DISEASE PREVENTION AND CONTROL
(Communicable)
GRADE 8 STANDARD:

The learner demonstrates understanding of family health, family life, disease and injury prevention/control as well as prevention of substance use and abuse to develop and promote family health for quality life.

CONTENT STANDARD:

The learner demonstrates understanding on the prevention and control of communicable diseases for the attainment of individual wellness.

PERFORMANCE STANDARD:

The learner consistently demonstrates personal responsibility and healthful practices in the prevention and control of communicable diseases.

LEARNING COMPETENCIES:

At the end of this lesson, the learners are expected to

1. discuss the nature, prevention and control of common communicable diseases (mortality and morbidity);
2. analyze the common beliefs about the causes of disease;
3. discuss the factors that influence disease transmission;
4. explain the different elements of the chain of infection;
5. discuss the stages of infection;
6. Discuss skin problems: its nature, prevention and control;
   - Acne
   - Warts
   - Tinea (ringworm, jock, itch, athlete’s foot)
7. Recommends actions to prevent and control the spread of communicable diseases.
8. Demonstrate healthful practices in order to prevent and control communicable diseases.
9. Demonstrate self-monitoring skills to prevent and control communicable diseases during adolescence.
<table>
<thead>
<tr>
<th>PRODUCT/PERFORMANCE TASK:</th>
<th>Use formative and summative assessment tools to assess the competencies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learners share responsibility and consistently demonstrate healthful practices in the prevention and control of communicable diseases to family members, schoolmates and community.</td>
<td>1. Discuss the nature, prevention and control of common communicable diseases (mortality and morbidity).</td>
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<tr>
<td></td>
<td>2. Analyze the common beliefs about the causes of disease.</td>
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<td></td>
<td>3. Discuss the factors that influence disease transmission.</td>
</tr>
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<td></td>
<td>4. Explain the different elements of the chain of infection.</td>
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<td></td>
<td>5. Discuss the stages of infection.</td>
</tr>
<tr>
<td></td>
<td>6. Discuss adolescent skin diseases problems its nature, prevention and control; Acne, Warts, Tinea (ringworm, jock, itch, athlete’s foot)</td>
</tr>
<tr>
<td></td>
<td>7. Recommend actions to prevent and control the spread of communicable diseases.</td>
</tr>
<tr>
<td></td>
<td>8. demonstrate healthful practices in order to prevent and control communicable diseases</td>
</tr>
<tr>
<td></td>
<td>9. demonstrate self-monitoring skills to prevent and control communicable diseases during adolescence.</td>
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<thead>
<tr>
<th>Assess the performance task using the following criteria:</th>
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<tbody>
<tr>
<td>Values-based</td>
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<tr>
<td>Consistency</td>
</tr>
<tr>
<td>Accuracy</td>
</tr>
<tr>
<td>Appropriateness</td>
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</tbody>
</table>
INTRODUCTION

Disease prevention and control is a very important health concern because it affects the quality of people’s life. Communicable disease not only threatens the sick person but also his/her family and the society in general. Thus, protecting ourselves and our families from diseases is both a personal and social responsibility.

This material will introduce you to the nature of communicable diseases and its prevention and management. You will discover that the spread of communicable diseases to the environment will threaten the populace so each one must understand how to prevent the spread and learn how to manage it.

There’s a very popular saying “Prevention is better than cure.” As you go along, you will notice that the diseases you are experiencing or encountering can be prevented if you only know how to control it. Accordingly, if you lack self-discipline, then prevention and control of diseases will be difficult to attain.

One thing is sure after learning from this material, you will be challenged to become a catalyst for the control and prevention of communicable diseases. Start with your self, family, neighbor, community including your school then extend it to the nation. You just need to consistently demonstrate personal responsibility and healthful practices in order to prevent and control communicable diseases.

Our target is to let this knowledge be seen in your actions, words, and way of life. This is the best legacy you can contribute not only to you and your family but to the whole nation.

Lastly, I hope that you will enjoy going through this material.
OBJECTIVES

At the end of the lesson, the learners are expected to

- discuss the nature, prevention and control of common communicable diseases (mortality and morbidity);
- analyze the common beliefs about the causes diseases;
- discuss the factors that influence disease transmission;
- explain the different elements of the chain of infection;
- discuss the stages of infection;
- discuss adolescents skin diseases problems, nature, prevention and control as in ✓ Acne ✓ Warts ✓ Tinea (ringworm, jock, itch, athlete’s foot);
- recommend actions to prevent and control the spread of communicable diseases;
- demonstrate self-monitoring skills to prevent and control communicable diseases during adolescence;
- demonstrate healthful practices in order to prevent and control communicable diseases;
The learners will answer the pre-assessment found in their learning materials activities 1, 2, 3; pages 4-8. Give them time limit and ask them to write all their answers in their journal/notebook.

Activity 1 is a teacher-guided activity. The teacher will assist and help the students to answer the activity by giving them clarifications, clues or explanations when needed.

Activity 2 is to be answered by the students alone. There will be no help from others. And Activity 3 will be a group activity.

Activity 1: How well do you know the nature of diseases?

The learners will read very carefully each statement about the nature of communicable diseases. Assist them as they react to its truth or falsity as they put a check (√) mark on the appropriate box.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>TRUE</th>
<th>FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Organisms like bacteria and viruses are all over the environment.</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>2 Many of the most common diseases are caused by tiny microorganisms</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>called pathogens.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Communicable diseases come from one infected person to another.</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>4 Stomach ache is one symptom that can be manifested by a communicable</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>disease.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Viral hepatitis is caused by a virus that affects the liver.</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>6 Rabies virus can enter only the brain cells while polio virus</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>attacks only the nervous system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Malaria is a sickness caused by a carrier mosquito.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>8 Pinworms hatch and live primarily in the intestines of a person.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>9 Stagnant water is a reservoir for mosquitoes to multiply.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>10 It is the nature of pathogens to invade its host through certain</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>points of entry to cause morbidity.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SCORE | COMMENT | INDICATIONS
--- | --- | ---
10 TRUE | They are Advanced | They really know, understand, and practice the prevention of getting infected.
7-9 TRUE | Very Good | They need to review someone so that you will know, understand and practice the prevention of getting infected.
4-6 TRUE | Good | They are prone to get infected easily.
1-3 TRUE | Poor | They have to do something because you are in danger of getting sick easily.

**Congratulations!**
Since they did well in this activity, are they now excited to find out what’s in store for them in the next level?

### Activity 2: SELF – INVENTORY

**A. How do I rate…..?**

The students will number their activity notebook from 1 to 20. Read the questions and respond by writing

- **M** if the statement describes them *most of the time*,
- **S** if the statement describes them *some of the time* and
- **N** if the statement never applies to them.

The students will do this without any assistance from you or from anybody.

Total the number of each type of the response.
Proceed to the next section, the *How Did You Score* each section.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>M</th>
<th>S</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I keep my immunization records up-to-date.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 I stay away from people who currently have cold or flu.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I eat a balanced diet daily.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 I get at least eight hours of sleep each night.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 I exercise aerobically at least three times a week.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 I do not smoke.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 I avoid using towels that others have used.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 I avoid using other people’s combs and brushes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 I take a few minutes each day to relax.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 I listen and respond to my body that it is tired or that something may be wrong.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 I wash my hands before and after every meal, before preparing food, and after using the toilet.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 I shower or bathe regularly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 I do not share eating utensils or glasses with other people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 I cover my mouth when I cough or sneeze.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 I avoid walking around without footwear.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 I avoid eating dairy &amp; poultry products that are not refrigerated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 I advise my parents to make sure that our pets have their vaccines too.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 I put food waste in closed containers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I stay at home within the first day when symptoms of an illness appear.</td>
<td>20</td>
<td>I support efforts of the government to enforce public health laws for immunization and reporting communicable diseases.</td>
</tr>
<tr>
<td></td>
<td>Total for Most of the time</td>
<td></td>
<td>Total for Most of the time</td>
</tr>
<tr>
<td></td>
<td>Total for Some of the time</td>
<td></td>
<td>Total for Some of the time</td>
</tr>
<tr>
<td></td>
<td>Total for Never applies</td>
<td></td>
<td>Total for Never applies</td>
</tr>
</tbody>
</table>

**B. How did they score?**

Give the learners 4 points for each most of the time; 2 points for each some of the time; 0 points for each never answer.

Get their total and read the result of their score below:

- 60 to 80 = **Excellent!** Their disease prevention efforts are outstanding. Congratulations!
- 40 to 59 = **Good.** They are doing very well in their efforts to prevent communicable diseases.
- 20 to 39 = **Fair!** Disease prevention is not important to them. Some efforts will be beneficial to them and to others.
- Below 20 = **Needs Improvement!** Be careful. They may be spreading communicable diseases to others. Tell them now is a good time to start taking good care of themselves.

**C. Invite the learners to do, “What are your goals?”**

If they received an **excellent score (60 to 80),** they will complete the statements in part A only, but if they scored **fair (20 to 39),** then they will complete parts A and B.

**Part A.**

1. I plan to learn more about disease prevention by ________.
2. My timetable for accomplishing this is ____________________.
3. I plan to share my information with other people by ____________________________.

**Part B**

4. My behavior I am most likely to change is ____________.
5. The steps involved in making these change are ____________.
6. The people or groups I will ask for support and assistance are ____________.
7. My rewards for making this change will be ____________.
Activity 3: Looks Familiar?

Group the learner into five, each group will look closely on the pictures illustrating different kinds communicable diseases. Make them choose their answer from the choices given. Have them reflect on what the causes of each communicable disease then plot their ideas on the appropriate box.

<table>
<thead>
<tr>
<th>Picture of COMMUNICABLE diseases</th>
<th>Write on the first row the name of the disease (look at the choices below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WART</td>
<td>Caused by VIRUS</td>
</tr>
<tr>
<td>RINGWORM</td>
<td>Caused by FUNGUS</td>
</tr>
<tr>
<td>ACNE</td>
<td>Caused by BACTERIA</td>
</tr>
<tr>
<td>ATHLETE’S FOOT</td>
<td>Caused by FUNGUS</td>
</tr>
<tr>
<td>JOCK’S ITCH</td>
<td>Caused by FUNGUS</td>
</tr>
<tr>
<td>MALARIA</td>
<td>Bites from malaria-carrier mosquito</td>
</tr>
<tr>
<td>DENGUE</td>
<td>Bites from dengue carrier mosquito</td>
</tr>
</tbody>
</table>

WART
Caused by VIRUS

RINGWORM
Caused by FUNGUS

ACNE
Caused by BACTERIA

ATHLETE’S FOOT
Caused by FUNGUS

JOCK’S ITCH
Caused by FUNGUS

MALARIA
Bites from malaria-carrier mosquito

DENGUE
Bites from dengue carrier mosquito
**TUBERCULOSIS**

Caused by BACTERIA

**INFLUENZA**

Caused by VIRUS in the respiratory

**PNEUMONIA**

Caused by VIRUS in the lung

### Choices:

- ACNE
- ATHLETE’S FOOT
- DENGUE
- INFLUENZA
- JOCK ITCH
- MALARIA
- PNEUMONIA
- RINGWORM
- TUBERCULOSIS
- WARTS

Encourage the learners to do the assessment by answering the following questions.

