

Health

Quarter 3 – Module 1: Poor Environmental Sanitation: Its Impact to One's Health



Health – Grade 6
Alternative Delivery Mode
Quarter 3 – Module 1: Poor Environmental Sanitation: Its Impact to One’s Health
First Edition, 2019

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Health

Quarter 3 – Module 1: Poor Environmental Sanitation: Its Impact to One's Health

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

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If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you explain how poor environmental sanitation can greatly affect one's health. The module consists of only one lesson:

- Lesson 1 – Poor Environmental Sanitation: Its Impact to One's Health

After going through this module, you are expected to explain how poor environmental sanitation can negatively affect the health of an individual.

(MELC H6EH-IIIb-2)



What I Know

Direction: Write **True** if the statement is correct about the impact of poor environmental sanitation to health and **False** if it is not. Write your answers in a separate sheet of paper.

1. Burning of leaves and wastes release several poisons in the environment that is harmful to one's health.
2. Dumping of garbage in vacant lots create no harm to people living in the area.
3. Uncollected garbage attracts pests like cockroaches, rats and flies that in turn spread diseases to people through water and food contamination.
4. Cigarette smoking does not pollute the environment.
5. Smokes from factories and vehicles could cause respiratory illnesses or diseases.
6. Wastes coming from piggeries that are directly dumped into the rivers make fishes and shrimps grow well.
7. Untreated waste water coming from factories or industries that are disposed to rivers, seas or oceans makes the water safe to use.
8. Oil spills can cause fish kill that pollutes the environment.
9. Wastes in bodies of water can poison marine life like fishes and shells. Eating the contaminated food endangers people's health.
10. Leaving dead animals to decay or rot causes foul odor and allows bacteria to multiply that can cause airborne or water diseases.

Lesson 1

Poor Environmental Sanitation: Its Impact to One's Health



What's In

Maintaining a clean and healthy environment is a big challenge to the community. Waste that is not properly managed from households and community is a serious health hazard and can lead to the spread of infectious diseases. Improper disposal of wastes, oil spill, smoke-belching vehicles and uncollected garbage are some of the causes of environmental pollution. If the health officials and the people in the community will not help in environmental sanitation, several problems may happen. Pests like rats, mosquitoes, cockroaches and flies can be seen feasting on wastes which are carriers of diseases. A dirty or polluted surrounding can cause water and air-borne diseases. Virus, bacteria, germs and other microorganisms multiply in a polluted environment. These disease carriers can bring serious health problems to people's lives.



What's New

Direction: Which of the following pictures show activities of poor environmental sanitation that can cause negative impact to health? Do you see these practices in your own community? What are the common health problems that happen when the environment is dirty? Write your answer for each question in a separate sheet of paper.

A.



D.



B.



E.



C.





What is It

Direction: The Grade VI-class is having a discussion about poor environmental sanitation. They were given an assignment to research for the negative impact of poor environmental sanitation. Read carefully and take note of what they are saying.

Good day, classmates. Today, we will discuss about the poor environmental sanitation practices and their negative impact to health. Let's start with improper disposal of garbage. What are the negative impacts of this problem to us?

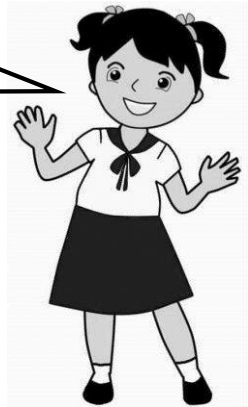


Uncollected garbage or unattended waste attracts flies, cockroaches, rats and other creatures that in turn spread diseases. Germs, bacteria and viruses carried by these pests can contaminate our food and water and can make us sick too.

Wet waste decomposes and releases bad odor. It can also bring respiratory diseases and other illnesses. Garbage juice absorbed by land can contaminate our water supply and can cause problems like diarrhea, skin infection, and food poisoning.



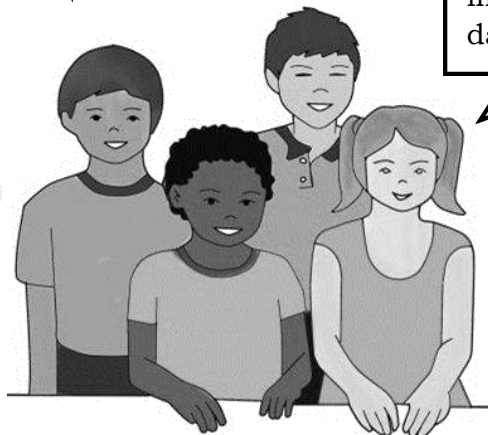
Can we burn plastics and other garbage such as leaves to manage our waste?



No, we cannot! Burning leaves and other wastes is harmful to one's health. Leaf and waste burning releases several poisons in the environment. The Department of Environment and Natural Resources (DENR) bans backyard burning of garbage.

Burning of leaves and waste materials is prohibited under Republic Act 9003 or the Ecological Solid Waste Management Act (Section 48, paragraph 3).

I agree. People who will violate the Anti-Burning Law will have a fine of P300 to P1000 or imprisonment of 1 to 15 days.

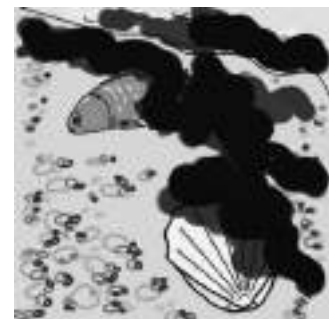


I'm very happy that you did a lot of research, classmates. How about poor environmental sanitation in water like dumping garbage in the river and other bodies of water?



