain that the immune system helps protect our body from these things. The teacher will ask students, “Have you heard of this term before?” The teacher will define the immune systems as “the organs in your body that defends against disease” (taken from the science textbook). The teacher will explain there are a few steps which work in a chronological order for the immune system to stop diseases in the body.

The teacher will show a PowerPoint presentation with the types of cells and the job each contributes to the immune system. The teacher will pass out a copy of the presentation with parts of the information missing where students will have to fill in the rest of the information. The following will be on the PowerPoint Presentation: Helper T cells recognize the foreign body (microorganism) and have the B cells make the antibodies. These antibodies then latch onto the invading microorganism and tag them to be destroyed. Killer T cells then attach to the microorganisms that were tagged by the B
cells. Suppressor T cells stop the production of antibodies when the immune system stopped the invasion.

Exploration
The teacher will now instruct the class that today they will become the immune system. Each group will have 5 members to represent the 5 parts of the immune system (Helper T cells, Microorganism, B cell, Killer T cell, and Suppressor T cell). The teacher will model to the class to do the activity.

The teacher will pick four volunteers to come to the front of the classroom to help with the modeling. The teacher will place a sign that has the person’s immune system part over their neck (like a necklace). The teacher will model that the Helper T cell will tell the B-Cell to tag the microorganism. The B Cell will then have to place a sticky note on the person playing the microorganism. The Killer T Cell will then remove the sticky note from the microorganism and the Suppressor T cell will move the Killer T cell out of the way.

After the modeling the teacher will instruct the students that they are to participate in each role. The teacher will pass out a bag with all of the signs for the activity and a pad of sticky notes. The teacher will tell the students to begin and walk around the role to make sure all students are participating and understanding the concepts.

Explanation
The teacher will direct the students to go back to their seats when the activity is finished. The teacher will ask comprehension questions such as, “What do the Killer T cells do?” and “How are the B cells and microorganisms related in relation to the Immune System?” The teacher will then ask questions such as, “Why do you think it is important to learn about how the immune system works?” and “What kinds of jobs do you think would require this information?”

Evaluation
Students will now receive a worksheet with the names of the five different cells that are discussed in this science lesson. The students will have to cut out the different steps in how the body fight the microorganism (from the role playing activity) and paste them in the correct order. The students will have to have the steps in the right order and glued on the construction paper to receive full points.

Gearing Up
Students will create their own quiz to give to the other students in the class. They could consist from asking what each cell does in the immune system to the names of the different cells.

Gearing Down
If the class is having a hard time labeling the steps of the immune system, the entire class will complete the EVALUATION part together.
Helper T cells
Microorganism
B cell
Killer T cell
Suppressor T cell
Suppressor T cells stop the production of antibodies when the immune system stopped the invasion.

Helper T cells recognize the foreign body (microorganism).

Killer T cells then attach to the microorganisms that were tagged by the B cells.

B cells make the antibodies. These antibodies then latch onto the invading microorganism and tag them to be destroyed.
How the Immune System Works

B Cells
- B cells make the antibodies
- These antibodies then latch onto the invading microorganism and tag them to be destroyed

Killer T Cells
- Killer T cells then attach to the microorganisms that were tagged by the B cells

Suppressor T Cells
- Suppressor T cells stop the production of antibodies when the immune system stopped the invasion

Helper T-Cells
- Helper T cells recognize the foreign body (microorganism)
- White blood cells
Lesson Plan Science-Holocaust
Day 9

Concept
Identify different vaccinations

State Academic Standard
4.4.11-Explain that there are some diseases that human being catch only once. Explain that there are many diseases that can be prevented by vaccinations, so that people do not catch them even once.

Objectives
Students will be able to identify important facts about certain vaccinations.

Prerequisite knowledge
3.4.9 Explain that some diseases are caused by germs and some are not. Note that diseases caused by germs may be spread to other people. Also understand that washing hands with soap and water reduces the number of germs that can get into the body or that can be passed on to other people.

Science Safety
Listen to all directions given.

Materials List
Poster, markers, pencils, rubric, whiteboard, markers, information packets on vaccines

Engagement
At the beginning of the lesson, the teacher will ask the students, “When have you ever felt sick?” and “What were you sick with?” The teacher will then ask, “Were you sick with that a few times or only once?” The teacher will then tell the students that there are few diseases that you can only catch once, some that you can catch multiple times, and ones that you have never caught.

One example of a disease that you can catch only once is the chicken pox. The teacher will ask students if they have had the chicken pox. The teacher will then explain that the common cold, strep throat, and pink eye are examples of diseases that you can catch multiple times. The teacher will ask, “How many students have had these more than one time?” The diseases that you get more than once have many different types of that disease (such as the common cold).

The teacher will then explain that there are some diseases that you have never caught because of vaccinations. The teacher will ask the students, “Have you ever had a vaccination before?” The teacher will write the word “Vaccination” on the board and define it as type of medicine (usually a shot) that contains medicine that creates antibodies against that disease. You are able to take the vaccine and make the antibody
without ever being infected. Many diseases you have had vaccines for were done when you were a baby.

**Exploration**

The teacher will now instruct the class that today they will be making posters about five major types of vaccinations used in the United States. The teacher will instruct the students that they will receive hand out from the CDC website to use to get all of their information. They will receive a rubric that has exactly what needs to be on the poster in order to receive all of the points. The teacher will first pass out the rubric and the information to the five groups of students. The teacher will tell then students that they must summarize the information on each of the section of the information packets to place on the poster including: The definition of the disease of the vaccination, why there is a need for the vaccination and when, who should wait/not get the vaccine, and risks of vaccination. The teacher will have created a model of the poster using a disease not being done by the students.

The teacher will then pass out a piece of poster board to each group and a box of supplies including pencils and markers. Students will be directed to do their work first in pencil and then raise their hand to get their worked checked by the teacher. Once the work is checked, the students will be able to use markers on the poster.

**Explanation**

The teacher will direct the students to go back to their seats when they are done making the poster. The teacher will have each group come to the front of the room to present their poster. The teacher will ask, “Why is it important to get these vaccinations?” and “What would happen if we do not take these vaccinations?”

**Evaluation**

Students will be evaluated on the posters that they made. The criteria will include Content, Neatness, Presentation, Correctness, and Group Behavior. Each section will be worth four points.

**Gearing Up**

Students will create their own quiz to give to the other students in the class. They will include information from their poster to quiz students in other groups.

**Gearing Down**

If the class is having a hard time with creating the poster, the whole class will make the poster in separate groups but with the same information.
Name: ____________________________________

Directions: The following is a rubric for the Vaccination poster. Use the example at the front of the room to help create your poster. The rubric is a breakdown of how to receive all points. Make sure that you include everything to receive all of the points. Remember to write everything in pencil first. Raise your hand to get in checked before using marker!!!

<table>
<thead>
<tr>
<th></th>
<th>Excellent (4)</th>
<th>Above Average (3)</th>
<th>Average (2)</th>
<th>Poor (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Behavior</td>
<td>Members got along and were able to complete work together</td>
<td>Most members got along, work was completed but not by entire group</td>
<td>Group was unable to work together at all; unable to complete assignment together</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>All information was present</td>
<td>4 events are placed on timeline</td>
<td>3 events are placed on timeline</td>
<td>0-2 events are placed on timeline</td>
</tr>
<tr>
<td>Correctness</td>
<td>All information is present</td>
<td>One piece of information is missing</td>
<td>Two pieces of information is missing</td>
<td>Three or more pieces of information is missing</td>
</tr>
<tr>
<td>Neatness</td>
<td>Lots of color and easy to read</td>
<td>Contains color but hard to read</td>
<td>Easy to read but no color</td>
<td>No color and hard to read</td>
</tr>
<tr>
<td>Presentation</td>
<td>Presentation was clear and to the point, groups went over their entire results</td>
<td>Presentation was clear and to the point, but groups did not over their entire results</td>
<td>Presentation was not clear and to the point, and groups did not over their entire results</td>
<td></td>
</tr>
</tbody>
</table>

Total:_______/20
Polio is a disease caused by a virus. It enters a child's (or adult's) body through the mouth. Sometimes it does not cause serious illness. But sometimes it causes paralysis (can't move arm or leg). It can kill people who get it, usually by paralyzing the muscles that help them breathe.

Polio used to be very common in the United States. It paralyzed and killed thousands of people a year before we had a vaccine for it.

Inactivated Polio Vaccine (IPV) can prevent polio.

History: A 1916 polio epidemic in the United States killed 6,000 people and paralyzed 27,000 more. In the early 1950's there were more than 20,000 cases of polio each year. Polio vaccination was begun in 1955. By 1960 the number of cases had dropped to about 3,000, and by 1979 there were only about 10. The success of polio vaccination in the U.S. and other countries sparked a world-wide effort to eliminate polio.

Today: No wild polio has been reported in the United States for over 20 years. But the disease is still common in some parts of the world. It would only take one case of polio from another country to bring the disease back if we were not protected by vaccine. If the effort to eliminate the disease from the world is successful, some day we won't need polio vaccine. Until then, we need to keep getting our children vaccinated.

IPV is a shot, given in the leg or arm, depending on age. Polio vaccine may be given at the same time as other vaccines.