**ASSESSMENT:** How far do you know these skin diseases?

<table>
<thead>
<tr>
<th>IF ..........</th>
<th>YOU’RE ..........</th>
<th>THEN ..........</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you answered all correct</td>
<td>ADVANCED</td>
<td>You are ready to discuss the nature, causes and prevention of these diseases. CONGRATULATIONS! You know very well.</td>
</tr>
<tr>
<td>If you got 4</td>
<td>PROFICIENT</td>
<td>You just need to read more about communicable diseases. You know well.</td>
</tr>
<tr>
<td>If you got 3</td>
<td>APPROACHING PROFICIENCY</td>
<td>You must exert effort to learn more about these diseases. You have basic knowledge of it.</td>
</tr>
<tr>
<td>If you got 2 and below</td>
<td>DEVELOPING</td>
<td>You need to exert effort to learn more about these communicable diseases.</td>
</tr>
</tbody>
</table>

Together with your students, analyze the results of your pre-assessment to determine where they are in terms of background knowledge and skills; their strengths and weaknesses as your bases for planning instructional activities.
Based on the objectives of the lesson and results of the pre-assessment, let your students define their personal goals and targets to achieve at the end of this lesson. Ask them to write their goals/targets in their journal/notebook.

Make sure that all your students are able to define their own goals and targets. Tell them to monitor the progress of their targets as you go on with the lesson.

Instruct the learners to write their expected goals and targets in their journal. Inform them that their journal will be given attention at the end of the lesson.

I will demonstrate understanding on the prevention and control of communicable diseases for the attainment of my wellness.

The following are the things I will do to demonstrate prevention and control of communicable diseases for the attainment of my wellness.

Date________________
_______________________________________
_______________________________________.
I have to set my goals and targets on how I can consistently demonstrate personal responsibility and healthful practices for the prevention and control of communicable diseases.

Write down the steps you will do DAILY to consistently demonstrate personal responsibility and healthful practices to prevent and control communicable diseases.

_______________________
_______________________
_______________________
_______________________
_______________________

Please refer to page ___ entitled my personal daily journal.

_______________________
_______________________
_______________________
_______________________
_______________________
PART ONE - WHAT TO KNOW

In this part of the learning material, the learners are provided with structured learning experiences that will assesses their prior knowledge, clarify their understanding, and require them to answer some focus questions about human sexuality.

REMEMBER: Accept all answers of your students. However, take note of those areas that you need to clarify details. Make sure that the learners fully understand how they are assessed so that they can clearly set their expectations such as performing well in the activities especially at the end of the grading period.

Activity 1:  Read, Analyze, and React.

One summer, my family went to Ilocos for our yearly summer vacation. One night my daughter had a fever and what I did was to let her have medicine to lower the fever. In the morning, I saw that rashes have appeared on her arms so I suspected measles. I had her occupy another room where she was alone to prevent cross-infections.

After breakfast, my late mother-in-law brought my daughter out at the backyard and started scattering some rice while talking indistinctively. She got some soil near a tree where my daughter played and rubs it on my daughter’s arms, face, and feet. She said that she did that because my daughter might have disturbed some spirits in the back yard when she played there.

Have them react on what they read.

Help them analyze the questions and assist them by reading the questions aloud. Let them raise their hands if they need assistance.

1. Are the rashes a result of some disturbed spirit? ( ) yes ( ) no
2. Can playing at the back yard harm some spirits? ( ) yes ( ) no
3. Will scattering some rice around help heal the rashes? ( ) yes ( ) no
4. Does rubbing the soil in the arms, face, & feet heals the rashes?

Encourage the learners to evaluate their answers using the following description:

If you got 4 correct answers, then you really know the truth about some false beliefs and practices.
If you got 3 correct answers, then you are not sure of the some false beliefs and practices.
If you got 2 correct answers, then you need to take focus, listen and learn.
If you got 1 correct answer, then you are in danger, you practice a lot of false
5. What can you say about the story?
6. Do you agree with the belief of the mother-in-law? Why or why not?
7. If you were the mother-in-law, what should you do?
8. Have you heard of a similar story?
   Share your answer to the class.

Have the learners do the CRITICAL THINKING

Make them answer the following questions.
- If you were to give some questions about the readings, what will these be?

Tell them use their own words.

Activity 2: Did you know?

Dear Naomi,

I received your text message about the Factors that Influence Disease Transmission. Anyway, thank you for this opportunity to share to you what I learned in my medical training.

As far as I can remember, the following are factors that influence disease transmission. 1) **Environmental Factors.** *Sanitation and sanitation facilities* can affect the transmission of diseases where food and water can become contaminated because of poor sanitation. *Pollution* also plays a major role in disease transmission as evidenced by floods during the rainy season. These floods were the culprits in the spread of Leptospirosis. *Climate* also takes its role as an environmental factor. In our country we only have the dry and wet seasons where various microorganisms that can cause morbidity can thrive on each of these seasons. 2) **Socio-economic Factors.** *Cultural practices* influence disease transmission. For instance, there are some places in the Cordilleras where people drink wine after a tiring day of planting and when they drink they use one glass to show unity. I also experience one practice among the Ilocanos, in a barrio where I had my medical practice, that all the members of the family are to wash their hands in one basin of water before they eat.

*Living arrangements* in some cultures where people tend to live near their livestock without knowing that these can be sources of diseases. *Prostitution* due to economic factors where the poor tend to engage themselves into this activity is one avenue for the transmission of communicable diseases as well.

There are other factors, but for now these are the things I can share you. I encourage you to read books that can give you more information.

Have a nice day,

Calvin Paul

Judith Langbayan-Javier
Invite the learners to do the following:

1. Do this activity as a group. Row one will be group 1, row two will be group 2, and row three will be group 3.
2. Copy the format below in your activity notebook. Based from what you read, read the questions you see beside the shapes and fill in the shapes with your answers. The first group to finish will write their answer on the board.

![Diagram of Factors that Influence Disease Transmission]

- **ENVIRONMENTAL FACTOR**
  - Sanitation & Sanitation Facilities
  - Climate
  - Pollution

- **SOCIO-ECONOMIC FACTOR**
  - Cultural Practices
  - Prostitution
  - Living Arrangement
  - others

What are the things that affect the factors?
Ask the learners to evaluate their answer.

If your group got 9 correct answers, then your group is in the advanced level.
If your group got 7–8 correct answers, then your group is in the proficient level.
If your group got 5–6 correct answers, the your group is in the approaching proficiency level.
If your group got 3–4 correct answers, then your group is in the developing level.
If your group got 1–2 correct answers, then your group is in the beginner’s level.

Make them put a (√) mark check before the statement if they have knowledge about it, an X mark before the statement that you have just learned, and put a ? mark on the statement that they want to know more about.

_____ A communicable disease is an illness transmitted through contact with microorganisms.
_____ People, animals, food, surfaces, and air can all be carriers of the microorganisms that pass infectious illnesses from one host to the next.
_____ The exchange of fluids or contact with a contaminated substance or individual may be enough to allow the spread of communicable disease.

Have them focus on the statement that they want to know more about because the following activities will be dealing more on the things they need to learn which are the nature, prevention and control of communicable diseases.

Encourage to do the Activity 3: Germs, germs now has wandered

Dear students,

Hello! Let’s do some activities that will help you discover the importance of protecting yourself from the different threats to your health. As you do this activity, you will explain the different elements of the chain of infection. So I will group you into male and female group. The male will form a circle likewise with the female. Select a leader who will hold the colored ball (ball is painted with washable paint). The leader will sing the song first to be followed by the group while the ball is passed around. Select an “it” who will be looking for the ball when it will be passed around. While singing the song (germs, germs now has wandered...in the tune of “dollar, dollar now has wandered) the leader will pass the ball to her/his right. The “it” will start to look for the ball. If she/he finds/points at the person holding it then that person becomes the “it”, but if not, then he/she remains the “it”.

Keep singing until all of you hold the ball or have paints on your hands. Try to analyze the lyrics/wordings of the song.

Germs, germs now has wandered
From one hand to one another
It is here, it is here to get anybody standing there.
Allow them to start singing and pass the ball, the “it” will stay at the center of the circle and go around looking for the ball. The passing of the ball stops when everyone has paint on her/his hand.

Activity 4 – Share and Care
Encourage the learners to answer the following questions:

A) What did you understand about the lyrics of the song?
B) How do you relate the lyrics of the song to your daily experiences?

Flash Figure 1 on the board and let them fill up each space with appropriate descriptions. Make them use the questions as their guide.

In the context of disease transmission, what does the following represent?

A. ball
B. leader
C. act of passing the ball
D. student having paints on their hands
E. How would you name the activity?

![Diagram](image)

Figure 1

Instruct the learners to have self-evaluation through this activity.
HOW DID I SCORE IN THIS ACTIVITY?

<table>
<thead>
<tr>
<th>Score</th>
<th>Basis for the points/score</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 5</td>
<td>If you got this score, it means that you know the concept on how a person gets infected by a communicable disease. Congratulations!</td>
</tr>
<tr>
<td>2-3</td>
<td>If you got this score then it shows that you have to focus and know the ways on how a person gets infected by a communicable disease.</td>
</tr>
<tr>
<td>0-1</td>
<td>If you got this score, it means that you hardly know how a person gets infected by a communicable disease so you need to strive harder.</td>
</tr>
</tbody>
</table>

**Congratulations** dear student! You are now ready to do the next level.

Encourage the learners to read this very interesting story. This story will help them remember their Under Six experiences and this will help them answer the next activity.

One rainy day, Christine Joy was fixing some old boxes in the store room. She found a small booklet with graphs and remarks. She asked her mom some explanations.

Her mother explained how CJ had her doses/shots of anti-measles, anti-polio, anti-malaria, anti-TB and many more. Her mom brings her to Under Six Clinic for monthly check-ups and to take her vaccines. Her check-ups include taking her weight and height, checking her ears, mouth, and eyes to know if they are not infected.