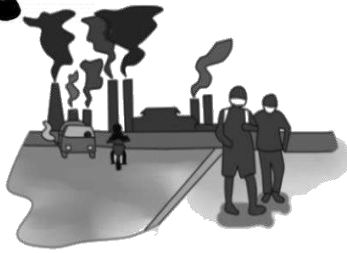
The garbage dumped in the river and other bodies of water will deplete or decrease the nutrients and oxygen supply for marine animals. This can bring harm to water creatures. There will be a fish kill due to lack of oxygen supply. It can also damage the habitats and nesting grounds of animals.

When this happens, our food supply will be affected. There will be no enough fish, shells, shrimps, squids, seaweeds and others that will be sold in markets or will be eaten by families because of water pollution.





Very Good! Poor environmental sanitation in air is a problem too. Smoke coming from factories, cigarette smoking and smoke-belching vehicles is a danger to one's health. Can you share negative impacts of air pollution?



We could experience coughing or difficulty of breathing if we inhale air pollutants also called particulate matter (PM) from dust, dirt and smoke. Breathing or inhaling toxic air pollutants could trigger allergies and asthma attacks. We will have respiratory and nervous system problems!

Pregnant women who are exposed to air pollutants will have their children develop birth defects. Preterm or premature birth, low birth weight and defects of the mouth and lip may happen to babies. It may also increase the risk of sudden infant death syndrome or (SIDS).



Exposure to smoke pollutants from cars, construction sites, industries and fires can affect both our lungs and heart. If you live near a factory that releases toxic air, you are at risk of getting cancer and other disorders.



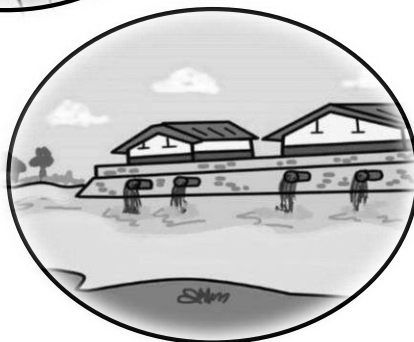
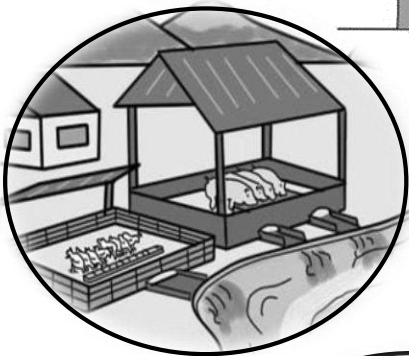
Water pollution is another problem that kills organisms that depend on water bodies. Drinking contaminated water could cause diseases like diarrhea and other infections. People get diseases such as hepatitis by eating seafood that has been poisoned. Can you give examples of poor environmental sanitation activities done in our bodies of water?



Yes. I've seen waste water coming from piggeries, poultrys and factories that are dumped in bodies of water.

Garbage and dangerous chemicals from industries and markets are being disposed too.

People who have no comfort rooms defecate on waters. Others throw dead animals in the river.



Well said! Now, let us sum up our discussions. What are the negative impacts of poor environmental sanitation to our health?



There will be water, air and land pollution that can cause diseases or illnesses to our health. Pests and germs multiply too if the surrounding is not clean.

The environment is smelly and dirty if there is poor environmental sanitation.

Marine life will be killed if there is water pollution. Eating contaminated seafood can cause serious health problems. In general, poor environmental sanitation brings more harm than do good to one's health.





What's More

Direction: Try singing the song to the tune of “The More We Get Together”. You can also have this as a poem.

We Save the World As One

by: Francilet R. Padios

The more we get together
In caring for our environment
The more we get together
We save the world as one.



Let's not burn our garbage
Let's recycle our wastes
Let's campaign for protection
And save the world as one.



Let us throw our garbage
In proper waste containers
Let's clean bodies of water
And save the marine life.

Let's be aware of oil spills
And smokes that cause pollution
Let's do proper sanitation
And save the world as one.



We'll suffer from illnesses
We'll surely die from diseases
Let's do our work together
And save the world as one.



Say bye now to viruses
Say bye now to pests
There'll be no more pollution
In environmental sanitation.

The world is yours and mine
It's ours, it will be fine
The more we help each other
We save the world as one.





What I Have Learned

Direction: Choose the letter of the correct answer. Write your answers in a separate sheet of paper.

1. Kiko burns the garbage in their backyard. What will be the impact of this activity?
 - A. It will help the air clean.
 - B. It will pollute the air.
 - C. It will make the nearby plants healthy.
2. What is the impact to health if we will inhale smoke pollutants from cars, industries, construction sites and factories?
 - A. The lungs will be healthier.
 - B. Health will be improved.
 - C. There will be difficulty in breathing.
3. Untreated waste water coming from factories is disposed to rivers, seas or oceans. What will happen to the marine life?
 - A. The marine life will die because of water pollution.
 - B. The marine life will get fat because of the wastes.
 - C. The marine life will multiply because of the nutrients from wastes.
4. The drinking water is contaminated because of leaking pipeline. Should we drink the water?
 - A. Yes, our body can handle the contaminated water.
 - B. No, the contaminated water is unsafe to drink. It will cause diseases.
 - C. Yes, the waste cannot harm our health.
5. The non-segregated garbage in Calachuchi Street was uncollected for several days. What will be the impact of this problem to the community?
 - A. The bad odor will allow pests and germs to multiply and cause illnesses.
 - B. The waste can be used as fertilizer to plants.
 - C. The kids will be happier playing near the garbage pile.