Children
Most people should get polio vaccine when they are children. Children get 4 doses of IPV, at these ages:

- A dose at 2 months
- A dose at 6-18 months
- A dose at 4 months
- A booster dose at 4-6 years

Adults
Most adults do not need polio vaccine because they were already vaccinated as children. But three groups of adults are at higher risk and should consider polio vaccination:

1. people traveling to areas of the world where polio is common,
2. laboratory workers who might handle polio virus, and
3. health care workers treating patients who could have polio.

Adults in these three groups who have never been vaccinated against polio should get 3 doses of IPV:

- The first dose at any time,
- The second dose 1 to 2 months later,
- The third dose 6 to 12 months after the second.

Adults in these three groups who have had 1 or 2 doses of polio vaccine in the past should get the remaining 1 or 2 doses. It doesn’t matter how long it has been since the earlier dose(s).

Oral Polio Vaccine: No longer recommended

There are two kinds of polio vaccine: IPV, which is the shot recommended in the United States today, and a live, oral polio vaccine (OPV), which is drops that are swallowed.

Until recently OPV was recommended for most children in the United States. OPV helped us rid the country of polio, and it is still used in many parts of the world.

Both vaccines give immunity to polio, but OPV is better at keeping the disease from spreading to other people. However, for a few people (about one in 2.4 million), OPV actually causes polio. Since the risk of getting polio in the United States is now extremely low, experts believe that using oral polio vaccine is no longer worth the slight risk, except in limited circumstances which your doctor can describe. The polio shot (IPV) does not cause polio. If you or your child will be getting OPV, ask for a copy of the OPV supplemental Vaccine Information Statement.

Adults in these three groups who have had 3 or more doses of polio vaccine (either IPV or OPV) in the past may get a booster dose of IPV.

Ask your health care provider for more information.
Some people should not get IPV or should wait.

These people should not get IPV:

- Anyone who has ever had a life-threatening allergic reaction to the antibiotics neomycin, streptomycin or polymyxin B should not get the polio shot.
- Anyone who has a severe allergic reaction to a polio shot should not get another one.

These people should wait:

- Anyone who is moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting polio vaccine. People with minor illnesses, such as a cold, may be vaccinated.

Ask your health care provider for more information.

What are the risks from IPV?

Some people who get IPV get a sore spot where the shot was given. The vaccine used today has never been known to cause any serious problems, and most people don't have any problems at all with it.

However, a vaccine, like any medicine, could cause serious problems, such as a severe allergic reaction. The risk of a polio shot causing serious harm, or death, is extremely small.

What if there is a serious reaction?

What should I look for?
Look for any unusual condition, such as a serious allergic reaction, high fever, or unusual behavior.

If a serious allergic reaction occurred, it would happen within a few minutes to a few hours after the shot. Signs of a serious allergic reaction can include difficulty breathing, weakness, hoarseness or wheezing, a fast heart beat, hives, dizziness, paleness, or swelling of the throat.

What should I do?
- Call a doctor, or get the person to a doctor right away.

- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.

Or you can file this report through the VAERS website at www.vaers.org, or by calling 1-800-822-7967.

VAERS does not provide medical advice.

Reporting reactions helps experts learn about possible problems with vaccines.

The National Vaccine Injury Compensation Program

In the rare event that you or your child has a serious reaction to a vaccine, there is a federal program that can help pay for the care of those who have been harmed.

For details about the National Vaccine Injury Compensation Program, call 1-800-338-2382 or visit the program’s website at http://www.hrsa.gov/osp/vicp

How can I learn more?

- Ask your doctor or nurse. They can give you the vaccine package insert or suggest other sources of information.

- Call your local or state health department’s immunization program.

- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO)
  - Visit the National Immunization Program’s website at http://www.cdc.gov/nip
CHICKENPOX VACCINE

WHAT YOU NEED TO KNOW

1 Why get vaccinated?

Chickenpox (also called varicella) is a common childhood disease. It is usually mild, but it can be serious, especially in young infants and adults.

- The chickenpox virus can be spread from person to person through the air, or by contact with fluid from chickenpox blisters.
- It causes a rash, itching, fever, and tiredness.
- It can lead to severe skin infection, scars, pneumonia, brain damage, or death.
- A person who has had chickenpox can get a painful rash called shingles years later.
- About 12,000 people are hospitalized for chickenpox each year in the United States.
- About 100 people die each year in the United States as a result of chickenpox.

Chickenpox vaccine can prevent chickenpox.

Most people who get chickenpox vaccine will not get chickenpox. But if someone who has been vaccinated does get chickenpox, it is usually very mild. They will have fewer spots, are less likely to have a fever, and will recover faster.

2 Who should get chickenpox vaccine and when?

Children should get 1 dose of chickenpox vaccine between 12 and 18 months of age, or at any age after that if they have never had chickenpox.

People who do not get the vaccine until 13 years of age or older should get 2 doses, 4-8 weeks apart.

Ask your doctor or nurse for details.

Chickenpox vaccine may be given at the same time as other vaccines.

3 Some people should not get chickenpox vaccine or should wait

- People should not get chickenpox vaccine if they have ever had a life-threatening allergic reaction to gelatin, the antibiotic neomycin, or (for those needing a second dose) a previous dose of chickenpox vaccine.
- People who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting chickenpox vaccine.
- Pregnant women should wait to get chickenpox vaccine until after they have given birth. Women should not get pregnant for 1 month after getting chickenpox vaccine.
- Some people should check with their doctor about whether they should get chickenpox vaccine, including anyone who:
  - Has HIV/AIDS or another disease that affects the immune system
  - Is being treated with drugs that affect the immune system, such as steroids, for 2 weeks or longer
  - Has any kind of cancer
  - Is taking cancer treatment with x-rays or drugs
- People who recently had a transfusion or were given other blood products should ask their doctor when they may get chickenpox vaccine.

Ask your doctor or nurse for more information.
What are the risks from chickenpox vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of chickenpox vaccine causing serious harm, or death, is extremely small.

Getting chickenpox vaccine is much safer than getting chickenpox disease.

Most people who get chickenpox vaccine do not have any problems with it.

Mild Problems
- Soreness or swelling where the shot was given (about 1 out of 5 children and up to 1 out of 3 adolescents and adults)
- Fever (1 person out of 10, or less)
- Mild rash, up to a month after vaccination (1 person out of 20, or less). It is possible for these people to infect other members of their household, but this is extremely rare.

Moderate Problems
- Seizure (jerking or staring) caused by fever (less than 1 person out of 1,000).

Severe Problems
- Pneumonia (very rare)
Other serious problems, including severe brain reactions and low blood count, have been reported after chickenpox vaccination. These happen so rarely experts cannot tell whether they are caused by the vaccine or not. If they are, it is extremely rare.

What if there is a moderate or severe reaction?

What should I look for?
Any unusual condition, such as a serious allergic reaction, high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness within a few minutes to a few hours after the shot. A high fever or seizure, if it occurs, would happen 1 to 6 weeks after the shot.

What should I do?
- Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.
Or you can file this report through the VAERS website at www.vaers.org, or by calling 1-800-822-7967.

VAERS does not provide medical advice

The National Vaccine Injury Compensation Program

In the rare event that you or your child has a serious reaction to a vaccine, a federal program has been created to help you pay for the care of those who have been harmed.

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How can I learn more?
- Ask your doctor or nurse. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department’s immunization program.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO)
  - Visit the National Immunization Program’s website at http://www.cdc.gov/nip

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
National Immunization Program

Vaccine Information Statement
Varicella (12/16/98) 42 U.S.C. § 300aa-26
INFLUENZA VACCINE
WHAT YOU NEED TO KNOW

1 Why get vaccinated?

Influenza ("flu") is a very contagious disease.

It is caused by the influenza virus, which spreads from infected persons to the nose or throat of others.

Other illnesses can have the same symptoms and are often mistaken for influenza. But only an illness caused by the influenza virus is really influenza.

Anyone can get influenza. For most people, it lasts only a few days. It can cause:
- fever
- sore throat
- chills
- fatigue
- cough
- headache
- muscle aches

Some people get much sicker. Influenza can lead to pneumonia and can be dangerous for people with heart or breathing conditions. It can cause high fever and seizures in children. Influenza kills about 36,000 people each year in the United States, mostly among the elderly.

Influenza vaccine can prevent influenza.

2 Inactivated Influenza vaccine

There are two types of influenza vaccine:

An inactivated (killed) vaccine, given as a shot, has been used in the United States for many years.

A live, weakened vaccine was licensed in 2003. It is sprayed into the nostrils. This vaccine is described in a separate Vaccine Information Statement.

Influenza viruses are constantly changing. Therefore, influenza vaccines are updated every year, and an annual vaccination is recommended.

For most people influenza vaccine prevents serious illness caused by the influenza virus. It will not prevent "influenza-like" illnesses caused by other viruses.

It takes about 2 weeks for protection to develop after the shot, and protection can last up to a year.

Inactivated influenza vaccine may be given at the same time as other vaccines, including pneumococcal vaccine.

Some inactivated influenza vaccine contains thimerosal, a preservative that contains mercury. Some people believe thimerosal may be related to developmental problems in children. In 2004 the Institute of Medicine published a report concluding that, based on scientific studies, there is no evidence of such a relationship. If you are concerned about thimerosal, ask your doctor about thimerosal-free influenza vaccine.