According to her doctor, proper hygiene is one way to prevent getting infected. Her mom said that having sunshine everyday and walking around the yard is one of the most enjoyable activities CJ did because she wasn’t only walking but running after her brother.

Now, how about you? What is your story?

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Judith Langbayan-Javier

**Ask the learners to do this Activity 5: What do you know?**

In their activity notebook, make them draw their palm and fingers. Have them recall the healthful things their parents have done to them since they were a baby up to the present in order to prevent them from getting sick.

Make them write each one on each finger in three minutes. Give them one minute each to share their work to the class.

After sharing your work with the class, take note of the focal point they have had. Then have them list down the common and vital practices that their parents have done to them.
If in the sharing, the following words are mentioned, list them down and find out how they will be explored in the following activities.

*Immunity, vaccines, personal hygiene, physical fitness, and or biofeedback.*

**Did you know?**
There are three levels of preventing diseases: primary, secondary, and tertiary. In primary prevention, activities are done to prevent one from having the disease. This includes getting immunized, eating a healthy diet, and getting enough sleep. The secondary prevention activities are done to prevent further damages when the disease has already started. This includes prompt diagnosis and treatment. For the tertiary prevention, the focus is on rehabilitating the sick person so as to prevent long-term complications of the disease.

Fill in each blank with appropriate entry/word. Then, follow these guidelines to reduce the spread of infections.

- Bath everyday to keep your skin, hair, and nails clean.
- Avoid sharing personal or drinking utensils.
- Store & prepare food in a safe way to prevent food contamination.
- Wash your hands after using the toilet and wash your hands before and after eating.
- If you are sick, avoid sharing your sickness to others. Cover your mouth when coughing.
- There are three other ways to protect yourself from communicable diseases. You can become sick by having the disease. You can be immunized by injection. If a vaccine is available, then you can practice biofeed back.

There are three levels of prevention.

1) The Primary level is used before the person gets the disease.
2) The Secondary level is used after the disease has occurred, but before the person notices that anything is wrong.
3) The Tertiary level targets the person who already has symptoms of the disease; to lessen the damage and pain from the disease, to slow down the disease, prevent It from causing complications, give the best care and to make the sick healthy again.
EVALUATE YOUR ANSWER:
If you got 13 correct answers, it means that you are very much concern and helps reduce the spread of infections.
If you got 11-12 correct answers, it means that you are much concern and helps reduce the spread of infections.
If you got 6 – 10 correct answers, it means that you are concern in the reduction of the spread of infections.
If you got 1-5 correct answers, it means that you are in danger of getting infected.

Make the learners do this Activity 6: Know what you see.

Invite them to look at the figure (power point) and write in their notebook what they should do and what they should not be doing if they are the one in the picture. Let them copy figure 2 on their notebook and write their answers on the column provided.

Have them look at the choices below and write the appropriate answer on the column.

<table>
<thead>
<tr>
<th>WHAT I SHOULD DO</th>
<th>WHAT I SHOULD NOT BE DOING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drink using my own bottle/glass</td>
<td>I should NOT drink from someone’s bottle/glass.</td>
</tr>
<tr>
<td>Use my own hair comb/brush</td>
<td>I should NOT use someone’s hair comb/brush.</td>
</tr>
<tr>
<td>Use my own towel</td>
<td>I should NOT use other’s towel.</td>
</tr>
<tr>
<td>Use a clean sock everyday</td>
<td>I should NOT use other’s sock.</td>
</tr>
<tr>
<td>Wash my hands with clean water and soap before and after I use it (hands)</td>
<td>I should NOT be lazy to wash my hands before and after using it (hands).</td>
</tr>
</tbody>
</table>

Fig. 2
CHOICES:

1. Drink water all the time. I use my own bottle/glass in drinking.
2. Use the comb properly.
3. Use my own towel.
4. Use clean socks and change it everyday.
5. Wash hands with soap and water.

1. Drink from somebody’s bottle/glass.
2. Use my comb alone and won’t share it with others.
3. Not to share my towel or use others’ towel.
4. Share my socks to others or use others’ socks.
5. Be lazy in washing my hands before and after using them.

Have the learners do this Activity 7: Act what you know

Group them into five. Each group is composed of 10 members. Make them do the following:

Each group will draw from the box the type of pathogens their group will represent. Read the lesson about your drawing and discuss on how you will present to class the lesson.

1. Here are some suggested ways you can use to present the lesson.
   A. News casting
   B. Skit
   C. Classroom setting
   D. Debate
   E. Barangay Meeting
   F. acrostic

2. The lesson talks about the types of Pathogen which are
   a. Bacteria;
      Toxins Bacteria,
      Resident Bacteria,
   b. Virus;
   c. Rickettias;
   d. Fungi;
   e. Protozoan;
   f. Parasitic worm.

3. Make sure everyone understand the lesson and each uses his/her own words to explain and discuss it.

4. Each group is given 20 minutes to prepare their group for presentation

5. After 20 minutes, the leader from each group will draw who will present first.

7. The following criteria will be the basis for scoring:
Clear explanation of the lesson – 50%
Presentation of the lesson is creative using the suggested means without help from others – 25%
Group participation (all the members actively participated) – 25%

Total------------------------------------------------------------100%

<table>
<thead>
<tr>
<th>TYPES OF PATHOGENS</th>
<th>NATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATHOGEN</td>
<td>Many of the most common diseases are caused by tiny microorganisms called PATHOGEN. Pathogen infects, or invades the body and attacks its cells and tissues. Some bacteria, rickettsias, fungi, protozoans, certain types of worms, and all viruses are pathogens. Diseases caused by the direct or indirect spread of pathogens from one person to another are called communicable diseases.</td>
</tr>
<tr>
<td>BACTERIA</td>
<td>I read that BACTERIA are one-celled microscopic organisms that rank among the most widespread of living things. Some are small that a single grain of soil may contain over 100 million of them. Most bacteria do not cause disease. In order to live, all bacteria must have a food supply, as well as suitable temperature, moisture and darkness. Some bacteria digest nonliving food materials such as milk and meat. These organisms are called saprophytes. If the food supply is a living plant or animal, the microorganism is called a parasite. The plant or animal that the parasite feeds on is called a host.</td>
</tr>
<tr>
<td>TOXIN BACTERIA</td>
<td>Toxin Bacteria produces a certain poison. Botulism is a food poison. These bacterial live in the soil. Once they enter the body through a wound, they can cause tetanus or lockjaw. Other bacteria cause pneumonia.</td>
</tr>
<tr>
<td>RESIDENT BACTERIA</td>
<td>It lives in the human mouth and intestines and on our skin. These help protect us from harmful bacteria. Lactobacili, found in the gastrointestinal tract, produce lactic acid from simple carbohydrate. Coliform bacilli, found in the intestines, help break down carbohydrates and combat disease-causing bacteria. Resident bacteria cause infection when it moves from where residents are. Example, a bacteria in the mouth is moved to the ear then you get an infected ear.</td>
</tr>
<tr>
<td>RICKETTSIAS</td>
<td>These are organisms that are considered intermediate, that is, somewhere between a virus and a bacterium. Most of them grow in the intestinal tracts of insects, which carry them to their human hosts. Rickettsia requires living cells in order to grow and multiply. Blood sucking insects, such as lice,</td>
</tr>
</tbody>
</table>

mites, and ticks carry rickettsias to humans. Typhus fever and Rocky Mountain spotted fever are diseases caused by these organisms.

| VIRUS | are small, simple life-like forms from one half to 100 the size of a bacteria. These organisms are the human body’s worst enemies. All virus are parasites. There are virus that invades animals and virus that attack specific types of cells. Example, rabies virus can enter only brain cells, polio virus attacks only the nervous system. Cold virus enters the respiratory system. Viral hepatitis is caused by virus that affects the liver. Mumps and mononucleosis are caused by viruses that infect glandular tissues. Smallpox, chicken pox, shingles and warts are infections caused by viruses that attack the skin tissues. When virus enters the body, it attaches itself to a cell and releases its nucleic acid into the host cell. |
| FUNGI | These are simple organisms that cannot make their own food. Many lives on dead animals, insect, and leaves. Fungi are therefore saprophytes. They prefer dark, damp environments. Two of the most common fungi are yeast and mushrooms. Disease-producing fungi invade mainly deep tissues of the hair, nails and skin. Fungi cause infections of the scalp, such as ring worm, and of the feet, such as athlete’s foot. Pathogenic fungi can also cause brain inflammation and serious lung infections. |
| PROTOZOANS | are single-celled organisms that are larger than bacteria and have a more complex cellular structure. Most of these are harmless and they are most common in tropical areas that have poor sanitation. They cause malaria, African sleeping sickness and amoebic dysentery, a severe intestinal infection. |
| PARASITIC WORM | A worm classified as a parasite. (A parasite is a disease-causing organism that lives on or in a human or another animal and derives its nourishment from its host.) Lice are examples of parasites that live on humans; bacteria and viruses are examples of parasites that live either on humans or in humans; parasitic worms (also called helminths) live in humans. Helminth eggs contaminate food, water, air, feces, pets and wild animals, and objects such as toilet seats and door handles. The eggs enter the body of a human through the mouth, the nose, and the anus. Once inside the body, helminth eggs usually lodge in the intestine, hatch, grow and multiply. They can sometimes infest other body sites. The word "helminth" is derived from the Greek "helmins" (worm). Helminthology is the study of parasitic worms. Common helminths and the problems they cause include the following:

- **Roundworm**: Roundworms hatch and live in the intestines.
The eggs usually enter the body through contaminated water or food or on fingers placed in the mouth after the hands have touched a contaminated object. Symptoms of their presence include fatigue, weight loss, irritability, poor appetite, abdominal pain and diarrhea. Treatment with medication results in a cure of about a week. Without treatment, anemia and malnutrition can develop.

- **Pinworm**: Also called seatworms and threadworms, pinworms hatch and live primarily in the intestines. The eggs usually enter the body through the anus, through the nose or mouth via inhaled air, or through the mouth on fingers that have touched a contaminated object. Symptoms of their presence include anal itching and sometimes pale skin and stomach discomfort. If pinworms enter the vagina in females, discharge and itching may develop. Pinworms do not cause serious complications. Treatment with medication results in a cure within days.