What I Can Do

Direction: Write **Yes** if the statement below each picture shows or depicts a poor environmental sanitation that can greatly affect one's health and **No** if it does not. Write your answers in a separate sheet of paper.



1. Unattended garbage attracts rats which in turn spread diseases by contaminating food and water.



4. Water wastes coming from factories and industries are not safe for use due to chemical content that are hazardous.



2. Composting is an activity which helps improve proper sanitation.



5. Throwing different wastes everywhere cause pollution in the environment that can put people's lives in danger.



3. Improper disposal of garbage makes the environment dirty and unhealthy.



Assessment

Direction: Draw a 😊 if the statement about the impact of poor environmental sanitation to health is correct and ☹️ if it does not. Do it in a separate sheet of paper.

1. Water pollution causes fish kill. It can make us sick if we happen to eat food affected by water pollution.
2. Wastes coming from factories and households are harmless. Children can enjoy water activities in bodies of water where waste water is being dumped.
3. Smoke pollutants can cause coughing and difficulty in breathing.
4. Improper waste disposal makes the environment safe and pleasing to see.
5. Burning of waste is allowed because it reduces wastes and it does not do harm to our health.
6. Garbage that is not collected by garbage collectors makes the air dirty and can cause diseases.
7. Leaving dead animals to rot can cause airborne diseases that could harm our health.
8. Piggeries and poultries with poor sanitation make the environment safe and clean to live in.
9. Dumping of garbage in bodies of water could make fish, seashells and other marine life unhealthy to eat.
10. Smoke-belching vehicles make the air quality good and safe for people to breathe.

Thank you for accomplishing this module. Congratulations!













Additional Activity

Direction: Complete the statement by writing an explanation on how poor environmental sanitation can negatively affect the health of an individual in the following situations stated below. Do it in a separate sheet of paper.

1. Air pollution can _____.
2. Unburied dead animals can _____.
3. Chemical wastes being dumped in bodies of water can _____
_____.
4. Burning of garbage in the backyard can _____.
5. Smoke coming from factories and big industries can _____
_____.



Answer Key

<p>Assessment</p> <p>1.  2.  3.  4.  5.  6.  7.  8.  9.  10. </p> <p>Additional Activity</p> <p>Pupil's answers may vary</p>	<p>What I Have Learned</p> <p>1. B 2. C 3. A 4. B 5. A</p> <p>What I Can Do</p> <p>1. Yes 2. No 3. Yes 4. Yes 5. Yes</p>	<p>What I Know</p> <p>1. True 2. False 3. True 4. False 5. True 6. False 7. False 8. True 9. True 10. True</p> <p>What's New</p> <p>A, B, C, D (In any order) Pupil's answers may vary for the succeeding questions</p>
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References

A. General References

K to 12 Health Curriculum Guide August 2016, page 58

MELC Health 6, page 353

B. Electronic Sources

10 negative effects of improper rubbish removal.

<https://www.skipthetip.com/10-negative-effects-of-improper-rubbish-removal/>

Air quality: Particle Pollution. In *Centers for Disease Control and Prevention*.

www.cdc.gov/air/particulate_matter

Health effects of air pollution. www.sparetheair.com/health.cfm

Health impacts of solid waste.

<http://edugreen.teri.res.in/explore/solwaste/health.htm>

Recycling domestic waste. In *Citizens Information Recycling*.

https://www.citizensinformation.ie/en/environment/waste_management_and_recycling/domestic_recycling_services.html

Risk Assessment for Toxic Air Pollutants: A Citizen's Guide. In *EPA United States Environmental Protection Agency*. https://www3.epa.gov/airtoxics/3_90_024.html

Spelman, Mark. 2020. How to manage your home waste.

<https://www.wikihow.life/Manage-Your-Home-Waste>

Your cool facts and tips in waste management. In *eSchool Today*.

<https://www.eschooltoday.com/waste-recycling/what-is-recycling.html>

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Quarter 3 – Module 2: Ways to Keep Water and Air Clean and Safe



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What I Need to Know

This module was designed and written with you in mind. It is here to help you discuss ways to keep water and air clean and safe. The module consists of only one lesson:

- Lesson 1 – Ways to Keep Water and Air Clean and Safe

After going through this module, you are expected to discuss ways to keep water and air clean and safe. **(MELC H6EH-IIIc-3)**



What I Know

Direction: Write **Yes** if the activity shows ways in keeping water and air clean and safe and **No** if it does not. Write your answers in a separate sheet of paper.

1. Planting trees
2. Factories and industries emitting smoke pollutants
3. Throwing garbage and dead animals in the bodies of water
4. Segregating wastes in the community
5. Anti-smoke belching drives
6. Burning wastes at home
7. Use of pesticides to kill pests that are destroying crops
8. Campaign for no smoking
9. Clean-up drive in maintaining the cleanliness of water source
10. Filtering and boiling to make potable water

Lesson 1

Ways to Keep Water and Air Clean and Safe

A healthy physical environment is characterized by water and air that is clean and safe to use. An environment with good air and water quality offers wellness or good health to the people who are living in the community.



What's In

Clean air and water are vital to our health and environment. Clean air and water refer to the degree which air and water are clean enough for living organisms to remain healthy. Air pollution from factories, power plants, vehicles, industries and other sources increases the risk of diseases and deaths once smoke pollutants are inhaled.

A place that has clean air and water quality contributes to a stronger economy and reduces illnesses and deaths. It also offers better quality life to the people.





What's New

Direction: Which of the following activities show ways in keeping water and air clean and safe? Were you able to witness these ways in your own community? Why do you think we need to keep our water and air clean and safe? Write your answers in a separate sheet of paper.