3 Who should get inactivated influenza vaccine?

Influenza vaccine can be given to people 6 months of age and older. It is recommended for people who are at risk of serious influenza or its complications, and for people who can spread influenza to those at high risk (including all household members):

People at high risk for complications from influenza:

- All children 6-23 months of age.
- People 65 years of age and older.
- Residents of long-term care facilities housing persons with chronic medical conditions.
- People who have long-term health problems with:
  - heart disease
  - kidney disease
  - lung disease
  - metabolic disease, such as diabetes
  - asthma
  - anemia, and other blood disorders
- People with certain muscle or nerve disorders (such as seizure disorders or severe cerebral palsy) that can lead to breathing or swallowing problems.
- People with a weakened immune system due to:
  - HIV/AIDS or other diseases affecting the immune system
  - long-term treatment with drugs such as steroids
  - cancer treatment with x-rays or drugs
- People 6 months to 18 years of age on long-term aspirin treatment (these people could develop Reye Syndrome if they got influenza).
- Women who will be pregnant during influenza season.

People who can spread influenza to those at high risk:

- Household contacts and out-of-home caretakers of infants from 0-23 months of age.
- Physicians, nurses, family members, or anyone else in close contact with people at risk of serious influenza.

Influenza vaccine is also recommended for adults 50-64 years of age and anyone else who wants to reduce their chance of catching influenza.

An annual flu shot should be considered for:

- People who provide essential community services.
- People living in dormitories or under other crowded conditions, to prevent outbreaks.
- People at high risk of influenza complications who travel to the Southern hemisphere between April and September, or to the tropics or in organized tourist groups at any time.
4 When should I get influenza vaccine?

The best time to get influenza vaccine is in October or November.

Influenza season usually peaks in February, but it can peak any time from November through May. So getting the vaccine in December, or even later, can be beneficial in most years.

Some people should get their flu shot in October or earlier:
- People 50 years of age and older,
- Younger people at high risk from influenza and its complications (including children 6 through 23 months of age),
- Household contacts of people at high risk,
- Healthcare workers, and
- Children younger than 9 years of age getting influenza vaccine for the first time.

Most people need one flu shot each year. Children younger than 9 years of age getting influenza vaccine for the first time should get 2 doses, given at least one month apart.

If these problems occur, they usually begin soon after the shot and last 1-2 days.

Severe problems:
- Life-threatening allergic reactions from vaccines are very rare. If they do occur, it is within a few minutes to a few hours after the shot.
- In 1976, a certain type of influenza (swine flu) vaccine was associated with Guillain-Barré Syndrome (GBS). Since then, flu vaccines have not been clearly linked to GBS. However, if there is a risk of GBS from current flu vaccines, it would be no more than 1 or 2 cases per million people vaccinated. This is much lower than the risk of severe influenza, which can be prevented by vaccination.

5 Some people should talk with a doctor before getting influenza vaccine

Some people should not get inactivated influenza vaccine or should wait before getting it.

- Tell your doctor if you have any severe (life-threatening) allergies. Allergic reactions to influenza vaccine are rare.
  - Influenza vaccine virus is grown in eggs. People with a severe egg allergy should not get the vaccine.
  - A severe allergy to any vaccine component is also a reason to not get the vaccine.
  - If you have had a severe reaction after a previous dose of influenza vaccine, tell your doctor.

- Tell your doctor if you ever had Guillain-Barré Syndrome (a severe paralytic illness, also called GBS). You may be able to get the vaccine, but your doctor should help you make the decision.

- People who are moderately or severely ill should usually wait until they recover before getting flu vaccine. If you are ill, talk to your doctor or nurse about whether to reschedule the vaccination. People with a mild illness can usually get the vaccine.

6 What are the risks from inactivated influenza vaccine?

A vaccine, like any medicine, could possibly cause serious problems, such as severe allergic reactions. The risk of a vaccine causing serious harm, or death, is extremely small.

Serious problems from influenza vaccine are very rare. The viruses in inactivated influenza vaccine have been killed, so you cannot get influenza from the vaccine.

Mild problems:
- Soreness, redness, or swelling where the shot was given
- Fever
- Aches

Vaccine Information Statement
Inactivated Influenza Vaccine (10/20/05) 42 U.S.C. §300aa-26
Diphtheria, tetanus, and pertussis are serious diseases caused by bacteria. Diphtheria and pertussis are spread from person to person. Tetanus enters the body through cuts or wounds.

**Diphtheria** causes a thick covering in the back of the throat. It can lead to breathing problems, paralysis, heart failure, and even death.

**Tetanus (Lockjaw)** causes painful tightening of the muscles, usually all over the body. It can lead to "locking" of the jaw so the victim cannot open his mouth or swallow. Tetanus leads to death in about 1 out of 10 cases.

**Pertussis (Whooping Cough)** causes coughing spells so bad that it is hard for infants to eat, drink, or breathe. These spells can last for weeks. It can lead to pneumonia, seizures (jerking and staring spells), brain damage, and death.

Diphtheria, tetanus, and pertussis vaccine (DTaP) can help prevent these diseases. Most children who are vaccinated with DTaP will be protected throughout childhood. Many more children would get these diseases if we stopped vaccinating.

DTaP is a safer version of an older vaccine called DTP. DTP is no longer used in the United States.

**Why get vaccinated?**

**1**

Children should get 5 doses of DTaP vaccine, one dose at each of the following ages:

- **2 months**
- **4 months**
- **6 months**
- **15-18 months**
- **4-6 years**

DTaP may be given at the same time as other vaccines.

**Who should get DTaP vaccine and when?**

**2**

**Some children should not get DTaP vaccine or should wait**

- Children with minor illnesses, such as a cold, may be vaccinated. But children who are moderately or severely ill should usually wait until they recover before getting DTaP vaccine.
- Any child who had a life-threatening allergic reaction after a dose of DTaP should not get another dose.
- Any child who suffered a brain or nervous system disease within 7 days after a dose of DTaP should not get another dose.
- Talk with your doctor if your child:
  - had a seizure or collapsed after a dose of DTaP,
  - cried non-stop for 3 hours or more after a dose of DTaP,
  - had a fever over 105°F after a dose of DTaP.

Ask your health care provider for more information. Some of these children should not get another dose of pertussis vaccine, but may get a vaccine without pertussis, called DT.

**Older children and adults**

DTaP should not be given to anyone 7 years of age or older because pertussis vaccine is only licensed for children under 7.

But older children, adolescents, and adults still need protection from tetanus and diphtheria. A booster shot called Td is recommended at 11-12 years of age, and then every 10 years. There is a separate Vaccine Information Statement for Td vaccine.
What are the risks from DTaP vaccine?

Getting diphtheria, tetanus, or pertussis disease is much riskier than getting DTaP vaccine.

However, a vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of DTaP vaccine causing serious harm, or death, is extremely small.

Mild Problems (Common)

- Fever (up to about 1 child in 4)
- Redness or swelling where the shot was given (up to about 1 child in 4)
- Soreness or tenderness where the shot was given (up to about 1 child in 4)

These problems occur more often after the 4th and 5th doses of the DTaP series than after earlier doses. Sometimes the 4th or 5th dose of DTaP vaccine is followed by swelling of the entire arm or leg in which the shot was given, lasting 1-7 days (up to about 1 child in 30).

Other mild problems include:

- Fussiness (up to about 1 child in 3)
- Tiredness or poor appetite (up to about 1 child in 10)
- Vomiting (up to about 1 child in 50)

These problems generally occur 1-3 days after the shot.

Moderate Problems (Uncommon)

- Seizure (jerking or staring) (about 1 child out of 14,000)
- Non-stop crying, for 3 hours or more (up to about 1 child out of 1,000)
- High fever, over 105°F (about 1 child out of 16,000)

Severe Problems (Very Rare)

- Serious allergic reaction (less than 1 out of a million doses)
- Several other severe problems have been reported after DTaP vaccine. These include:
  - Long-term seizures, coma, or lowered consciousness
  - Permanent brain damage.

These are so rare it is hard to tell if they are caused by the vaccine.

Controlling fever is especially important for children who have had seizures, for any reason. It is also important if another family member has had seizures. You can reduce fever and pain by giving your child an aspirin-free pain reliever when the shot is given, and for the next 24 hours, following the package instructions.

What if there is a moderate or severe reaction?

What should I look for?

Any unusual conditions, such as a serious allergic reaction, high fever or unusual behavior. Serious allergic reactions are extremely rare with any vaccine. If one were to occur, it would most likely be within a few minutes to a few hours after the shot. Signs can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness. If a high fever or seizure were to occur, it would usually be within a week after the shot.

What should I do?

- Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.

Or you can file this report through the VAERS website at www.vaers.org, or by calling 1-800-822-7967.

VAERS does not provide medical advice

The National Vaccine Injury Compensation Program

In the rare event that you or your child has a serious reaction to a vaccine, a federal program has been created to help pay for the care of those who have been harmed.

For details about the National Vaccine Injury Compensation Program, call 1-800-338-2382 or visit the program’s website at www.hrsa.gov/osp/vicp

How can I learn more?