- **Trichina spiralis**: This worm lives in the intestines and causes a serious illness known as trichinosis. The eggs usually enter the body via raw or undercooked pork, sausage or bear meat. In the intestines, the eggs hatch, mature, and migrate to other parts of the body through the bloodstream and the lymphatic system. Early symptoms include vomiting, diarrhea, and abdominal cramps. In time, a high fever, puffiness of the face and muscle pain develop. Eventually, the worms can penetrate the muscles, the heart, and the brain and can cause death. Treatment with an anti-worm drug such as thiabendazole, as well as bed rest and a physician’s care, can cure trichinosis. Recovery may take several months. Diagnosis of trichinosis sometimes requires analysis of a tissue sample (biopsy) taken from muscle.

- **Tapeworm**: Tapeworms live in the intestines. The eggs usually enter the body via raw or uncooked beef. Symptoms of their presence are usually absent. However, some patients experience abdominal pain, fatigue, weight loss, and diarrhea. Treatment with medication results in a cure within days.

- **Fluke**: Flukes live in different locations in the body, including the intestines, bladder, rectum, liver, spleen, lungs,
and veins. Flukes first mature inside freshwater snails. After leaving the snails, they can enter the body of humans by penetrating the skin of persons swimming, bathing, or washing in water where flukes are active. Infected persons can re-contaminate the water by urinating or defecating in it. Most infected persons experience no symptoms. However, some infected persons may experience rash, itching, muscle aches, coughing, chills and fever. Flukes pass out of the body, but persons can become infected again and again. In time, the repeated infections can damage the liver, bladder, intestines and lungs. In rare cases, flukes can invade the spinal cord or brain and cause seizures and paralysis. Fluke-caused illnesses are classified as schistosomiasis (also called bilharziasis) and are mainly confined to Africa, parts of South America and the Caribbean, and parts of the Middle East, China, and the Philippines.

Prevention of helminth diseases usually requires frequent washing of hands, frequent cleaning of bathrooms and kitchens, and thorough cooking of the food they infest -- mainly beef, pork, sausage, and bear meat. Water supplies should be chlorinated, if possible.

ASSESSMENT FOR KNOWLEDGE

<table>
<thead>
<tr>
<th>SCORE</th>
<th>REMARK</th>
<th>INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>You belong to the Advanced group</td>
<td>You have very clear knowledge about the lesson because you explained the lesson with confidence using the means of presentation creatively with out any help from others. The whole member of the group actively participated and the class attentively enjoyed your presentation.</td>
</tr>
<tr>
<td>81-89</td>
<td>You belong to the Proficient group</td>
<td>You have clear knowledge about the lesson because you explained the lesson using a creative presentation without any help from others. The whole member of the group participated and the class enjoyed your presentation.</td>
</tr>
<tr>
<td>70-80</td>
<td>You belong to the Approaching Proficiency group</td>
<td>You have clear knowledge about the lesson because you explained the lesson using the means of presentation with a little help from others. The whole member of the group participated and the class watch your presentation.</td>
</tr>
<tr>
<td>50-69</td>
<td>You belong to the</td>
<td>You have vague knowledge about the lesson because you explained the lesson using the means of presentation with</td>
</tr>
<tr>
<td>Score</td>
<td>Group Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Developing</td>
<td>Developing group</td>
<td>much help from others. The whole class will watch your presentation.</td>
</tr>
<tr>
<td>49 and</td>
<td>You belong to the</td>
<td>You hardly know the lesson because you hardly explain the lesson using the</td>
</tr>
<tr>
<td>below</td>
<td>Beginning group</td>
<td>lesson using the means of presentation and with much help from the teacher.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The whole class watched your presentation.</td>
</tr>
</tbody>
</table>

**Congratulations** dear students! You are now ready to do the next level.
In this part of the learning material, the learners are provided with various learning experiences to enable them to make sense of the information, develop, reflect, rethink, validate, and revise their understandings of the lesson.

Encourage the learners to do this

Activity 1: MATCH and CONNECT

Give them the pap sheet about the chain of infection. Instruct them to carefully read each numbered entry and choose from the word pool the appropriate term being described. Help them do the following:
1. A volunteer from each row will read aloud the definitions very well, then write the word of the first in the link chain.
2. Another member of the row will explain in her/his own words the meaning of the chain.
3. The other rows will do the same until the link chain is discussed.

<table>
<thead>
<tr>
<th>CHAIN</th>
<th>MEANING/DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pathogen</td>
<td>is an organism with the ability to cause diseases. The greater the organism's virulence (ability to grow and multiply), invasiveness (ability to enter tissues) and pathogenicity (ability to cause diseases), the greater the possibility that the organism will cause an infection. Infectious agents are bacteria, virus, fungi, protozoa and parasitic worms.</td>
</tr>
<tr>
<td>2. Reservoir</td>
<td>is a place within which microorganisms can thrive and reproduce. For example, microorganisms thrive in human beings, animals, and inanimate objects such as water, table tops, and doorknobs. The most common reservoir is the human body.</td>
</tr>
<tr>
<td>3. Mode of Transmission</td>
<td>provides a way for a microorganism to leave the reservoir. For example, the microorganism may leave the reservoir through the nose or mouth when someone sneezes or coughs. Microorganisms, carried away from the body by feces, may also leave the reservoir through an infected bowel.</td>
</tr>
<tr>
<td>4. Portal of exit</td>
<td><em>the mode of transmission</em> is the method by which the organism moves from one host to another. The mode of transmission are contact, droplet, air-borne, food-borne/water-borne, Vector-borne (usually insect)</td>
</tr>
<tr>
<td>5. Portal of entry</td>
<td><em>an opening</em> allowing the microorganism to enter the host. This includes body orifices, mucus membranes, or breaks in the skin. Tubes placed in body cavities, such as urinary catheters, or from punctures produced by invasive procedures such as intravenous fluid replacement can also serve as portal of entry.</td>
</tr>
<tr>
<td>6. Susceptible Host</td>
<td><em>a person who cannot resist</em> a microorganism invading the body lack due to immunity of physical resistance to overcome the invasion by the pathogenic microorganism.</td>
</tr>
</tbody>
</table>

Word Pool:

<table>
<thead>
<tr>
<th>MODE OF TRANSMISSION</th>
<th>PORTAL OF EXIT</th>
<th>RESERVOIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATHOGEN</td>
<td>PORTAL OF ENTRY</td>
<td>SUSCEPTIBLE HOST</td>
</tr>
</tbody>
</table>
Get clues from the guide questions below. Explain the chain of infection to the class.

Guide Questions:
1. What types of pathogens has the ability to cause diseases?
2. What is the place within which microorganisms can thrive and reproduced?
3. Where is the reservoir of the microorganisms?
4. How did the microorganisms transfer to John?
5. Where did the microorganisms enter John?
6. Who is this next host?
Present the following prompts to the learners, and make them evaluate how they fare in the activity.

<table>
<thead>
<tr>
<th>LET US SEE HOW YOU SCORED</th>
<th>If you answered all correctly then you are skillful in analyzing the definitions and can write the sequence of the chain of infection correctly. Therefore, you are considered an Advanced Student.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you got 7-9 correct answers then you have some skills in analyzing the definitions and in writing the sequence of the chain of infection correctly. So this makes you a Proficient Student.</td>
</tr>
<tr>
<td></td>
<td>If your score is 4-6, then you need more skills in analyzing the definitions and in writing the sequence of the chain of infection correctly. You are Approaching Proficiency.</td>
</tr>
<tr>
<td></td>
<td>But if you scored 1-3, then you really need some more skills in analyzing the definitions and in writing the sequence of the chain of infection correctly. You are still Developing.</td>
</tr>
<tr>
<td></td>
<td>The danger is if you got zero then you are just beginning to learn skills in and Analyzing the subject.</td>
</tr>
</tbody>
</table>

Encourage the learners to do this
Activity 2: **Fill my lacking correctly where they will do the following:**

Each group will read the “chain letter” and fill-in the blanks with the correct word. Start to answer when you hear the bell and stop when you hear the word “time is up.” All groups will submit their papers after 5 minutes of answering. Exchange papers and check the answers as the class goes over the letter.

The teacher will clarify misconceptions as the need arises.

**“THE CHAIN LETTER”**

1) **PATHOGEN** is a disease-causing organism which includes bacteria, virus, parasitic worm, protozoa, and fungi and lives in the (2) **RESERVOIR** which can be a living or non-living object. In order to be transmitted, the pathogen leaves the reservoir through the (3) **PORTAL of EXIT**. Examples include the mouth, nose, anus, and other special body openings. The pathogen is then passed through a direct or indirect (4) **MODE of TRANSMISSION** from one host to the next host. It is transmitted through a living vector like a mosquito or flea. Some diseases like malaria have complicated life cycles involving more than one species. Some are transmitted by respiratory droplets, while others are through blood contact, semen or other secretions. Hand-to-mouth is a common mode for gastrointestinal pathogens. The organism enters the body through the (5) **PORTAL of ENTRY**, such as the nose, skin, or mouth. The portal of entry determines the type of personal protective equipment (PPE) to use to keep health care workers, family and visitors safe in the hospital. The (6) **SUSCEPTIBLE HOST** is a person with low immunity to disease. This includes the very old, and the immune suppressed (due to genetics, transplant drugs, malnutrition, or viral infection like HIV).

-Michelle Ziegler, Contagions,wordpress.com
Make them evaluate their answer through using the following guide:

<table>
<thead>
<tr>
<th>SCORE</th>
<th>REMARKS</th>
<th>COMMENT!</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>An Advanced Student</td>
<td>You were able to process very well the elements of the chain of infection. Congratulations!</td>
</tr>
<tr>
<td>5</td>
<td>A Proficient Student</td>
<td>You were able to process well the elements of the chain of infection</td>
</tr>
<tr>
<td>3-4</td>
<td>Approaching Proficiency Student</td>
<td>You found it hard to process the basic knowledge of the chain of infection.</td>
</tr>
<tr>
<td>0-2</td>
<td>A Developing Student</td>
<td>You still need to double your effort in processing the chain of infection.</td>
</tr>
</tbody>
</table>

Have them do this Activity 3: Read this!

Hello my dear student,

Here are some additional preventive measures for diseases according to different modes of transmissions. In addition to your general hygiene practices, vaccination and standard precautions, specific preventive measures should be adopted when dealing with diseases with various modes of transmission. In order for you to avoid the spread of infections, if you are sick, you should avoid going to school or going outdoors. The suitable time for you to return to school depends on your health conditions.