A. Factories emitting smoke pollutants



D. Clean-up drive advocacy



B. Gardening activities



E. Boiling or purifying water



C. Dumping trashes in the river



F. Not using pesticides to plants



What is It

A. Direction: The children are sharing ideas on different ways to keep air clean and safe. Read carefully and take note of what they are saying.



Republic Act No. 8749, known as Philippine Clean Air Act of 1999 is a comprehensive air quality management policy program which aims to achieve and maintain healthy air for all Filipinos. To support this, we need to have ways to keep our air clean and safe. Can you share your ideas about it?



Practice tobacco control.

Support or organize a “No Smoking Campaign”.



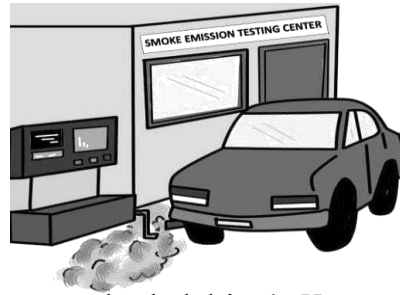
Do gardening without using pesticides. Pesticides have chemicals that make our air unsafe.

Say No to backyard burning! Let us compost or recycle our wastes.



Grow house plants. They purify the air by sucking up air pollutants.

Strengthen the Anti-Smoke Belching Drives! Smoke-belching vehicles pollute air!



Stop smoke-belching! Have smoke emission test regularly to monitor the condition of the vehicle.



A well-tuned vehicle runs better and pollutes less.

We will walk or ride our bikes instead of travelling by car whenever possible. The fewer vehicles on the roads, the better our air will be.



Oh, life is full of joy! It is fair as we inhale safe and clean air.



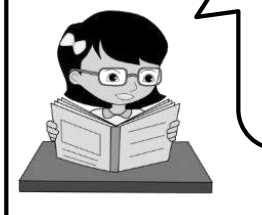





Let's think of ways, and do our share in improving the quality of air around us!

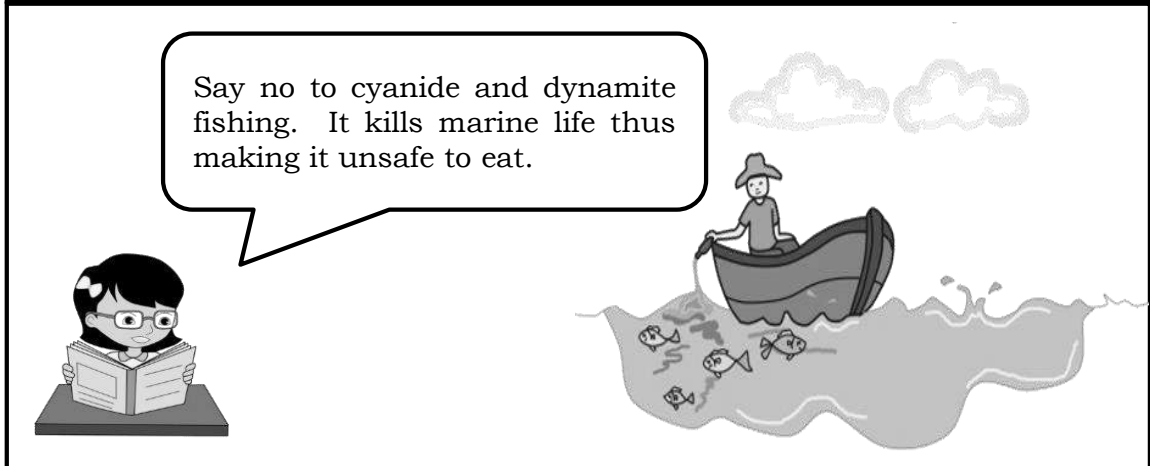
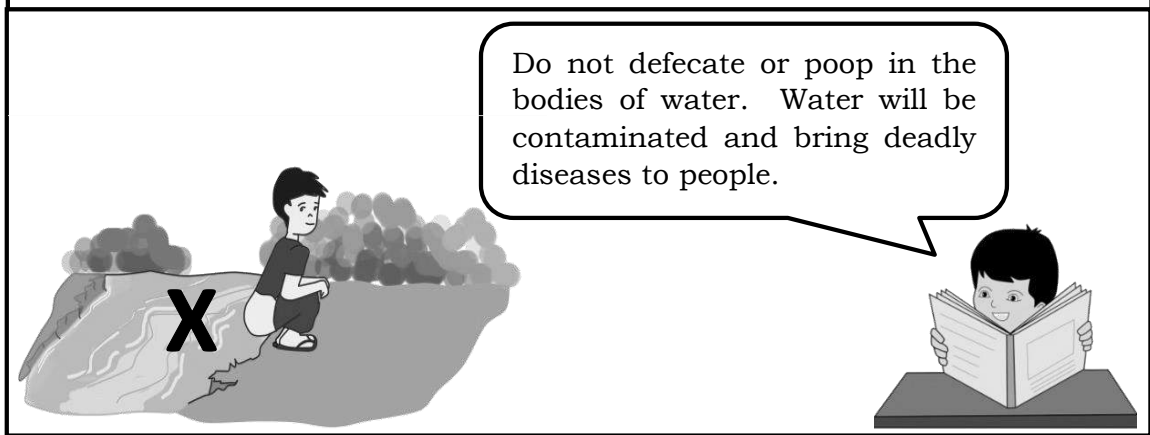
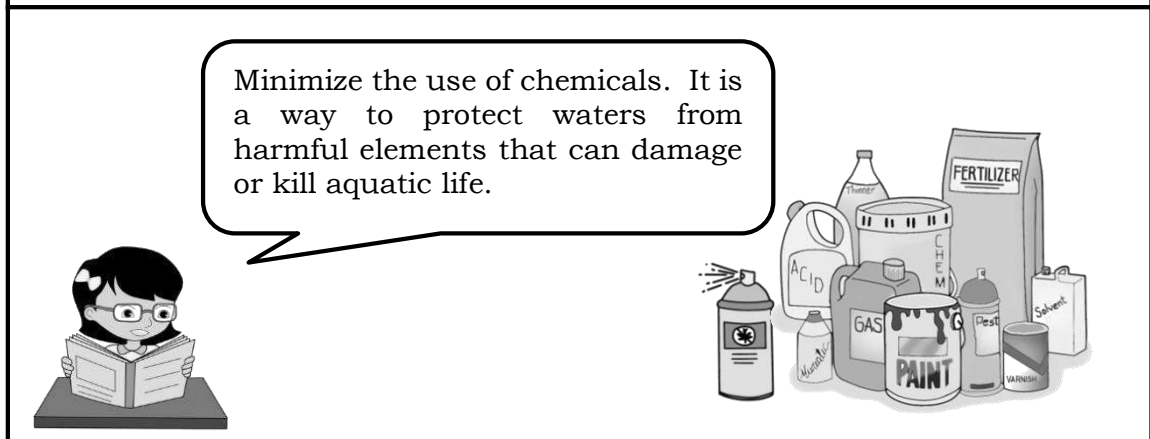
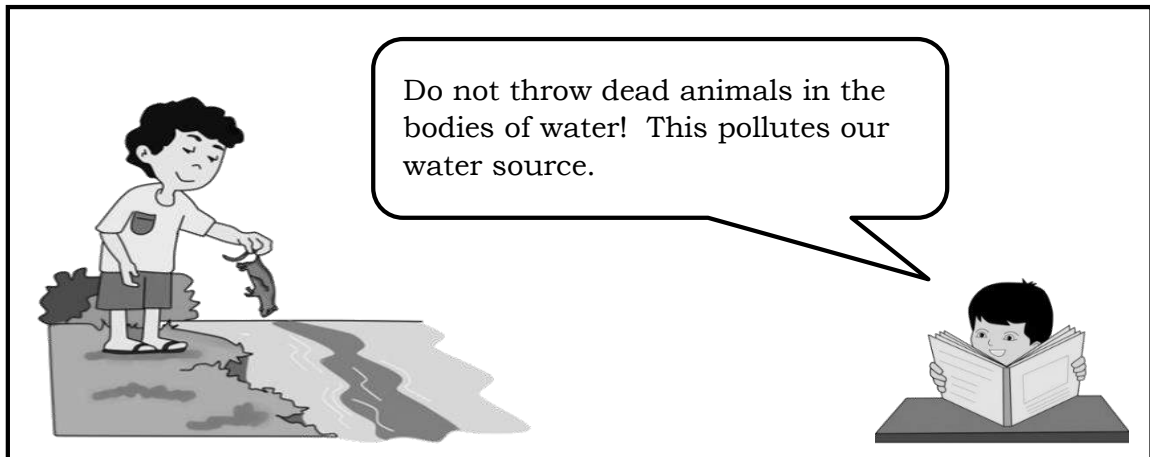