- Ask your health care provider. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department’s immunization program.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO)
  - Visit the National Immunization Program’s website at www.cdc.gov/nip

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
National Immunization Program

Vaccine Information Statement
DTaP (7/30/01) 42 U.S.C. § 300aa-26
MEASLES MUMPS & RUBELLA

WHAT YOU NEED TO KNOW

1 Why get vaccinated?

Measles, mumps, and rubella are serious diseases.

Measles
• Measles virus causes rash, cough, runny nose, eye irritation, and fever.
• It can lead to ear infection, pneumonia, seizures (jerking and staring), brain damage, and death.

Mumps
• Mumps virus causes fever, headache, and swollen glands.
• It can lead to deafness, meningitis (infection of the brain and spinal cord covering), painful swelling of the testicles or ovaries, and, rarely, death.

Rubella (German Measles)
• Rubella virus causes rash, mild fever, and arthritis (mostly in women).
• If a woman gets rubella while she is pregnant, she could have a miscarriage or her baby could be born with serious birth defects.

You or your child could catch these diseases by being around someone who has them. They spread from person to person through the air.

Measles, mumps, and rubella (MMR) vaccine can prevent these diseases.

Most children who get their MMR shots will not get these diseases. Many more children would get them if we stopped vaccinating.

2 Who should get MMR vaccine and when?

Children should get 2 doses of MMR vaccine:
✓ The first at 12-15 months of age
✓ and the second at 4-6 years of age.

These are the recommended ages. But children can get the second dose at any age, as long as it is at least 28 days after the first dose.

Some adults should also get MMR vaccine:
Generally, anyone 18 years of age or older, who was born after 1956, should get at least one dose of MMR vaccine, unless they can show that they have had either the vaccines or the diseases.

Ask your doctor or nurse for more information.

MMR vaccine may be given at the same time as other vaccines.

3 Some people should not get MMR vaccine or should wait

- People should not get MMR vaccine who have ever had a life-threatening allergic reaction to gelatin, the antibiotic neomycin, or to a previous dose of MMR vaccine.

- People who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting MMR vaccine.

- Pregnant women should wait to get MMR vaccine until after they have given birth. Women should avoid getting pregnant for 4 weeks after getting MMR vaccine.

- Some people should check with their doctor about whether they should get MMR vaccine, including anyone who:
  - Has HIV/AIDS, or another disease that affects the immune system
  - Is being treated with drugs that affect the immune system, such as steroids, for 2 weeks or longer.
  - Has any kind of cancer
  - Is taking cancer treatment with x-rays or drugs
  - Has ever had a low platelet count (a blood disorder)

Over...
People who recently had a transfusion or were given other blood products should ask their doctor when they may get MMR vaccine.

Ask your doctor or nurse for more information.

What are the risks from MMR vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of MMR vaccine causing serious harm, or death, is extremely small.

Getting MMR vaccine is much safer than getting any of these three diseases.

Most people who get MMR vaccine do not have any problems with it.

Mild Problems
- Fever (up to 1 person out of 6)
- Mild rash (about 1 person out of 20)
- Swelling of glands in the cheeks or neck (rare)
If these problems occur, it is usually within 7-12 days after the shot. They occur less often after the second dose.

Moderate Problems
- Seizure (jerking or staring) caused by fever (about 1 out of 3,000 doses)
- Temporary pain and stiffness in the joints, mostly in teenage or adult women (up to 1 out of 4)
- Temporary low platelet count, which can cause a bleeding disorder (about 1 out of 30,000 doses)

Severe Problems (Very Rare)
- Serious allergic reaction (less than 1 out of a million doses)
- Several other severe problems have been known to occur after a child gets MMR vaccine. But this happens so rarely, experts cannot be sure whether they are caused by the vaccine or not. These include:
  - Deafness
  - Long-term seizures, coma, or lowered consciousness
  - Permanent brain damage

What if there is a moderate or severe reaction?

What should I look for?

Any unusual conditions, such as a serious allergic reaction, high fever or behavior changes. Signs of a serious allergic reaction include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness within a few minutes to a few hours after the shot. A high fever or seizure, if it occurs, would happen 1 or 2 weeks after the shot.

What should I do?
- Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccination was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.
  Or you can file this report through the VAERS website at www.vaers.org, or by calling 1-800-822-7967.
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Lesson Plan Health-Holocaust
Day 10

Concept
Demonstrate strategies to maintain personal health

State Academic Standard
4.3.5-Demonstrate strategies to improve or maintain personal health and hygiene.

Objectives
Students will be able to demonstrate ways how to maintain personal health.

Prerequisite knowledge
1.3.5 Demonstrate personal hygiene skills.
2.3.4 Demonstrate the ability to identify personal health needs.
3.3.5 Demonstrate the ability to use strategies to improve or maintain personal health and hygiene.

Science Safety
Listen to all directions given.
Do not eat anything from the experiment

Materials List
Computer, PowerPoint software, KWL chart, markers, sink, toothbrushes, sunscreen, soap, post-it notes, pencils, information packets

Engagement
The teacher will begin the lesson using a KWL Chart. The teacher will begin by asking the students “What do you know about personal health?”. The teacher will pass out post-it notes for the children to write their answers on. The teacher will call on a few students to recite their statements to the entire class and place their questions under the “What We Know” section of the chart. The teacher will then ask, “What do you want to learn about personal health?” The teacher will then have the students write their questions on the post-it notes and call on a few to share their questions with the rest of the class. The teacher will have the students place their questions under the heading “What We Want to Learn”. The teacher will explain that day the class will be learning about personal health.

The teacher will then ask, “Why do you think you should know how to properly take care of your skin and teeth?” and “Why do you think it important to know how to exercise and wash your hands correctly?”.

Exploration
The teacher will now instruct the class that today they will be demonstrating how people should keep their skin and teeth healthy, along with demonstrating why exercise
and washing your hands correctly is important. The teacher will tell the students that they will be receiving packets of information about their topic and are to create a short PowerPoint Presentation over their topic (including directions on how to do their procedure correctly, interesting information, and a brief introduction). The group will also role play the correct procedure for the class.

The teacher will pass out to each group their packets of information and props for them to use in their demonstration. The teacher will also hand out a rubric to each group to know the criteria of this project. The teacher will show an example of the PowerPoint presentation by one that the teacher created. When each group is done making their PowerPoint presentation, the teacher will have the students go back to their seats to watch the presentations and demonstrations.

**Explanation**

After all of the groups have presented and demonstrated over their topic, the teacher will pull out the KWL chart from the beginning of the lesson. The teacher will now ask the students, “What did you learn about personal health from the presentations and demonstrations?”. The teacher will have the students write their responses on the post-it notes and call on a few students to share their answers. The teacher will then direct the students to place their answers under the “What We Learned” section of the poster. The teacher will ask, “Do you think the prisoners in the work camps during World War II had the opportunity to participate in these demonstrations?”, “Why or why not?”, and “Do you think might have caused some of the prisoners to be sick? Why?”

**Evaluation**

Students will write a letter to a friend telling them what he/she has learned about the topic he/she researched and demonstrated on. Students will be instructed to write the procedures in clear and logical steps.

**Gearing Up**

Students will create poster for the younger classes in the school outlining the proper procedure of the personal health skills learned in this lesson.

**Gearing Down**

If the class is having a hard time with creating the poster, the whole class will complete the EVALUATION section together.
Directions: Your group will be making a PowerPoint Presentation over the skill that you were given. Follow the example that I made for you. Also, remember that you will actually have to MODEL the proper procedural to the entire class. Not everyone in group must do this, but at one person has to. Good luck and have fun!

<table>
<thead>
<tr>
<th></th>
<th>Excellent (4)</th>
<th>Above Average (3)</th>
<th>Average (2)</th>
<th>Poor (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group Work</strong></td>
<td>Members got along and were able to complete work together</td>
<td>Most members got along, work was completed but not by entire group</td>
<td>Group was unable to work together at all; unable to complete assignment together</td>
<td></td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>All three things are on the PowerPoint</td>
<td>One thing was missing from the PowerPoint</td>
<td>Two or more things were missing from the PowerPoint</td>
<td></td>
</tr>
<tr>
<td><strong>Followed Directions</strong></td>
<td>Group was able to complete the task and followed all directions</td>
<td></td>
<td>Group was unable to follow the direction given; had to be kept on task</td>
<td></td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>Lots of color and easy to read</td>
<td>Contains color but hard to read</td>
<td>Easy to read but no color</td>
<td>No color and hard to read</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>Presentation was clear and to the point, groups went over their specific skill clearly</td>
<td>Presentation was clear and to the point, but groups did not go over their specific skill clearly</td>
<td>Presentation was not clear and to the point, but groups went over their specific skill clearly</td>
<td>Presentation was not clear and to the point, and groups did not go over their specific skill clearly</td>
</tr>
</tbody>
</table>

Total: ____________/20
Combat Cross-Contamination

Get it straight – it's safe to separate!
Did you know that improper handling of raw meat, poultry, and seafood can create an inviting environment for cross-contamination? As a result, bacteria, that yucky germ known as BAC!, can spread to food and throughout the kitchen.

Learn more about preventing cross-contamination by using this helpful chart, and remember to spread the word — not the bacteria!