Copy the following chart on your activity notebook, and as you go through this lesson, underline with green color/pen the examples of diseases that you already experienced. Underline with red color/pen the diseases that you have. For the preventive measures, underline with black color/pen the practices you are doing regularly and underline with blue color/pen the preventive measures that you need to practice to prevent infections.
<table>
<thead>
<tr>
<th>Mode of transmission</th>
<th>Examples of diseases</th>
<th>PREVENTIVE MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I – DIRECT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Contact transmission</td>
<td>Hand, foot and mouth disease,</td>
<td>□ Adopt proper isolation for the sick. No human contact.</td>
</tr>
<tr>
<td></td>
<td>(Kissing)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute conjunctivitis,</td>
<td>□ Keep both hands clean and perform hand hygiene properly.</td>
</tr>
<tr>
<td></td>
<td>(handshakes with a sick person)</td>
<td>□ Clean and disinfect properly the items used by Patients.</td>
</tr>
<tr>
<td></td>
<td>(sleeping with someone with lice)</td>
<td>□ Do not share towels and other personal items.</td>
</tr>
<tr>
<td></td>
<td>Scabies</td>
<td>□ Wear gloves when making contact with patients.</td>
</tr>
<tr>
<td></td>
<td>Head lice</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Food-borne/ water-borne transmission</td>
<td>Chickenpox</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Viral gastroenteritis, Food poisoning,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholera, Bacillary dysentery,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A, Hepatitis E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ensure all food is adequately cooked especially high risk food like shellfish.
- Perform hand hygiene before meals and after going to the toilet.
- Handle vomitus and excreta properly.
- Sick food handlers should refrain from work and seek medical advice early.

<table>
<thead>
<tr>
<th>3. Vector-borne transmission (usually insects)</th>
<th>Dengue fever</th>
</tr>
</thead>
</table>

- Maintain environmental hygiene to prevent breeding of insects / mosquitoes, e.g. prevent accumulation of stagnant water.
Mosquito bites
And
Insect bites

Malaria,
Symptoms of Malaria

Japanese encephalitis

Take personal protection to prevent insect/mosquito bites, e.g. wear light-colored, long-sleeved clothes and trousers/pants and use insect repellents.

II – INDIRECT
1. Droplet transmission
   (Coughing)

Influenza,
Common cold,

□ Maintain good indoor ventilation

□ Keep both hands clean. In particular, perform hand hygiene properly and immediately after making contact with sick persons having respiratory secretions.
1. Respiratory transmission

- **Streptococcus pneumoniae infection**
  - Cover mouth and nose when sneezing or coughing. Use tissue papers to contain respiratory secretions and dispose them in garbage bins with lid.
  - People with respiratory infection, symptoms and their close contact/aids should wear surgical masks.
  - Keep a distance of at least one metre from the sick person.
  - Seek medical advice immediately if unwell.

- Adopt proper isolation for the sick.
- Use appropriate personal protective equipment when necessary.

2. Air-borne transmission

- Pulmonary tuberculosis, Measles,
  - Maintain good indoor ventilation
  - Seek medical advice immediately if Unwell.
  - Anyone with symptoms suggestive of air-
Invite the learners to do the activity below. The teacher will help them fill in the shapes with the correct answers. Make them answer the questions.

1. What are the TWO KINDS OF TRANSMISSION?

   - CONTACT
   - FOOD/WATER-BORNE
   - VECTOR-BORNE
   - DROPLET
   - AIR-BORNE

2. What are the MODE OF TRANSMISSIONS?

<table>
<thead>
<tr>
<th>DIRECT</th>
<th>IN DIRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scabies, Sore eyes</td>
<td>Influenza, common colds</td>
</tr>
<tr>
<td>Hand, foot &amp; mouth</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Hepatitis, dysentery</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>Viral gastroenteritis</td>
<td>Measles, chicken pox</td>
</tr>
<tr>
<td>Cholera, food poisoning</td>
<td></td>
</tr>
<tr>
<td>malaria, dengue</td>
<td></td>
</tr>
</tbody>
</table>

3. What are the Examples of communicable diseases?

1. Perform hygiene properly
2. Use your own personal things
3. Maintain good ventilation
4. Keep away from sick people
5. Eat clean and well cooked food
6. Maintain environmental cleanliness
4. What are the PREVENTIVE MEASURES?

Have them EVALUATE their ANSWERS

<table>
<thead>
<tr>
<th>SCORE</th>
<th>REMARKS</th>
<th>INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>You’re advanced</td>
<td>You know and understands very well the modes of transmission of communicable diseases and their preventive measures.</td>
</tr>
<tr>
<td>20-24</td>
<td>You’re proficient</td>
<td>You know and understands well the modes of transmission of communicable diseases and their preventive measures</td>
</tr>
<tr>
<td>15-19</td>
<td>You’re approaching proficiency</td>
<td>You know and understands the modes of transmission of communicable diseases and their preventive measures</td>
</tr>
<tr>
<td>10-14</td>
<td>You’re developing</td>
<td>You hardly know and understands the modes of transmission, the communicable diseases and their preventive measures</td>
</tr>
<tr>
<td>6-9</td>
<td>You’re beginning</td>
<td>You are prone to be infected with communicable diseases because you don’t know their preventive measures.</td>
</tr>
</tbody>
</table>

Make them do the CRITICAL THINKING and process this alone without asking help from others.

- Observe, Reflect, and React

The Cough Etiquette
### A

**Analysis.**

What do you see in picture A?
Do you think this is a very fast way to infect other people with diseases?
Prove your point.
Share your analysis to the class, your family and friends

### B

**Evaluate yourself.**

Look at picture B.
Which of these six prevention tips do you strictly practice and why?
What is its effect to you?
Which of these six prevention tips do you hardly practice and why?
What is its effect to you?

So what are you planning to do now?

---

### Analyze and Evaluate

1. People say that the hands are the dirtiest part of the body.

   ✓ Do you agree? Why and why not?

2. People say that washing the hands is the most neglected practices that a person does.

   ➢ Do you agree? Why and why not?
PART THREE – WHAT TO UNDERSTAND

In this part, the learners are provided with other learning resources and experiences for them to enrich/broaden their understandings of the lesson through additional activities (e.g. conducting research, lecture forum, symposium, or inviting resource person to discuss critical topics, etc.) and reading resources for them to enrich/broaden their understanding.

Encourage the learners to do this ACTIVITY 1 – An important life changing letter

Dear students,

This life-changing letter is about the course of infection by stages. Read it very carefully and understand how infection manifests through its various stages. When a person is sick, the first stage of infection is incubation. It is the period starting from the entry of the pathogen until the appearance of the first sign. For example: chicken pox, it takes 2-3 weeks of incubation. For common cold, 1-2 days of incubation, influenza takes 1-3 days, and 15-18 days for mumps.

The second stage is called the prodromal stage which starts from the onset of non-specific signs and symptoms such as fever. Illness stage begins when more specific signs and symptoms appear. For example, common cold is characterized by sore throat, sinus congestion, rhinitis, mumps manifested by ear ache, high fever, and salivary gland swelling.

The last stage of infection is an interval when acute symptoms of infection disappear. The length of recovery depends on the severity of infection and the sick person’s general state of health. Recovery may take several days to months and is called the convalescence stage.

By understanding the chain of infection, the sick person must intervene to prevent the infection from developing any further. When a sick person acquires an infection, he/she must observe signs and symptoms of infection and take appropriate actions to prevent the spread like staying away from other people, and taking the doctor’s advise seriously. Infection follows a progressive course as explained above. The severity of the sick person’s illness depends on the extent of the infection, the pathogenicity of the microorganism and susceptibility of the host.

I hope that you were able to learn something about the stages of infections.
Make them look at the graph showing the stages of infection. Encourage them to study the graph and share what they learned to their classmate, friends, and parents.

Give the learners some activities to enhance what they have understood about the lesson. Make them do the following tasks

Row 1 will do Activity 1.a: *What’s the word?*

Row 2 will do Activity 1.b: *Pick and Put* and

Row 3 will do Activity 1.c: *Explain the graph*

Each row will discuss their outputs to the class after 5 minutes.
Instruct the learners to do this

**ACTIVITY 1 .a: What’s the word where they will answer.**

1. Copy the puzzle in your activity notebook and write the letters on the boxes to form each word being described.
2. Choose your answer from these choices:
   - Convalescence stage, Incubation stage, Illness stage, Prodromal stage

**Across**

1. This is the interval between entrance of pathogen into the body to the appearance of first symptoms.
2. This is the stage when the sick person exhibits signs and symptoms specific to type of infections.
3. This is the interval when acute symptoms of infection disappears (length depends on severity of infection and sick person’s state of health).

**Down**

4. This is the interval from the onset of nonspecific signs and symptoms to the appearance of more specific symptoms time. When microorganisms grow and multiply, and the sick person may be more capable of spreading disease to others.

**Have them do the self-assessment through using this, HOW DID I SCORE IN THIS ACTIVITY?**

If I got 4 checks then I understood the intervals of infections.
If I got 2 checks then I need to reflect on my answers in order to understand intervals of infections.

**CRITICAL THINKING**

Choose a stage where they think is the best stage to CUT from the flow of infection and explain why they chose that stage.

1.b – Pick and put

Choices of symptoms are written on the strips. Copy on your activity notebook the table as shown below and pick the answers from the choices and write them on the columns that describe the stages.

**ANSWER**

<table>
<thead>
<tr>
<th>Incubation stage</th>
<th>Prodromal stage</th>
<th>Illness stage</th>
<th>Convalescence Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickenpox, 2-3 weeks</td>
<td>Malaise, low-grade fever, fatigue</td>
<td>Common cold manifested by sore throat, sinus congestion, rhinitis</td>
<td>Length of recovery depends on severity of infection and patient's general state of health; take several days to months.</td>
</tr>
<tr>
<td>Common cold, 1-2 days</td>
<td>Malaise, low-grade fever, fatigue</td>
<td>Common cold manifested by sore throat, sinus congestion, rhinitis</td>
<td>Length of recovery depends on severity of infection and patient's general state of health; take several days to months.</td>
</tr>
<tr>
<td>Influenza, 1-3 days</td>
<td>Malaise, low-grade fever, fatigue</td>
<td>Common cold manifested by sore throat, sinus congestion, rhinitis</td>
<td>Length of recovery depends on severity of infection and patient's general state of health; take several days to months.</td>
</tr>
<tr>
<td>Mumps, 15-18 days</td>
<td>Malaise, low-grade fever, fatigue</td>
<td>Common cold manifested by sore throat, sinus congestion, rhinitis</td>
<td>Length of recovery depends on severity of infection and patient's general state of health; take several days to months.</td>
</tr>
</tbody>
</table>

**CHOICES:**

Length of recovery depends on severity of infection and patient’s general state of health; take several days to months.