What's More

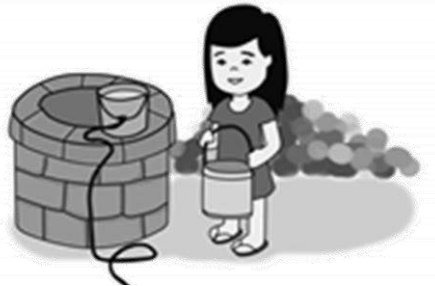
A. Direction: Let's meet Lino and Lina. They have information to share on ways to keep water clean and safe. Let us read and understand their story.

	<p>We need clean water to stay alive. Water carries oxygen and nutrients to our cells. It flushes waste and toxins from the body via urine too.</p>	
	<p>There are so many ways to keep our water clean. One way is to recycle used items. This will keep wastes from making their way to bodies of water.</p>	
	<p>Help in cleaning-up streams, rivers, canals and other waterways. This will protect aquatic life and keep us safe too.</p>	
	<p>Planting vegetation like trees and bushes along stream banks can purify or clean our water.</p>	





Do you have access to a potable or clean water source? Let us take a look at the groundwater source.

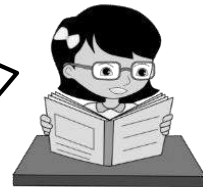


Many rural communities depend on groundwater for drinking which can be tapped by drilling wells. Groundwater is naturally clean for drinking but it may be contaminated by pollution from human activity like spilled and improper use of chemicals.

We also have spring water source.



It is collected only at the source of the spring. The source is naturally purified but human and animal activity may contaminate this.



We can also have emergency water source like ice cubes. Ice cubes in your freezer can be melted into drinking water as long as it is not contaminated.



Now, if you do not have access to potable or clean water, join us as we sing the song to the tune of “Sitsiritsit”. You can also have it as a poem. It will give you idea on how to make your drinking water safe and clean.

Let Us Purify Our Water!

by: Francilet R. Padios

Filter and put water in your kettle or pot
Then bring it to a rolling boil!
Wait approximately one minute
And you then can reduce the heat.



It takes 30 minutes for the water to cool
So plan ahead whenever you boil
Purifying water is a good thing to think
If your water is clean, it is safe to drink.



Let us use the tune of “Are You Sleeping Brother John” to this next song.

Make our water, make our water
Safe and clean, safe and clean
Come and let us filter
Come and let us boil it
Clean water, safe water.