Separate . . . Don't Cross-Contaminate

Keep it Clean!

Lather Up
Always wash hands, cutting boards, dishes, and utensils with hot, soapy water after they come in contact with raw meat, poultry, and seafood.

Take Two
If possible, use one cutting board for fresh produce and use a separate one for raw meat, poultry, and seafood.

Clean Your Plate
Never place cooked food back on the same plate or cutting board that previously held raw food.

Watch those Juices!

Safely Separate
Separate raw meat, poultry, and seafood from other foods in your grocery shopping cart and in your refrigerator.

Seal It
To prevent juices from raw meat, poultry, or seafood from dripping onto other foods in the refrigerator, place these raw foods in sealed containers or plastic bags.

Marinating Mandate
Sauce that is used to marinate raw meat, poultry, or seafood should not be used on cooked foods, unless it is boiled before applying.

If you have questions or concerns about food safety, contact:

- The U.S. Department of Agriculture (USDA) Meat and Poultry Hotline at (888) 674-6854 or (202) 720-3333 (Washington, DC area). The TTY number for the hearing impaired is (800) 256-7072.
- The U.S. Food and Drug Administration (FDA) Food Information Line at (888) SAFE FOOD.
- The Fight BAC!™ Web site at: www.fightbac.org
Separating Food in the Kitchen

By: The Teacher

Procedures

- Clean your hands, cutting boards, and utensils with hot, soapy water after they come into contact with food.
- Use one cutting board for produce and one for meat and seafood.
- Do not place cooked foods back on the original plate or cutting board!

Cross Contamination

- It is important not to handle raw meat and poultry because it could cause cross-contamination.
- Cross contamination could cause bacteria to grow in the kitchen!
- (this slide has the brief introduction and interesting information)
Taking Care of Your Teeth

When you get your picture taken, everyone says, "Say cheese! Smile!" So you do - you open your mouth and show your teeth. When you see the picture, you see a happy person looking back at you. The healthier those teeth are, the happier you look. Why is that?

It's because your teeth are important in many ways. If you take care of them, they'll help take care of you. Strong, healthy teeth help you chew the right foods to help you grow. They help you speak clearly. And yes, they help you look your best.

Why Healthy Teeth Are Important

How does taking care of your teeth help with all those things? Taking care of your teeth helps prevent plaque (say: plak), which is a clear film that sticks to your teeth. The film itself might not sound so bad, but it's very sticky, and it acts like a magnet for bacteria (say: bak-teer-ee-uh) and sugar.

Like ants at a picnic, bacteria go crazy over the sugar on your teeth, breaking it down into acids that eat away tooth enamel, causing holes called cavities. Plaque also causes gingivitis (say: jin-juh-vi-tis), which is gum disease that can make your gums red, swollen, and sore. Your gums are those soft pink tissues in your mouth that hold your teeth in place.

If you don't take care of your teeth, it won't be long before cavities and unhealthy gums make your mouth very, very sore. Eating meals will be difficult. And you won't feel like smiling so much.

Before Toothpaste Was Invented

We're lucky that we know so much now about taking care of our teeth. Long ago, as people got older, their teeth would rot away and be very painful. To get rid of a toothache, they had their teeth pulled out. Finally people learned that cleaning their teeth was important, but they didn't have toothpaste right away. While you're swishing that minty-fresh paste around your mouth, think about what people used long ago to clean teeth:

- ground-up chalk or charcoal
- lemon juice
- ashes (you know, the stuff that's left over after a fire)
- tobacco and honey mixed together

Yuck!

It was only about 100 years ago that someone finally created a minty cream to clean teeth. Not long after that, the toothpaste tube was invented, so people could squeeze the paste right onto the toothbrush! Tooth brushing became popular during World War II. The U.S. Army gave brushes and toothpaste to all soldiers, and they learned to brush twice a day. Back then, toothpaste tubes were made of metal; today they're made of soft plastic and are much easier to squeeze!
Today there are plenty of toothpaste choices: lots of colors and flavors to choose from, and some brands are made just for kids. People with great-looking teeth advertise toothpaste on TV commercials and in magazines. When you're choosing a toothpaste, make sure it contains fluoride. Fluoride makes your teeth strong and protects them from cavities. When you brush, you don't need a lot of toothpaste: just squeeze out a bit the size of a pea. It's not a good idea to swallow the toothpaste, either, so be sure to rinse and spit after brushing.

How You Can Keep Your Teeth Healthy

Kids can take charge of their teeth by taking these steps:

- **Brush at least twice a day** - after breakfast and before bedtime. If you can, brush after lunch or after sweet snacks. Brushing properly breaks down plaque.
- Brush all of your teeth, not just the front ones. Spend some time on the teeth along the sides and in the back. Brush away from your gums.
- Take your time while brushing. Spend at least 3 minutes each time you brush. If you have trouble keeping track of the time, use a timer or play a recording of a song you like to help pass the time.
- Be sure your toothbrush has *soft bristles* (the package will tell you if they're soft). Ask your parent to help you get a new toothbrush every 3 months. Some toothbrushes come with bristles that change color when it's time to change them.
- Learn how to floss your teeth, which is a very important way to keep them healthy. It feels weird the first few times you do it, but pretty soon you'll be a pro. Slip the dental floss between each tooth and up along the gum line. The floss gets rid of food that's hidden where your toothbrush can't get it, no matter how well you brush.

It's also important to visit the dentist twice a year. Besides checking for signs of cavities or gum disease, the dentist will help keep your teeth extra clean, and he or she can help you learn the best way to brush and floss.

It's not just brushing and flossing that keep your teeth healthy - you also need to be careful about what you eat and drink. Remember, the plaque on your teeth is just waiting for that sugar to arrive. Eat lots of fruits and vegetables and drink water instead of soda. And don't forget to smile!

Updated and reviewed by: Kim Rutherford, MD
Date reviewed: January 2003
Originally reviewed by: Steve Dowshen, MD, and Lisa Goss, RDH, BS
Handwashing

So? Is it important to wash your hands?
Simply put, yes. Hand washing is the single most effective way to prevent the spread of infections. This is especially important for those who work in public places like universities and colleges because of the inherent risks of daily contact with the public. "Good" hand washing techniques include using an adequate amount of soap, rubbing the hands together to create friction, and rinsing under running water. The use of gloves is not a substitute for hand washing.

PREVENTION

Usually, you can catch infectious diseases or illnesses from contact with other people – casually by hand contact or by being nearby when people cough or sneeze. Classrooms are especially conducive to ease in the spread of infection due to the numbers of people and the close proximity in which they interact. You can also spread microbes by being in contact with or sharing items like food utensils, straws, etc. Once your hands have these microbes on them, you may touch your face (mouth, eyes, or in the nose) where the microbes may take hold and start an infection.

Handwashing is the single most important way to stop the spread of infections. Up to 80% of common infections are spread by hands.

What types of diseases can good handwashing prevent?
- Influenza
- Common cold
- E. coli 0157:H7
- Respiratory Syncitial Virus (RSV)
- Hepatitis A

Other tips:
- Cover cuts with bandages and wear gloves for added protection (cuts are very vulnerable to infections).
- Artificial nails and chipped nail polish have been associated with an increase in the number of bacteria on the fingernails. Be sure to clean the nails properly.
- Keep your hands away from your eyes, nose or mouth.
- Assume that contact with any human body fluids is infectious.
- Liquid soap in disposable containers is best. If using reusable containers, they should be washed and dried before refilling. If using a bar of soap, be sure to set it on a rack that allows water to drain or use small bars that can be changed frequently.

For more information:
Laura Lozanski
Health and Safety Officer
2675 Queensview Drive
Ottawa, Ontario K2B 8K2
Tel 613.820.2270
Fax 613.820.7244
Email lozanski@caut.ca

A Simple Guide to Hand Washing

- Friction ~ used to remove gross contamination, dead skin and other particles that contain potentially harmful organisms.
- Soap ~ breaks down skin oils that tend to hold these particles so that they are easier to remove.
- Warm Running Water ~ to remove debris and cleansing agents.

For effective hand washing, follow these steps:
- remove any rings or other jewelry
- use warm water and wet your hands thoroughly
- use soap (1-3 mL) and lather very well
- scrub your hands, between your fingers, wrists, and forearms with soap for 30 seconds
- scrub under your nails
- rinse thoroughly
- turn off the tap/faucets ~with paper towel
- dry your hands with a single use towel or hot air dryer.
- NEVER USE A BASIN OF STANDING WATER FOR SHARED WASHING
When should I wash my hands?

- after classes,
- after using the washroom (includes changing diapers),
- before and after eating or handling food,
- after touching raw meat, poultry, or fish,
- after handling garbage,
- visiting or working with sick people,
- handling animals and their waste,
- changing wound dressings.

Handwashing up in Toronto — Post-SARS

A study was conducted by Withlin Worldwide, which compared observed behaviour of 7,541 people to the findings of a telephone poll of 1,000 Americans taken during the same month.

While 95 per cent of respondents said they wash their hands in public washrooms, the observed average — which was bolstered by Toronto’s high numbers — showed that only 74 per cent of men and 83 per cent of women did so.

Similar surveys conducted in 1996 and in 2000 showed virtually the same percentage of people claiming they always wash their hands after sneezing or coughing into them and only 77 per cent said they washed their hands after changing a diaper.