<table>
<thead>
<tr>
<th>Incubation stage</th>
<th>Prodromal stage</th>
<th>Illness stage</th>
<th>Convalescence Stage</th>
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<td>Common cold manifested by sore throat, sinus congestion, rhinitis</td>
<td>Length of recovery depends on severity of infection and patient's general state of health; take several days to months.</td>
</tr>
</tbody>
</table>
Make them do self-assessment by doing the “HOW DID I SCORE IN THIS ACTIVITY?”
Make them use the following prompts.

1. If I was able to put all the symptoms in the boxes correctly then I have clear ideas about them.
2. If I wasn’t able to get all the symptoms in the correct boxes then I have to analyze and reflect on the symptoms to understand it better.

Invite them to do the
CRITICAL THINKING: WHAT WILL YOUR GROUP DO? where they will classify the symptoms in each column and stages, choose a stage where they think is the best stage to STOP the flow of the infection and explain why they chose that stage?

Let them 1.c: Explain the graph
   Explain in their own words the graph of the stages of infection and use these guide questions;

   1. Where did the arc started and where did it end? What does it mean?
   2. Explain the flow of the arc. If you noticed, it started low, then up, then it goes down.
   Make them check their answers against the following.
   ANSWER

Let them do self-assessment through using HOW DID I SCORE IN THIS ACTIVITY?

1. If I was able to explain very well to the class the stages of infection then I have clear ideas about them.
2. If I was able to explain very well to the class the stages of infection then I have to analyze and reflect on the stages of infection until to understand it better.
Make them do the CRITICAL THINKING through CAN YOU DO SOMETHING ABOUT IT?

After their group explained the stages of infection, let each group choose a stage that is the best stage to CUT the flow of infection and explain why they have chose that stage.

Make them proceed to the next activity about decision making.

Make them do ACTIVITY 2: I have to decide... read the first column “when the following happens...” and read the second column, “what will I do?” Have them connect two sets and put a check √ mark on each appropriate box.

<table>
<thead>
<tr>
<th>When the following happens….</th>
<th>What will I do?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>By understanding the chain and stages of infection</td>
<td>I will intervene to prevent infections from developing.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>When I acquire infection</td>
<td>I will observe signs and symptoms of infections.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>When there are symptoms and signs</td>
<td>I will take appropriate actions to prevent its spread.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>If the symptoms and signs persists</td>
<td>I will see the appropriate doctor/medical specialist.</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

Have them do the self-assessment through using the following prompts

1st - If you checked all yes, then you are really a disciplined and health-conscious student. You are ready to be a model for others to follow.

2nd - If you answered 2 yes, then you have to go back to where you started and internalize or analyze what a sick person should do when he is infected. So that when it happens to you, you will apply it.

3rd - If you answered 1 yes, then you have to read the module and other health readings that I have given you so that you will Understand what to do during infections.
Make them do ACTIVITY 3: Read me aloud! this short information about the Levels of Prevention of getting sick.

<table>
<thead>
<tr>
<th>PRIMARY LEVEL</th>
<th>SECONDARY LEVEL</th>
<th>TERTIARY LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is primary prevention?</strong></td>
<td><strong>What is secondary prevention?</strong></td>
<td><strong>What is tertiary prevention?</strong></td>
</tr>
<tr>
<td>- activities are done to prevent one from having the disease.</td>
<td>- Activities are done to prevent further damage when the disease has already started.</td>
<td>- The focus is on rehabilitating the sick person so as to prevent long-term complications of the disease.</td>
</tr>
<tr>
<td>Examples:</td>
<td>Examples:</td>
<td>Example:</td>
</tr>
<tr>
<td>- getting immunized;</td>
<td>- prompt diagnosis and treatment.</td>
<td>- If the child is suffering dysentery, he must be closely monitored because he/she can die of dehydration and complications. He can be confined in a hospital for strict monitoring.</td>
</tr>
<tr>
<td>- eating a balanced diet;</td>
<td>- So if a child is diagnosed with Loose Bowel Movement, he must follow the doctor’s instructions very strictly. This is to prevent LBM from becoming dysentery or even worse.</td>
<td>- Tertiary prevention includes the follow-up and monitoring of all prescribed medications to make sure the patient is taking them, therapy to help restore functions in debilitating diseases and any medical procedure means to treat or cure the disease itself.</td>
</tr>
<tr>
<td>- getting enough sleep;</td>
<td>- Screening tests are excellent examples of secondary prevention. By diagnosing diseases quickly,</td>
<td></td>
</tr>
<tr>
<td>- avoiding vices;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Don’t abuse yourself by doing a lot of work that can cause sickness.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- In order not to get sick of Loose Bowel Movement, practice washing your hands with clean water and soap before &amp; after it is used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Immunizations are probably the best example of primary prevention, and health education to all.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Invite them to do the CRITICAL THINKING where they will analyze the following questions and write their reactions on a whole pad paper

1. If you are a mother and your toddler is very sickly. What do you think is the reason? What will you do? Because of this experience,
**ACTION:** What will you advise your neighbor who just gave birth?

2. Inside your classroom, your best friend fainted. How will you know the cause of her fainting? What will you do?

**ACTION:** What will you advise your best friend after getting conscious from fainting?

3. Your neighbor was electrocuted and had a third degree burn. You helped bring him to the hospital. After three days, you heard the doctor explain to your neighbor the best way to prevent the spread of infection. Amputation was his suggestion but your neighbor did not like. What will you do?

**ACTION:** Explain to your neighbor the importance of prevention. Explain why is amputation or removing a small part of the body in order to save the bigger part of the body very important?

---

**Have them read and learn the following in order to avoid and prevent encountering them**

<table>
<thead>
<tr>
<th>Infectious Agent</th>
<th>How it looks</th>
<th>What it is</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td><img src="image1.png" alt="Bacteria Image" /></td>
<td>One-celled organisms that is found almost everywhere.</td>
<td>Strep throat, tuberculosis, sinus infections</td>
</tr>
<tr>
<td>Virus</td>
<td><img src="image2.png" alt="Virus Image" /></td>
<td>Extremely small organisms that consist of a protein coat and some genetic materials.</td>
<td>Cold, Influenza</td>
</tr>
<tr>
<td>Fungus</td>
<td><img src="image3.png" alt="Fungus Image" /></td>
<td>Fungi rely on other living or dead organisms to survive; yeast, molds, and mildews are included in this group</td>
<td>Athlete’s foot, ringworm</td>
</tr>
</tbody>
</table>
Protozoan

Protozoan, pseudopods

Single-celled organisms; much more complex than bacteria; protozoal infections usually come from infected water or food.

Amoebic dysentery

Parasite

Parasite | Health Dictionary
426 x 399 | 38.5 KB
www.beltina.org

An organism that lives in a host organism; draws nourishment from a host; some may be very large.

Tapeworm, malaria

Have them reflect on the following:

SO WHAT NOW?

Do you believe that you can do great things to prevent the spread of communicable disease?

Adapt the quotation that says “Ako ang simula”

As a student, what can you do to make our environment clean and keep ourselves free from disease?

Make them use these guides to come up with a *personal daily journal*.

Title: Making Small Things to Prevent the Spread of Diseases.

How? Before you sleep, write down on your journal what you have done for that day. For example, I picked scattered wrappers inside the classroom and I washed my hands with soap and water afterwards.

You can write on your journals everyday and you are free to adapt a strategy on how to do it. You can also make posters.

Decide on what to do to demonstrate your understanding of the general methods of disease prevention and control. Be sure to collect and check their journals every weekends.

Make the learners do ACTIVITY 4: Advertise what you know form six groups. In column A, make an advertisement/drawing on the prevention of skin disease that is described in the column B. Write your advertisement/drawing in your activity notebook.

The following criteria will be the basis for judging their work.

1. Does your advertisement/drawing match each description in column B?
2. Did you make a very clear message for the public in the advertisement/drawing?
3. Is it attractive that can easily catch the eyes of people?

Make them check their answers against the following descriptions in column B.
## Ringworm of the Body (Tinea Corporis)

Ringworm usually causes a very itchy rash. It often makes a pattern in the **shape of a ring**, but not always. Sometimes it is just a red, itchy rash. *The outer ring is very reddish and another ring in the middle is reddish too. The in-between is whitish.*

To prevent ringworm:

- Keep your skin clean and dry.
- Change your socks and underwear at least once a day.
- Wear loose-fitting cotton clothing.
- Avoid tight underwear, pants, and panty hose.
- Always dry yourself completely after showers or baths. After drying your skin with a towel, allow your skin to air-dry before putting your clothes on.
- You can also use a hair dryer, set on a cool setting, to dry your skin.
- Do not share clothing, sports equipment, towels, or sheets. If you think you have been exposed to ringworm, wash your clothes in hot water with fungus-killing (fungicidal) soap.
- Wear slippers or sandals in locker rooms, showers, and public bathing areas.
- Shower and shampoo thoroughly after any sport that requires skin-to-skin contact.

## Acne

Acne has always been a common skin problem among teenagers and adults. This disease is also known to cause stress or embarrassment on its sufferers. Thus, acne has become an almost dreaded skin condition. So if you don't want to experience having a hard time dealing with the possibility of acne growth on your skin, the best thing that you can do is to learn how to take care of your skin. Acne is usually caused by the following factors -- dirt, excess oil, and unhealthy lifestyle.

Prevention is, in washing your face, make sure that you use a gentle soap or cleanser that matches your skin type to effectively eliminate sweat, excess oil, and dirt from your face, otherwise your skin pores will clog and soon pimples might appear.

Moreover, in drying your skin, make sure that you use only clean towels.

**Wash acne-prone areas only twice a day.** Washing removes excess oil and dead skin cells. But too much washing can irritate the skin. Wash areas with a gentle cleanser and use oil-free, water-based skin care products.

**Avoid heavy make-up.** Choose powder cosmetics over cream products because they're less irritating.
**Remove make-up before going to bed.** Going to sleep with cosmetics on your skin can clog tiny openings of the hair follicles ( pores). Also, be sure to throw out old make-up and clean your cosmetic brushes and applicators regularly with soapy water.

**Wear loose-fitting clothing.** Tight-fitting clothing traps heat and moisture and can irritate your skin. Also, whenever possible, avoid tight fitting straps, backpacks, helmets, or sports equipment to prevent friction against your skin.

**Shower after exercising or doing strenuous work.** Oil and sweat on your skin can trap dirt and bacteria.

- At all times try to keep your hands and hair away from your face. Your hands and you hair may contain oil and dirt. If contacted on your face it can contaminate the pores and cause acne.
- Never squeeze or pick your spots! We all know this maybe very tempting, but it would only makes matters much worse. Most spots will heal on it's own. Picking at spots will just increase the chance of it spreading the bacteria or even worst permanently scarring your skin. So remember never to pick on it.
- Trying to reduce stress in your daily routine wherever possible is a great way to prevent acne. More sleep, do more exercise, taking warm baths and a balance diet will contribute to physical well being and hence prevent acne.