- B. Direction: Let us use the tune of “Twinkle, Twinkle Little Star” to sing this song. You can also have this as a poem. This will remind us on how to keep our water safe and clean.

Let's Save Our Water

by: Francilet R. Padios

We are using water everyday
We drink, we bathe, we use in many ways
Doing water sports that we love
Using water that we have.



We should keep it safe and clean
Throw your wastes in the proper bin.

Let's save water in so many ways
Let's take part during clean-up days
Cleaning streams, oceans and bays
Rivers, seas and waterways.



Let us plant more shrubs and trees
To purify water sources.

Our water needs protection
Let's campaign, have a mission
Life on Earth is impossible
If water supplies are in trouble.

Hurry, hurry! Let's save, don't wait!
Quick or it will be too late!





What I Have Learned

Direction: Complete each sentence on how to keep water and air clean and safe. Choose the correct word or words from the box below. Write your answers in a separate sheet of paper.

1. Strengthen the _____ to prevent smoke belching vehicles from emitting pollutants in the air.
2. To make water clean and safe, let us do _____ before drinking it.
3. Never do backyard burning. We should save biodegradable wastes or scraps for _____ activity.
4. We should do _____ because cigarette smoking causes air pollution.
5. We should have access to potable or clean water. Let us _____ along stream banks to clean our water source.

composting

filtering and boiling

plant trees

tobacco control

anti-smoke belching drives



What I Can Do

Direction: Write check (✓) if the statement in the picture shows a way to keep our water and air clean and safe and (✗) if it does not. Write your answers in a separate sheet of paper.



1. The Scouting Activity advocates protection of the environment by picking-up trashes and doing the tree planting.



2. Use a smoke-belching vehicle in transporting passengers.



3. No Smoking Policy is observed in the community to support the Clean Air Act.



4. Dynamite and cyanide fishing are done to catch more fishes in the sea.



5. Garbage is collected daily by a garbage truck to manage wastes.



Assessment

Direction: Write **Agree** if the statement shows a way to keep water and air clean and safe and **Disagree** if it does not. Write your answers in a separate sheet of paper.

1. Getting the car tuned regularly is advised to prevent smoke-belching.
2. Cleanliness in the different bodies of water should be maintained to keep the water safe and clean.
3. Boil water from sources like underground water and spring water before drinking.
4. Dump wastes in vacant lots and waterways.
5. Anti-smoke belching drives supports Clean Air Act.
6. Burning wastes at home can purify the air around us.
7. Using pesticides to kill pests that are destroying crops is a good practice.
8. No Smoking Policy for the people in the community is strictly imposed.
9. Getting involved or having an advocacy in maintaining the cleanliness of water and air in the community is highly encouraged.
10. Filtering and boiling are used to make potable or clean water.

Thank you for accomplishing this module. Congratulations!



Additional Activity

Direction: Give 5 ways on how you are going to keep water and air safe and clean. Write your answers in a separate sheet of paper.

Keeping water safe and clean
1.
2.
3.
4.
5.
Keeping air clean and safe
1.
2.
3.
4.
5.



Answer Key

<p>Assessment</p> <p>1. Agree 2. Agree 3. Agree 4. Disagree 5. Agree 6. Disagree 7. Disagree 8. Agree 9. Agree 10. Agree</p> <p>Additional Activity</p> <p>Pupil's answers may vary</p>	<p>What I Have Learned</p> <p>1. anti-smoke 2. belching drives 3. filtering and 4. boiling 5. composting 6. tobacco control 7. plant trees</p> <p>What I Can Do</p> <p>1. / 2. X 3. / 4. x 5. /</p>	<p>What I Know</p> <p>1. Yes 2. No 3. No 4. Yes 5. Yes 6. No 7. No 8. Yes 9. Yes 10. Yes</p> <p>What's New</p> <p>1. B, D, E, F (In any order) 2. Pupil's answers may vary for the succeeding questions</p>
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References

A. General References

Department of Environment and Natural Resources. 2003. Primer on the Clean Air Act. Diliman: DENR-Public Affairs Office.

K to 12 Health Curriculum Guide August 2016 page 57

MELC Health 6, page 353

B. Electronic Sources

10 Easy Steps for Cleaner Air.

<https://www.lungsask.ca/protect-your-lungs/air-quality/10-easy-steps-cleaner-air>

17 Simple Ways to Prevent Air Pollution in your Home. In *Healthessentials*, Cleveland Clinic. <https://health.clevelandclinic.org/17-simple-ways-prevent-air-pollution-home/>

Helmenstine, Anne Marie. 2020. How much of the human body is water. In *ThoughtCo*. <https://www.thoughtco.com/how-much-of-your-body-is-water-609406>

How Kids Can Keep Water Clean.

<https://www.tvakids.com/environment/cleanwater.htm>

How natural vegetation creates stream buffers to protect waterbodies from stormwater pollution (and how you can help build one!). In *Clean Water Education Partnership* (CWEP).

<https://nc-cleanwater.com/2017/02/24/how-natural-vegetation-creates-stream-buffers-to-protect-waterbodies-from-stormwater-pollution-and-how-can-you-help-build-one/>

Intensified Environmental Protection: Clean Air. In *Clean Air Program*

<https://www.denr.gov.ph/index.php/priority-programs/clean-air-program>

Kids: Things you can do for the air we breathe. In *Ontario Ministry of the Environment, Conservation and Parks*.

<http://www.airqualityontario.com/science/kids.php>

Martin, Melanie J. 2018. Ten Ways to Keep Our Water Clean Globally.

<https://homeguides.sfgate.com/ten-ways-keep-water-clean-globally-79399.html>

National Center for Biotechnology Information. 2020. Indoor Air: the Good and the Bad. In NSC: Air Quality.