Consider that in the context of this medical fact: most of the infectious diseases we suffer from in the course of a year are transmitted via the hand-to-mouth route.

Infectious disease experts say we could all reduce our risk of catching colds and nasty bugs like the Norwalk virus if we washed our hands more frequently. But, the message generally seems to fall on deaf ears.

Hospital workers are notorious for not washing their hands frequently enough — a fact that contributes to the spread of hard-to-shed antibiotic-resistant infections.

Antibacterial soap

- There is no need to use antibacterial soaps in the home, school or workplace.
- Antibacterial soap should be reserved for hospital settings or work areas specifically identified for use
- Promotes antimicrobial resistance.
- Proper handwashing with regular soap and water can remove germs very effectively.

Although Oliver Wendell Holmes had already recognized the role of caregivers’ hands in the transmission of puerperal fever, the Hungarian physician Ignaz Semelweiss was the first to show, in the mid-19th century, that spread of this disease could be prevented by hand washing. Bacteria and viruses are commonly transmitted on the hands of healthcare workers, and hand washing is considered the single most important intervention to prevent such spread. Numerous epidemics have been traced to the so-called transient flora on the contaminated hands of healthcare workers.

In spite of these concerns, compliance with hand washing guidelines remains a problem. Given the strong case of hand washing, why does compliance remain so poor? A number of factors are associated with low rates of compliance with hand washing guidelines: lack of availability of sinks, adverse effects of hand washing on skin condition, high workload and low perceived risk.
Tips for Taking Care of Your Skin

Sometimes it may seem like your skin is impossible to manage, especially when you wake up and find a huge zit on your nose or a cold sore at the corner of your mouth. The good news is that there are ways to prevent and treat common skin problems - read on for some tips.

Acne

A pimple starts when the pores in the skin become clogged with a type of oil called sebum, which lubricates the skin and hair. Acne is common during puberty when hormones go into overdrive, causing the skin to overproduce sebum. Because many oil-producing glands are on the forehead, nose, and chin, this area - the T-zone - is where a person is most prone to pimples.

Here are some tips to help prevent breakouts and clear them up as fast as possible:

- Wash your face twice a day (no more) with warm water and a mild soap made for people with acne. Gently massage your face with circular motions. Don’t scrub. Overwashing and scrubbing can cause skin to become irritated. After cleansing, the American Academy of Dermatology (AAD) recommends applying an over-the-counter (no prescription needed) lotion containing benzoyl peroxide.

- Don’t pop pimples. It's tempting, but here's why you shouldn't: Popping pimples can push infected material further into the skin, leading to more swelling and redness, and even scarring. If you notice a pimple coming before a big event, like the prom, a dermatologist can often treat it for you with less risk of scarring or infection.

- Avoid touching your face with your fingers or leaning your face on objects that collect sebum and skin residue like the telephone receiver. Touching your face can spread the bacteria that cause pores to become inflamed and irritated. To keep bacteria at bay, wash your hands before applying anything to your face, such as treatment creams or makeup.

- If you wear glasses or sunglasses, make sure you clean them frequently to keep oil from clogging the pores around your eyes and nose.

- If you get acne on your body, try not to wear tight clothes, which don't allow skin to breathe and may cause irritation. You also might want to stay away from scarves, headbands, and caps, which can collect dirt and oil, too.

Remove your makeup before you go to sleep. When buying makeup, make sure you choose brands that say "noncomedogenic" or "nonacnegenic" on the label. Throw away old makeup that smells or looks different from when you first bought it.

- Keep hair clean and out of your face to prevent additional dirt and oil from clogging your pores.

- Protect your skin from the sun. It may seem like a tan masks acne, but it's only temporary. A tan can cause the body to produce extra sebum, which may worsen your acne, not improve it. Tanning also causes damage to skin that will eventually lead to wrinkles and increase your risk of skin cancer.
If you're concerned about acne, talk to a dermatologist. Dermatologists offer a range of treatments that help to prevent and clear up acne and acne scars. A dermatologist can help you find the treatment method that's best for you and can also give you lots of useful tips for dealing with acne and caring for your skin type. Some salons and spas have trained skin specialists, called estheticians, who can offer advice and skin care treatments.

**Sun and Skin**

When we're outdoors, we all know we need to protect our skin from the sun's harmful rays. Of course, it's impossible to avoid the sun - who wants to hide indoors all summer when it feels so great to get outside and be active? And the sun's not all bad, anyway: Sunlight helps our bodies create vitamin D. So follow these tips when you're outdoors to help manage sun exposure:

- Wear sunscreen with a sun protection factor (SPF) of at least 15, even if it's cloudy or you don't plan on spending a lot of time outdoors. If you go swimming or plan to stay outside, reapply sunscreen (even if the bottle says the sunscreen is waterproof) every 2 to 3 hours.
- Choose a sunscreen that blocks both UVA and UVB rays. Look for the words "broad spectrum protection" or UVA protection in addition to the SPF of 15 or greater. Select a sunscreen that says "nonacnegenic" or "noncomedogenic" on the label to help keep pores clear.
- The sun's rays are strongest between 10:00 AM and 4:00 PM, so make sure you reapply sunscreen frequently and take breaks indoors if you can. If your shadow is longer than you are tall, then it's a safer time to be in the sun (you should still wear sunscreen, though).
- Apply more sunscreen (with higher SPF) when you're around reflective surfaces like water, snow, or ice.
- We all know that the sun can damage skin, but did you know it can contribute to eye problems, too? Protect your face and eyes with a hat and sunglasses that provide 100% UV protection.
- Some medications, such as prescription acne medications or birth control pills, can increase your sensitivity to the sun, so if you're taking medication, increase your sun protection.

If you want the glow of a tan, try faking it with self-tanners or salon tanning treatments. Avoid tanning beds, though, because although manufacturers claim that tanning beds are free of UVB rays, they still use harmful UVA rays.

**Cold Sores**

Cold sores are caused by a type of herpes virus (HSV-1, which most often is not sexually transmitted) so they're contagious from person to person. Once you get this virus it stays in your body, meaning you'll probably get cold sores every now and then throughout your life. Here are ways you can help prevent cold sores from making an appearance (or reappearance if you've had them in the past).

- Avoid getting cold sores in the first place by not sharing stuff like lip balm, toothbrushes, or drinks with other people who might have cold sores. The virus that causes cold sores is transmitted through the nose (in mucus) and the mouth (in saliva).
- People who have the virus know that cold sores can flare up from things like too much sun, stress, or being sick. Just one more reason to lather on that suntan lotion, eat well, exercise, and get plenty of sleep!

If you do have a cold sore, here are some tips for keeping yourself comfortable:
• Take acetaminophen or ibuprofen if the cold sores are painful.
• Suck on ice pops or cubes to ease pain and keep cold sores cool.
• Stay away from acidic foods (like oranges, tomatoes, and lemonade) and salty, spicy foods, which can cause irritation.
• Don't pick at cold sores while you're waiting for them to go away. They may bleed or become infected with bacteria.

Usually, cold sores go away on their own after a week or 2. But if you get them frequently or they're a problem, talk to your doctor or dermatologist. He or she may be able to prescribe a medication to alleviate symptoms and shorten the amount of time cold sores last.

Eczema
Eczema is a condition that causes skin to become red, itchy, and dry. If you have eczema, you might notice that you are prone to getting itchy rashes - especially in places like where your elbows and knees bend or on your neck and face. The symptoms of eczema can vary from person to person. Though you can't cure eczema forever, there are things you can do to prevent it from flaring:

• Stay away from things like harsh detergents, perfumed soaps, and heavily fragranced lotions that tend to irritate the skin and trigger eczema.
• Because water tends to dry out the skin, take short, warm showers and baths. If you're going to have your hands in water for a long time (like when you're washing dishes or your car), try wearing gloves.
• Soothe your skin with regular applications of moisturizer to prevent itching and dryness. Creams generally moisturize a bit better and last longer than lotions for most people. Creams work best if applied when the skin is slightly wet, like just after bathing.
• Be careful what fabrics you wear. Cotton is good because it's breathable and soft. Try to stay away from materials like wool or spandex that may cause irritation or allergic reactions.
• Keep stress in check. Because stress can lead to eczema flares, try activities like yoga or walking after a long day to keep your stress levels low.
• If you wear makeup, look for brands that are free of dyes and fragrances that can aggravate eczema.

If you're having trouble managing your eczema, talk to a dermatologist. He or she will be able to suggest ways you can better control it.

Other Skin Conditions
Warts are tiny skin infections caused by viruses of the human papilloma virus (HPV) family. There's no way to prevent warts from occurring (other than avoiding contact with people who have warts already), but if you do get them, don't rub, pick, or scratch them because you can spread the virus and get new warts. Some over-the-counter medications containing special acids can help get rid of warts, but it's always a good idea to see your doctor before trying one. If you find warts in your genital area, you should see your doctor, who can recommend the best treatment method for that sensitive area.

Another type of wart-like viral infection is molluscum contagiosum. (It's not as scary as its name sounds!) Like warts, it can be transmitted through scratching and sexual contact.