**Athlete's foot** is caused by a fungus that grows on or in the top layer of skin. Fungi (plural of fungus) grow best in warm, wet places, such as the area between toes. It looks like a burned skin because it has scales and it is reddish and itchy.

**Athletes foot**

- Wear flip-flops in affected areas.
- Use anti-fungal sprays or powders on shoes and feet.
- Dry the feet and between the toes first after a shower to prevent spread to other parts of the skin.
- Avoid tight or closed footwear especially in warm climates.
- Change socks daily. Cotton socks keep the feet cooler.
- Wash towels daily.

**WARTS** are the most common of dermatological complaints. Three out of four people will develop a wart (verruca vulgaris) at some time in their lives. Warts are slightly contagious, and you can spread them to other parts of your body by touching them or shaving around infected
areas. Children and young adults are prone to getting warts because their defense mechanisms may not be fully developed, but it is possible to get a wart at any age. Warts are caused by the human papilloma virus (HPV), which enters the skin through a cut or scratch and causes cells to multiply rapidly. Usually, warts spread through direct contact. Each person responds differently, and not everyone exposed to HPV will develop a wart. They can be all over the parts of the body.

They are small black or brownish hard grown skin. They can become bigger especially when they are always touched.

**PREVENTION**

To reduce your risk of plantar warts

Avoid direct contact with warts.

This includes your own warts.

- Keep your feet clean and dry.
- Change your shoes and socks daily.
- Don't go barefoot in public areas.
- Wear sandals or flip-flops in public pools and locker rooms.
- Don't pick at warts. Picking may spread the virus.
- Don't use the same file, pumice stone, or nail clipper on your warts as you use on your healthy skin and nails.
- Wash your hands carefully after touching your warts.

**Jock itch** is characterized by an itchy, *red rash* on the genital, *inner thighs and buttocks*. It occurs in warm, moist areas of the body and is common in athletes and people who are obese or perspires a great deal.

**Jock itch (groin infection)**

- Wash the groin daily. Dry the skin carefully after bathing.
- Do not dry the feet before the groin to reduce the risk of spreading the fungi from the feet.
- Change underwear daily.
- Wash towels daily.

**CRITERIA:**

- **90-100** For an advertisement that has a clear message, harmonious combination of 4 colors, simple presentation, and placed in a 1/8 illustration board.
- **85-89** For an advertisement that has a clear message, combination of 4 colors, presented in a 1/8 illustration board.
- **80-84** For an advertisement that has a message, combination of 4 colors and presented in a 1/8 illustrated board.
- **75-79** For an advertisement that has a message, combination of 3 color and presented in a 1/8 illustrated board.
Make the learners assess their work based on the ASSESSMENT/indicator below

<table>
<thead>
<tr>
<th>REMARKS</th>
<th>INDICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced 90-100</td>
<td>For a very well done work. The advertisement/drawing matched very well what is being described in column B. A very clear and attractive message that catches the attention of people for them to read about the prevention of skin diseases.</td>
</tr>
<tr>
<td>Proficient 85-89</td>
<td>For making the advertisement/drawing that matched well what is being described in column B. A clear and attractive message that catches the eyes of people to read about the prevention of skin diseases.</td>
</tr>
<tr>
<td>Approaching Proficiency 80-84</td>
<td>The advertisement/drawing matched what is being described in column B. A message that people can read about the prevention of skin diseases.</td>
</tr>
<tr>
<td>Developing 75-79</td>
<td>For hardly making an advertisement/drawing that should match what is being described in column B. Message that hardly catches the eyes of people to read about the prevention of skin diseases.</td>
</tr>
</tbody>
</table>

Make them do this ACTIVITY 5: “R. U. R. on this” where they will read the following letter, and answer the questions after it.

Dear ______________________ ,  (please write your name in the blank)

It is a great opportunity for you to read my story. My name is Remedios, We are five in the family. I have three brothers and one younger sister where I am the eldest of these siblings. We are living in a very small house and my father works as a carpenter while my mother stays at home to take care of my siblings.

We are a happy family even though, we suffer a lot in our health. I was in grade 8 when my teacher taught us about the prevention and control of communicable diseases. And I have been applying what I learned until now and I am improving everyday.

Lack of water causes us much problem. We bathe at least twice a week but still all of us have body odors. My younger brother’s face is full of acne. My father complains of athlete’s foot every time he removes his shoe when he gets home. Our small house smells bad in every corner. My mother’s neck is full of warts. All of us even have lice. I don’t know what I have on my chest that looks like ring. I am thankful that we have learned lessons on how to prevent and control of communicable diseases.

After learning from the class discussion I was really challenged to share to the whole family about skin diseases. So one night, after dinner, I asked permission from my father to discuss what I learned and that we have to help one another to have these skin diseases cured and prevented.

All of us were not happy with our sickness and so we agreed to work hand in hand to solve the problem. One Saturday, my father told us to go to the health center. We were instructed ways to treat our illnesses. We were taught to take bath everyday, not to share personal things to family members so that we will not infect one another.
I know that my family is not very happy because of our skin problems, so I would like to encourage you to apply what you have learned in school for you not to experienced what my family and I have experienced.

Love and concern,

Remedios

-Judith Langbayan-Javier

After they read the letter, answer the following:

1. What can you say about the letter of Remedios?
2. Can you also do what she did? How will you do it?
3. If you are in her situation, what steps will you do to solve your family health problems?

Next thing they do is letter writing. Have them prepare the needed materials.

Invite them to write a letter and address it to Remedios. Remind them to share their feelings when they were reading her letter and why did they feel that way. Share also if they have similar experiences. Ask them that they would like to do what she did and how they will do it.

Dear Remedios,

__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________

__________________________________________________

__________________________________________________

__________________________________________________

__________________________________________________

__________________________________________________

Very truly yours,

______________
After writing, five volunteers will read to the class their letters. Let them answer this: Did it help you express your feelings after you wrote Remedios? Tell them you knew it helped them a lot.

Before you proceed to the transfer part, ask the students to answer the following summative assessment below.

Give them this Instruction:

This summative assessment is good for 40 minutes. The first five minutes will be used for instructions and paper distributions. The learners will have 40 minutes to answer. The rest of the time will be used for checking and evaluating.

<table>
<thead>
<tr>
<th>SUMMATIVE TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME ________________</td>
</tr>
<tr>
<td>SECTION ________________</td>
</tr>
</tbody>
</table>

MULTIPLE CHOICE:

DIRECTION: Carefully read the questions and choose the correct answer from the Choices given and write the letter of your choice on the blanks provided at the right side.

1. These are tiny microorganisms that infect or invade the body and attack body cells and tissues
   A. Bacteria
   B. Pathogen
   C. Virus
   1. B

2. Pneumonia is a sickness caused by pathogen called_____.
   A. Bacteria
   B. Fungus
   C. Virus
   2. A

3. Rickettsias need living cell in order to grow and multiply, which of the following is a rickettsias?
   A. Dysentery
   B. Small pox
   C. Ticks
   3. C

4. Athlete’s foot is a disease caused by pathogen called_____
   A. Fungi
   B. Parasite
   C. Fungi
   4. B

5. Which of the following virus enters the respiratory system and cause sickness?
   A. Cold
   B. Rabies
   C. Wart
   5. A
6. This is a pathogen that causes amoebic dysentery.
   A. Parasite  
   B. Protozoa  
   C. Virus  

7. Helminths is a pathogen meaning ______. 
   A. Bacteria  
   B. Parasite  
   C. Virus  

8. This helminth lives in the intestines and causes a serious illness known as___ 
   A. Bilharziasis  
   B. Schistosomiasis  
   C. Trichinosis  

9. Prevention of helminth diseases requires____. 
   A. Eating good food  
   B. Maintain cleanliness  
   C. Taking medicine  

10. Diseases caused by the direct and indirect spread of pathogens from one person to another are called ______ diseases. 
    A. Communicable  
    B. Non-Communicable  
    C. Toxin Bacteria  

Arrange the following stages of infection according to the graph of disease process in numbers 11 to 15 and the chain of infection in numbers 16 to 20 in a chronological order. Write the letters from A to E in the blanks.

A. Convalescence stage is recovery stage.  
B. Illness stage is when specific severe signs and symptoms appear.  
C. Incubation stage is when a person acquires the pathogen.  
D. Prodromal stage is when there are non-specific signs and symptoms appearing.  
E. Decline stage time when the signs and symptoms of the sick person slowly goes down.  

The chain of infection starts when a pathogen lives in a 
A. passed through a direct or indirect Mode of Transmission.  
B. reservoir which can be a living or non-living object. When the pathogen  
C. Susceptible Host if one who has a low immunity resistance is the next victim.  
D. leaves the reservoir through a Portal of Exit, the pathogen is  
E. The organism enters then the body through a Portal of Entry and the  

Fill in the blanks. Choose you answer from the choices below and write the letter of the correct answer on the blanks provided at the right side.

21. In the three level of prevention the first is called __________ of prevention  
22. The objective of this first level is to ______________ one from having the
23. disease. ________________ is probably the best example of this level of prevention and health education to all. 23. B

24. The second level of prevention is called ______________. 24. H

25. This level of prevention aims to prevent further ____________ when the disease has already started. The best action to do in this level is ______________. 25. A

26. prompt diagnose and ______________. 26. J

27. ________________ tests are excellent examples of this level. 27. G

28. The third level of prevention is called _____________. The focus of this level is ________________ the sick person so as to prevent long-term complications of the disease. The best thing to do in this level is follow-up and very close ________________(24/7) of the sick person. 28. I
29. F

30. and very close ________________(24/7) of the sick person. 30. C

Choices:

A. Damage
B. Immunization
C. Monitoring
D. Primary Level
E. Prevent
F. Rehabilitating
G. Screening
H. Secondary Level
I. Tertiary Level
J. Treatment
PART FOUR – WHAT TO TRANSFER

The learner demonstrates a complete performance on the following activities:

Make the learners do Activity 1: “ACT NOW!” where they will do a pantomime. The male is grouped into five smaller groups. Choose a leader who will draw a paper from the box. The word written on the paper will be their group’s name. The word written on the paper will be parts of the body such as nose, mouth, eyes, etc..

Each group will be given 15 minutes to conceptualize and practice a 5- minute pantomime presentation. The pantomime will focus on “The spread of diseases using the different modes of transmission.” Example, if their leader drew “nose” from the box, then the focus of their presentation is this, “Diseases are spread through the nose using the chain of infection.”