<https://www.nsc.org/home-safety/safety-topics/otherpoisons/air-quality>

National Institute of Environmental Health Sciences. 2017. “Let’s Talk about Water”. In *Kids Environment Kids Health*.

<https://kids.niehs.nih.gov/topics/pollution/water/talk-about-water/index.htm>

Western Resource Advocates. 2020. Clean Air and Water.
<https://westernresourceadvocates.org/clean-air-water/>

Why boiling water makes it safe to drink. In UPMC *Health Beat*.
<https://share.upmc.com/2017/02/how-to-purify-water/>.

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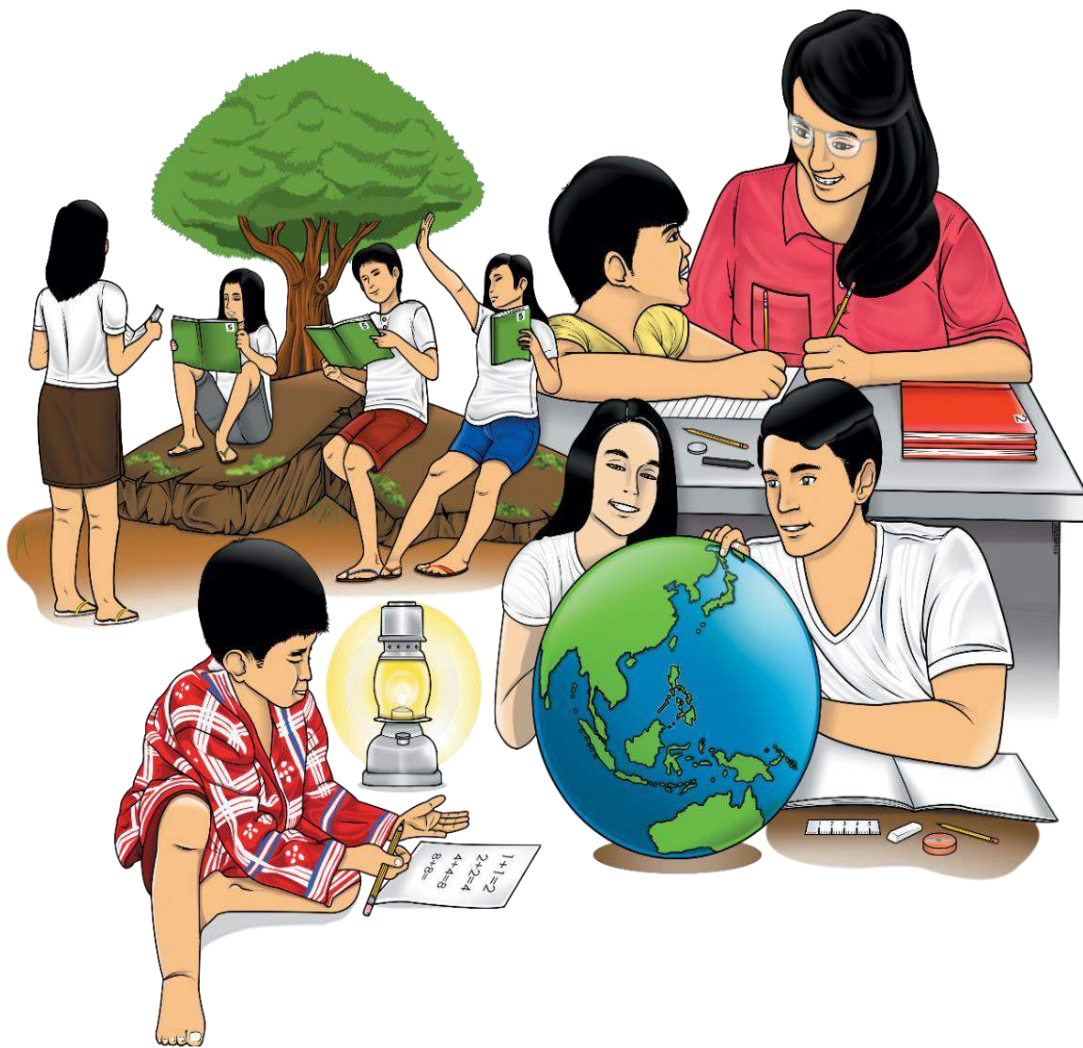
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Health

Quarter 3 – Module 3: Effects of Noise Pollution



Health – Grade 6
Alternative Delivery Mode
Quarter 3 – Module 3: Effects of Noise Pollution
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Health

Quarter 3 – Module 3: Effects of Noise Pollution

Introductory Message

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Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to explain the effect of a noisy environment.

The module consists of one lesson only.

- Lesson 1 – Effects of Noise Pollution

After going through this module, you are expected to explain the effect of a noisy environment. **(MELC H6EH-IIIId-4)**



What I Know

Direction: Complete the sentence with the correct word or words from the box below. Write the answer in a sheet of paper.

damage	headache
loud	unpleasant
sound	decreased
heart disease	brain
sleepiness	deafness

1. Noise pollution is generally defined as _____ and _____ noise that is harmful to human who can hear it.
2. Noisy environment can _____ our hearing by causing tinnitus or _____.
3. Physical effect of too loud noise includes high blood pressure, _____ and _____.
4. Listening to a loud sound can damage the hair cells in our ears that are responsible for transmitting _____ to the _____.
5. People who are affected by sleep disturbances tend to suffer the next day from daytime _____ and _____ cognitive performance.