Fine white or purplish lines on the skin called stretch marks are pretty common in most teens. Stretch marks are formed when the tissue under your skin is pulled by rapid growth or stretching, like during puberty. Stretch marks usually fade on their own over time. Talk to a dermatologist if you're concerned about them.
Because our skin is the most visible reflection of what's going on in our bodies, people equate healthy skin with beauty. But healthy skin is about more than just good looks; it's essential to our survival. So keep your skin glowing with the right skin care techniques and by eating well and getting lots of exercise.

Reviewed by: Eliot N. Mostow, MD, MPH
Date reviewed: July 2004
Why Exercise Is Cool

Kids exercise all the time without even thinking of it. Just being active, like when you run around outside or play kickball at school, is a kind of exercise. What else counts as exercise? Playing sports, dancing, doing push-ups, and even reaching down to touch your toes.

When you exercise, you’re helping build a strong body that will be able to move around and do all the stuff you need it to do. Try to be active every day and your body will thank you later!

Exercise Makes Your Heart Happy

You may know that your heart is a muscle. It works hard, pumping blood every day of your life. You can help this important muscle get stronger by doing aerobic (say: air-o-bik) exercise.

Aerobic means "with air," so aerobic exercise is a kind of activity that requires oxygen. When you breathe, you take in oxygen, and, if you’re doing aerobic exercise, you may notice you’re breathing faster than normal. Aerobic activity can get your heart pumping, make you sweaty, and quicken your breathing.

When your give your heart this kind of workout on a regular basis, your heart will get even better at its main job - delivering oxygen (in the form of oxygen-carrying blood cells) to all parts of your body.

So you want to do some aerobic exercise right now? Try swimming, basketball, ice or roller hockey, jogging (or walking quickly), in-line skating, soccer, cross-country skiing, biking, or rowing. And don’t forget that skipping, jumping rope, and playing hopscotch are aerobic activities, too!

Exercise Strengthens Muscles

Another kind of exercise can help make your muscles stronger. Did you ever do a push-up or swing across the monkey bars at the playground? Those are exercises that can build strength. By using your muscles to do powerful things, you can make them stronger. For older teens and adults, this kind of workout can make muscles bigger, too.

Here are some exercises and activities to build strong muscles:

- push-ups
- pull-ups
- tug-of-war
- rowing
- running
- in-line skating
- bike riding

Exercise Makes You Flexible
Can you touch your toes easily without yelling ouch? Most kids are pretty flexible, which means that they can bend and stretch their bodies without much trouble. This kind of exercise often feels really good, like when you take a big stretch in the morning after waking up. Being flexible is having "full range of motion," which means you can move your arms and legs freely without feeling tightness or pain. It's easy to find things to do for good flexibility:

- tumbling and gymnastics
- yoga
- dancing, especially ballet
- martial arts
- simple stretches, such as touching your toes or side stretches

**Exercise Keeps the Balance**

Food gives your body fuel in the form of calories, which are a kind of energy. Your body needs a certain amount of calories every day just to function, breathe, walk around, and do all the basic stuff. But if you're active, your body needs an extra measure of calories or energy. If you're not very active, your body won't need as many calories. Whatever your calorie need is, if you eat enough to meet that need, your body weight will stay about the same. If you eat more calories than your body needs, it may be stored as excess fat.

**Exercise Makes You Feel Good**

It feels good to have a strong, flexible body that can do all the activities you enjoy - like running, jumping, and playing with your friends. It's also fun to be good at something, like scoring a basket, hitting a home run, or perfecting a dive. But you may not know that exercising can actually put you in a better mood.

When you exercise, your brain releases a chemical called **endorphins** (say: en-dor-funz), which may make you feel happier. It's just another reason why exercise is cool!

Updated and reviewed by: Mary L. Gavin, MD  
Date reviewed: June 2004  
Originally reviewed by: Heidi Kecskemethy, RD, CSP
Lesson Plan Science-Holocaust  
Day 11

Concept
Identify key foods in a healthy diet

State Academic Standard
4.4.9-Explain that food provides energy and materials for growth and repair of body parts. Recognize that vitamins and mineral, present in small amounts in foods, are essential to keep everything working well. Further understand that as people grow up, the amounts and kinds of foods and exercise needed by the body changes.

Objectives
Students will be able to sort important foods in a healthy diet to help the body grow healthy.

Prerequisite knowledge
3.4.7 Explain that eating a variety of healthful foods and getting enough exercise and rest help people stay healthy.

Science Safety
Listen to all directions given.

Materials List
Journals, Overhead and markers, pencils, mats with the different food groups, pictures of foods, assessment worksheet

Engagement
At the beginning of the lesson, the teacher will show the class a copy of the new food pyramid. The teacher will ask, “Have you ever seen this before?” The teacher will explain that the food pyramid gives people an idea of what they could eat to keep healthy and is a guide to make sure they are eating and incorporating all of the vitamins and minerals that they need to keep their body healthy.

The teacher will now ask the students for an example of grains, vegetables, fruits, dairy, and meat/beans. The teacher will write the answers under the titles. The teacher will then ask the students, “Is it healthy to just eat meat or beans and have no vegetables in your diet?” The teacher will tell the students that it is important to vary your diet with the guidelines that USDA (U.S. Department of Agriculture) provides. The teacher will pass out a journal provided from the USDA’s website for the students to keep track of what they eat for the next three weeks. Inside this journal will be a piece of paper showing the serving size of the different types of food. The teacher will go over this page and the journal pages to show the students how to complete them. The teacher will create a model for the students to jot down to understand how to fill it out.
Exploration
The teacher will tell the students that today they will be classifying different foods that belong within the different food groups on the Food Pyramid. The teacher will first model what the class will be doing. Using a transparency of the mat the students will be using, the teacher will hold up pictures to the class and ask, “Where does this food belong under the food pyramid?”. When the students tell the teacher the right answer, he/she will place the picture under the correct title. The teacher will repeat this step until the students understand how to classify the foods.

The teacher will place the students into groups of four. The teacher will have one student from each group grab a copy of the mat and a bag of pictures with different types of foods in it. The teacher will tell the students they have about five to seven minutes to sort out the pictures. The teacher will walk around the room making sure each group is comprehending and participating in the activity.

Explanation
The teacher will direct the students to go back to their seats when the activity is finished. The teacher will call on each group to give their answers and reasoning why they put the foods under the certain groups (“Why did you place that food under that group?”). The teacher will then ask, “Why do you think it is important to learn about healthy eating habits?”

Evaluation
Students will now receive a worksheet with a food journal from a boy in a different school. The students will be asked to either agree with the child’s eating choices or not. The students will have to explain what needs to be changed, why the diet is a healthy one, and suggestions to make it healthier. Students will be graded on the validity of their answers.

Gearing Up
Students will create their own quiz to give to the other students in the class. They could consist from asking what types of food fall under each category or the serving sizes for common foods.

Gearing Down
If the class is having a completing the journal evaluation, the entire class will complete the EVALUATION part together.
Pictures for Food Mat
<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td><strong>Meat and Beans</strong></td>
<td>Fats/Sugars/Salt</td>
</tr>
</tbody>
</table>

Choose lean meat and poultry. Vary your choices—more fish, beans, peas, nuts, and seeds.

Build more physical activity into your daily routine at home and work.

- At least 30 minutes of moderate to vigorous activity a day, 10 minutes or more at a time.

Some foods don’t fit into any group. These “extras” may be mainly fat or sugar—limit your intake of these.
<table>
<thead>
<tr>
<th>Category</th>
<th>Recommendations</th>
<th>Examples</th>
<th>Amounts</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grains</strong></td>
<td>Make at least half your 6 ounce equivalents whole grains</td>
<td>1 cup cereal</td>
<td>6 ounce equivalents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 cup milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ham sandwich</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 slices bread</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cheese</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>Try to have vegetables from several subgroups each day</td>
<td>lettuce</td>
<td>2 ½ cups</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>onion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>carrot</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td>Make most choices fruit, not juice</td>
<td>apple, banana</td>
<td>2 cups</td>
<td></td>
</tr>
<tr>
<td><strong>Milk</strong></td>
<td>Choose fat-free or low fat most often</td>
<td>milk</td>
<td>3 cups</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cheese</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meat &amp; Beans</strong></td>
<td>Choose lean meat and poultry. Vary your choices—more fish, beans, peas, nuts, and seeds</td>
<td>ham, steak</td>
<td>5 ½ ounce equivalents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>water</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>chips</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Physical Activity**| Build more physical activity into your daily routine at home and work.            |                     | At least 30 minutes of moderate to vigorous activity a day, 10 minutes or more at a time. | Some foods don't fit into any group. These “extras” may be mainly fat or sugar—limit your intake of these. May include chips, mayo, water.
Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day

1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or 1/2 cup of cooked rice, cereal, or pasta

Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens

Eat more orange vegetables like carrots and sweet potatoes

Eat more dry beans and peas like pinto beans, kidney beans, and lentils

Eat a variety of fruit

Choose fresh, frozen, canned, or dried fruit

Go easy on fruit juices

Go low-fat or fat-free when you choose milk, yogurt, and other milk products

If you don’t or can’t consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages

Choose low-fat or lean meats and poultry

Bake it, broil it, or grill it

Vary your protein routine — choose more fish, beans, peas, nuts, and seeds

For a 2,000-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.