The female groups will do the same just as what the males will do. The group’s name will depend on the word that is written on the paper drawn from the box. The name of the group will also be a part of the body. The pantomime will focus on “The prevention of the spread of diseases from the different modes of transmission. Example, if the leader drew “food” from the box, then the focus of their presentation is on how to prevent the spread of infections from the food we eat.

After 15 minutes, each group will present for five minutes. Each group must jot down what they observed about the spread and prevention of diseases. After which observations will be shared with the class.

Please look into the criteria in rating their presentation.

Criteria:

Your score is 25 if

1. Your group will present a very clear and understandable message.
   For the Male, the spread of diseases using the different modes of transmission and
   For the Female, the prevention of the spread of disease from the different modes of transmission.

2. Each member will take part in the presentation.
3. The group will present for 3 minutes.

Your score is 20 if

1. The group will clearly present the pantomime but with a little
assistance from somebody on how to prevent the spread of diseases.
2. Each member of the group will actively participate.
3. The group will present for 3 minutes.

Your score is 15 if

1. The group hardly and vaguely presented the pantomime despite the assistance of somebody.
2. Most of the group members will not actively participate.
3. The group will not present three minutes.

After the presentation, make them share to the class what they have learned and observed from the presentations to the class.

Let the learners do the HOME WORK: COMMITMENT on how I can help prevent the spread of diseases.

They will write their commitment in their journal or activity notebook. Affix their signature on their work and ask their parents to read then sign. Use the following questions as their guides.

Guide questions:
1. As a teenager, what can I do to prevent the spread of diseases?
2. How can I help my classmates, schoolmates, and my family not to be infected by diseases?

It is time for the learner to make a recommendation that will help prevent the spread of communicable diseases. Make them consider the following:
SUGGESTIONS:
1. “Wash hands” campaign poster.
2. Cleanliness slogan.
3. Personal journal on individual daily actions to promote cleanliness.
4. Bookmark on prevention and control of communicable disease.

STEP:
1. Write a letter to their school student organization (SSO), barangay captain, parents, neighbors, etc.
2. Coordinate with their SSO, barangay captain, parents and neighbors if they have some activities that you can tie up with.
3. Suggest steps or tips on how to maintain and monitor it.

Let them use the following RUBRICS:

*Transfer of understanding to life situations (30%)* as demonstrated through:

- Products – outputs which are reflective of learner’s creative application of understanding; and
- Performance- skillful exhibition or creative execution of a process, reflective of masterful application of learning or understanding.

ADVANCED (26-30%) – The student independently and clearly demonstrates the ability to create, add value and transfer his/her/their understanding to life situations in the form of products and performances. This means that the product or performance reflects the following attributes:

- The entire process from planning to execution was carried out by the student, with no guidance from the teacher.
- The product or performance is well thought out by the student from planning to execution. Potential problems have been identified and appropriate remediation has been put in place should problems arise.
- Values formation is evident as demonstrated by the students in their performance.
- The product or performance is a demonstration of a creative application of enduring understanding in a new or novel context.

PROFICIENT(21-25%) The student demonstrates the ability to create, add value and transfer his/her understanding to life situations in the form of products and performances, but the product or performance can still stand improvement in a number of areas, namely:

- The entire process from planning to execution was carried out by the students with some guidance/coaching from the teacher.
- The product or performance is well thought out by the student from planning to execution. Potential problems have been identified and appropriate remediation has been put in place should problems arise.
- Values formation is evident as demonstrated by the students in their performance.
- The product or performance is a demonstration of creative application of enduring understanding in a new or novel context or situation.

APPROACHING PROFICIENCY (16-20%) – The student strives to use understanding or learning creatively in producing products or performance as manifested in the following:

- The students attempt to do the tasks entirely on their own, but seeks the teacher’s help for the majority of the process.
- The products or performances have some flaws in the design that the students addressed with help from the teacher.
- There is little evidence of values formation as demonstrated by the students in their performance.
- A little creative application of enduring understanding is shown in the product or performances. The context or situation in which the understanding is applied is ordinary or common. There are limited attempts at novelty (e.g. formatting, organization, packaging, presentation).

DEVELOPING (11-15%) – The students show inadequacy in using understanding or learning creatively in producing products or performances. The inadequacy is manifested in the following:

- The entire process from planning to execution had not been carried out by the student, without the teacher’s guidance and coaching.
- The product or performance is poorly thought out by the student from planning to execution. There are marked flaws in the design that the student is not even aware of.
- There is almost no evidence of value added by the student in the execution of the process or in the use of understanding or learning.
- Every aspect (e.g. formatting, organization, package, presentation) of the product or performance is just a copy of what has been taught in class.

BEGINNING (6-10%) – The student shows great difficulty in using understanding or learning creatively in their products or performances. The difficulty is manifested in the following:
• The entire process from planning to execution was poorly carried out by the student, without the teacher’s guidance and coaching.
• The product or performance is poorly thought out by the from planning to execution. There are many obvious flaws in the design that the student has ignored.
• There is no evidence of value added by the student in the execution of the process. There are no attempts at novelty (e.g. in formatting, organization, packaging, presentation).
• The product or performance does not show creative application of enduring understanding. The context or situation in which the understanding is applied is very ordinary or common.

Encourage them to do Activity 2 - Self Monitoring where in they will copy the chart as shown. In their daily chart, write what they can do to keep their home, school and community clean. Prepare four copies of this chart. Ask their parents and their teacher to monitor them if they are doing it. Attach their signature and their parents’ signature too.

SELF MONITORING CHART

<table>
<thead>
<tr>
<th>Committed to maintain cleanliness</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>-self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Let them check only if they have accomplished it through using the following chart

<table>
<thead>
<tr>
<th>Committed to do</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>S</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not drink from somebody’s bottle/glass.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use my own comb and don’t share others comb.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not share my towel or use others towel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not share my socks to others or use other’s socks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wash my hands before and after using them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wear only washed clothes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2  STUDENT’S SIGNATURE  PARENT’S SIGNATURE
SUMMARY/SYNTHESIS/GENERALIZATION

It is very encouraging to know that you are through with this material, Disease Prevention and Control (Communicable). Your readings, accomplishments in doing the activities and projects or performances and interacting, discussing with your classmates are assurances that you have learned a lot from this material. The saying, “Prevention is better than cure” become more significant to you because of the importance of practicing preventive measures so that diseases will not infect you. It is also a challenge on your part to practice daily these preventive measures you have learned. I know that you will share it to your family members, friends, and classmates especially how this module influenced you. A saying goes, “Learning without application is no learning at all.”

In the first part of this material, you are introduced to the overview content of this material and likewise the things you are expected to do.

In the pre-assessment you are given activities that help you assess how far you know the lessons and you are introduced to new concepts.

The learning goals and targets serve as your guide that lead you to what is expected of you.

Part one is what to know. Your knowledge is challenged there. The activities given aims to evaluate your stock knowledge. Misconceptions are clarified as you go through this part. There are readings given to enhance and let you know that there are many things to learn.

In part two, what to process, you are provided with activities that help you assess your skills especially in processing challenges on life. One of which is how you can be part of the prevention and control of communicable diseases.

Part three deals with what you need to reflect and understand. You are made to see what others cannot see or your attitude is put to a test to really see if you can apply what you have learned. In this part, you do not just learn how to cook rice or do the cooking but you learn why do you need to cook and the result of your cooked food should be good to your health.

Finally, the fourth part is the final test to see if you understood the what, when, where, who, why, and how to prevent and control the communicable diseases. Now, can you really say that you make all what you’ve learned part to your daily life? The answer lies in you.
GLOSSARY OF TERMS

A

ATHLETE’S FOOT is caused by a fungus that grows on or in the top layer of skin.

B

BACTERIA are one-celled microscopic organisms that rank among the most widespread of living things. Some are small that a single grain of soil may contain over 100 million of them and most bacteria do not cause disease.

BIOFEEDBACK is a process of becoming aware of physical events in your body that normally you are not aware of.

C

COMMUNICABLE DISEASES are those that are transmissible from one host, person or animal, to another.

CONVALESCENCE is the stage when acute symptoms of infection disappear.

D

DISEASE is an abnormal condition affecting the body of an organism.

F

FUNGI – are simple organisms that cannot make their own food.

H

HOST is a plant or animal that the parasite feeds on.

I

ILLNESS STAGE is the interval when a sick person manifests signs and symptoms specific to a certain type of infection.

IMMUNITY is the body’s natural resistance to pathogens.

INCUBATION STAGE is the interval between the entry of pathogen into the body until the appearance of first sign or symptom.
Jock Itch is characterized by an itchy, red rash on the genitals, inner thighs and buttocks. It occurs in warm, moist areas of the body and is common in athletes and people who are obese or perspire a great deal.

Mode of Transmission is a method of transfer by which the pathogen moves or is carried from one host to another.

Passive immunity is the temporary immunity that the infant acquires from the mother.

Parasite is a microorganism that gets their food supply in a living plant or animal.

Pathogen is an organism that causes disease to its host; also known as infectious/disease agent.

Portal of entry is an opening that allows the microorganism to enter the host. It includes body orifices, mucus membranes, or breaks in the skin.

Portal of exit is a place where pathogen leaves the reservoir such as the nose, mouth, or anus.

Prodromal stage is the interval from the onset of non-specific signs and symptoms to more specific symptoms.

Protozoans are single-celled organisms that are larger than bacteria and have more complex cellular structure.

Resident bacteria that lives in the human mouth and intestines and on our skin.

Reservoir is a place where pathogen thrives and reproduces such as human beings, animals, and inanimate objects such as water, table tops, and doorknobs.

Rickettsias are organisms that are considered intermediate, that is, somewhere between a virus and a bacterium.

Ringworm of the body (Tinea Corporis) usually causes a very itchy rash. It is caused by fungus. It often makes a pattern in the shape of a ring, but not always. Sometimes it is just a red, itchy rash.
S

**SUSCEPTIBLE HOST** is a person who cannot resist a pathogen because of weak body immunity.

**SYMPTOMS** are subjective manifestations of disease such as stomach ache.

T

**TOXINS BACTERIA** are bacteria that produces certain poison.

V

**VIRUS** are small, simple lifelike forms—from one half to 100 the size of a bacteria.

**VACCINES** are preparations that usually composed of dead or weakened viruses that provide immunity by causing the body to produce antibodies against the pathogen.

W

**WARTS** are the most common of dermatological complaints. Warts are slightly contagious and you can spread them to other parts of your body by touching them or shaving around infected areas.
RESOURCES

BOOKS


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