Eat 6 oz. every day
Eat 2 1/2 cups every day
Eat 2 cups every day
Get 3 cups every day; for kids aged 2 to 8, it’s 2
Eat 5 1/2 oz. every day

Find your balance between food and physical activity

Be sure to stay within your daily calorie needs.

Be physically active for at least 30 minutes most days of the week.

About 60 minutes a day of physical activity may be needed to prevent weight gain.

For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.

Children and teenagers should be physically active for 60 minutes every day, or most days.

Know the limits on fats, sugars, and salt (sodium)

Make most of your fat sources from fish, nuts, and vegetable oils.

Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these.

Check the Nutrition Facts label to keep saturated fats, trans fats, and sodium low.

Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients.
<table>
<thead>
<tr>
<th>GRAINS</th>
<th>Make at least half your grains whole grains</th>
<th>6 ounce equivalents</th>
<th>cereal, pasta (7)</th>
<th>7 ounce equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1 ounce equivalent is about 1 slice bread, 1 cup dry cereal, or ½ cup cooked rice, pasta, or cereal)</td>
<td>crackers, bread (2)</td>
<td></td>
</tr>
<tr>
<td>VEGETABLES</td>
<td>Try to have vegetables from several subgroups each day</td>
<td>2 ½ cups</td>
<td>salad</td>
<td>1 ½ cups</td>
</tr>
<tr>
<td>SUBGROUPS</td>
<td>Subgroups: Dark Green, Orange, Starchy, Dry Beans and Peas, Other Veggies</td>
<td>2 cups</td>
<td>banana, grapes</td>
<td>2 cups</td>
</tr>
<tr>
<td>FRUITS</td>
<td>Make most choices fruit, not juice</td>
<td>2 cups</td>
<td>milk (2)</td>
<td>3 cups</td>
</tr>
<tr>
<td>MILK</td>
<td>Choose fat-free or low fat most often</td>
<td>3 cups</td>
<td>(1 ½ ounces cheese = 1 cup milk)</td>
<td></td>
</tr>
<tr>
<td>MEAT &amp; BEANS</td>
<td>Choose lean meat and poultry. Vary your choices—more fish, beans, peas, nuts, and seeds</td>
<td>5 ½ ounce equivalents (1 ounce equivalent is 1 ounce meat, poultry, or fish, 1 egg, 1 T. peanut butter, ½ ounce nuts, or ¼ cup dry beans)</td>
<td>ham, grilled chicken</td>
<td>6 ounce equivalents</td>
</tr>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>Build more physical activity into your daily routine at home and work.</td>
<td>At least 30 minutes of moderate to vigorous activity a day, 10 minutes or more at a time.</td>
<td>chips, cookies</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

*Some foods don't fit into any group. These “extras” may be mainly fat or sugar—limit your intake of these.*
Name: _____________________ 

Evaluating Journal Assessment

Directions: Look at the sample journal attached to this worksheet. Answer the questions below. Make sure you give plenty of details to support your answers.

1. Do you think this is a healthy food journal entry? Why or why not? ______

2. What are some suggestions to make it healthy or healthier? ______

3. Fill in the “food goal for tomorrow” and the “activity goal for tomorrow” on the journal entry.
Lesson Plan Science-Holocaust
Day 12

Concept
Identify nutrients in foods that provides energy and materials for growth and repair of the human body

State Academic Standard
4.4.9-Explain that food provides energy and materials for growth and repair of body parts. Recognize that vitamins and mineral, present in small amounts in foods, are essential to keep everything working well. Further understand that as people grow up, the amounts and kinds of foods and exercise needed by the body changes.

Objectives
Students will be able to identify nutrients in foods that provide energy and materials for growth and repair of the human body

Prerequisite knowledge
3.4.7 Explain that eating a variety of healthful foods and getting enough exercise and rest help people stay healthy.

Science Safety
Listen to all directions given.

Materials List
Computer, PowerPoint Presentation, foods for activity, paper, pencil, construction paper, markers, scissors

Engagement
The teacher will ask the students, “What is a nutrient?” The teacher will listen to all responses. Then, the teacher will show the class a PowerPoint Presentation over the important nutrients in foods that help to provide energy and materials for growth and repair of the human body. The teacher will pass out a copy to the class with some of the information missing. Students will have to write down this information from the PowerPoint Presentation. The teacher will ask questions throughout the presentation such as “What kinds of foods contain this nutrient?” and “Why is it important that the nutrient does this job?”

Exploration
The teacher will pass out boxes of pasta to each student. The teacher will point out the Food Label that is located on the side of the box. The teacher will ask the students, “What kinds of nutrients are on the food label?” Students will raise their hands and answer. The teacher will then ask, “What food group would this go under in the Food Pyramids?”

The teacher will place students in groups of two and pass out a variety of foods with their food labels. The teacher will tell the students that they have to identify what
nutrients are present in that food item and what food group it belongs to under the Food Pyramid. The teacher will walk around the room checking the students work and progress.

**Explanation**

The teacher will direct the students’ back to the front of the room. The teacher will have each pair describe to the class what food they had, the nutrient(s) present, and where that particular food belongs under the Food Pyramid. The teacher will ask students, “Why do you think it is important to eat these nutrients?” and “Why are these functions from the nutrients important?” The teacher will then ask, “Do you think prisoners in the work camps in Germany were able to receive all of the nutrients they needed?”, “Why or why not?”, and “Do you think that this might be many of the people were sick in these camps?” “Why or why not?”

**Evaluation**

Students will be placed in groups of four in groups and will create graphic organizers for the nutrients discussed in this lesson. They are to write the name of the nutrient and under the flap describe the function of that nutrient and draw a picture of a food that contains that nutrient. Students will be able to use their PowerPoint Presentation to assist them in creating this graphic organizer.

**Gearing Up**

Students will create a day’s worth of meals that are rich in the nutrients their body needs. Students will then have to justify their reasoning.

**Gearing Down**

If the class is having problems filling out the information in the graphic organizer, the entire class will complete the EVALUATION part together (while creating their own organizer).
Directions: Fill out the table below.

<table>
<thead>
<tr>
<th>Name of Food</th>
<th>Nutrients</th>
<th>Food Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nutrients that help the Body

Carbohydrates
- Main source of energy for the body
- Foods with Carbohydrates:
  - Fruits
  - Milk
  - Bread
  - Rice
  - Pasta

Proteins
- Growth and repair of the cells in the body
- Foods with Protein:
  - Meat
  - Animal Products (Eggs, milk, cheese)

Fats
- Source of energy for the body
- Eating too much fat can lead to weight gain and health problems (heart disease)
- Foods with Fats:
  - Salad dressing
  - Fast Food
Lesson Plan Science-Holocaust
Day 13

Concept
Identify importance of vitamins and iron to keep the body working

State Academic Standard
4.4.9-Explain that food provides energy and materials for growth and repair of body parts. Recognize that vitamins and mineral, present in small amounts in foods, are essential to keep everything working well. Further understand that as people grow up, the amounts and kinds of foods and exercise needed by the body changes.

Objectives
Students will be able to identify the importance of vitamins and iron to help keep the body working.

Prerequisite knowledge
3.4.7 Explain that eating a variety of healthful foods and getting enough exercise and rest help people stay healthy.

Science Safety
Listen to all directions given.

Materials List
Computer, PowerPoint Presentation, picture of foods, mat, paper, pencil, construction paper, markers, scissors

Engagement
The teacher will ask the students, “What is a vitamin?” The teacher will listen to all responses. Then, the teacher will show the class a PowerPoint Presentation over the importance of vitamins and iron in the human body. The teacher will pass out a copy to the class with some of the information missing. Students will have to write down this information from the PowerPoint Presentation. The teacher will ask questions throughout the presentation such as “What kinds of foods contain this certain vitamin?” and “Why is it important that the vitamins do their job?”

Exploration
The teacher will have pictures of foods that are rich in the vitamins and iron that was discussed in the PowerPoint presentation. The teacher will place students in groups of two. The teacher will instruct the students that they are to place the foods that belong under each of the headings on the mat. The teacher will model this activity once for the students. The teacher will circulate the room checking on the groups for their understanding.
Explanation
The teacher will direct the students’ back to the front of the room. The pairs will go over their answers from the activity. The teacher will then ask, “Why is it important to have these vitamins in your diet?”, “What would happen if these vitamins were not present in your diet?”, “Do you think the prisoners in the work camps were able to get enough of these vitamins in the camps?”, “Why or why not?”, and “How do you think these prisoners’ health was in the camps without these vitamins?”

Evaluation
Students will be placed in groups of four in groups and will create graphic organizers for the vitamins discussed in this lesson. They are to write the name of the vitamin and under the flap describe the function of that vitamin and draw a picture of a food that contains that vitamin. Students will be able to use their PowerPoint Presentation to assist them in creating this graphic organizer.

Gearing Up
Students will create a day’s worth of meals that are rich in the vitamins their body needs. Students will then have to justify their reasoning.

Gearing Down
If the class is having problems filling out the information in the graphic organizer, the entire class will complete the EVALUATION part together (while creating their own organizer).
<table>
<thead>
<tr>
<th>Vitamin A</th>
<th>Vitamin C</th>
<th>Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>