Lesson

1

Effects of Noise Pollution

Noise pollution is defined as prolonged exposure to loud sound levels that may lead to adverse effects in human or other living organisms. Exposure to constant excessive noise has been shown to cause a range of health problems such as headache, hypertension, poor concentration, depression, stress and fatigue from lack of sleep to more serious issues such as cognitive impairment, cardiovascular disease, tinnitus and hearing loss.



What's In

Below are some examples of noises. What do you think is the effect if you live in an noisy environment? You will know the answer for this question after studying this module.





What's New

A. Direction: Read this poem about noise pollution.

Silence Please!

Written by: Mary Lutz P. Panizales



Different noise everywhere
Everyday that's all I ever hear
Breaking the sound of silence
That is getting louder and louder.



Noisy environment can damage our hearing
It can even ruin our daily living
We can't focus, we can't sleep
Making us stressed and depressed.



Living in a noisy environment is harmful
That can lead to different health conditions
Like deafness, anxiety and poor concentration
Even heart disease, tiredness and hypertension.



I'm afraid with all these noise that surround us
I'm not sure of the sound level my ears can endure
I have only one request before it's too late
Silence please, silence please!

B. Direction: Look at the pictures below. The following are some examples of the effects of a noisy environment, after reading/studying this Module identify which of these effects you experienced most of the time? Write your answer on a separate sheet.



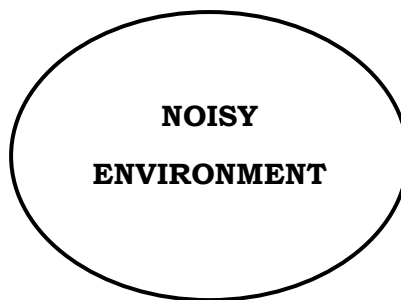
Headache



Depression



Sleep disturbances
or insomnia



Inability to focus and
concentrate



Deafness or hearing
loss



Stress




What is It

The two friends are reviewing their lesson about the noise pollution and its effect... Let's learn from them too.


What is a noise pollution?

Noise pollution is generally defined as loud and unpleasant noise that is harmful or annoying and may lead to adverse effects to people and other living organisms.



According to the World Health Organization, sound less than 70 decibels (dB) is not damaging to living organisms, regardless of how long or consistent the exposure is. Exposure for more than 8 hours to constant noise beyond 85 dB may be dangerous. Therefore, those, traffic enforcer/traffic aid who heard a car horn which produces 90 dB and a bus that produces 100 dB possible experience noise pollution.

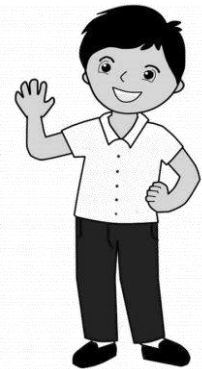
What are the effects of a noisy environment?



Noisy environment can damage our hearing by causing tinnitus or deafness. Constant loud noise is harmful to human health in many ways. Consistent barking of dogs from your neighbor, and traffic noise accounts for most polluting noise in cities are some example of noisy environment. Here are some of the effects of a noisy environment: physical, psychological, memory and concentration, as well as sleep and behavioral disorders.



Physical effect of loud sound includes high blood pressure or hypertension, heart disease and headache or migraine. Exposure to excessive sound for a long period of time can result to hypertension. People exposed to noise pollution are more likely to have heart problems compare to those unaffected by noise



Psychological effect includes stress, fatigue, anxiety, depression and noise irritation or emotional reaction that can have an immediate impact. People who are living in a noisy environment usually suffer from depression than those who live in a quieter environment.



Noise can **affect memory and concentration by losing** the ability to focus which can lead to low performance over time. Loud noise can have latent effects on our behavior, causing aggressive behavior and irritability.



Insomnia or sleep disturbances are usually caused by constant exposure to noise pollution. They are serious conditions that can lead to health deterioration. It can affect everyday performance and lead to serious diseases.



People who struggle from sleep disturbances tend to suffer the next day from daytime sleepiness, irritation, tiredness, mood swings and decreased cognitive performance.



Children appear to be more sensitive to noise pollution. One of the noise-pollution related disease is hearing impairment. Permanent hearing loss or deafness can be caused by noisy environment. For example, listening to a loud music in your headphones are at risk of developing hearing dysfunction or being exposed to a sound that are too loud for a long time. It damages the hair cells in our ears that are responsible for transmitting sound to the brain. These hair cells are very sensitive, once damaged they cannot grow back.



Among the five senses, perhaps our hearing is the most precious. Hearing empowers us and help us communicate with the people we love and the world around us . We must take good care of our





What's More

Direction: Write **Agree** if the picture shows about the effect of a noisy environment and **Disagree** if it does not. Write the answer in separate sheet of paper.

1.



Peaceful place

4.



Depression

2.



Headache

5.



Poor concentration

3.



Sound sleep



What I Have Learned

Direction: Write **PE** if the example belongs to Physical Effect, **PsyE** if belongs to Psychological Effect and **MC** if it belongs to Memory and Concentration. Write your answer in a separate sheet of paper.

- _____ 1. hypertension
- _____ 2. stress
- _____ 3. fatigue
- _____ 4. Heart disease
- _____ 5. poor concentration
- _____ 6. depression
- _____ 7. headache
- _____ 8. noise irritation
- _____ 9. migraine
- _____ 10. anxiety



What I Can Do

Direction: The following pictures explain the effects of a noisy environment. Complete each sentence below the picture by filling the correct word or words from the box. Write your answer in a separate sheet of paper.

sleep disturbances

heart disease

deafness

stress

high blood pressure

1.



Riza is suffering from _____. She cannot hear her friend's call.

4.



May is having _____ while working due to a very loud sound from the neighbor.

2.



Mel is affected with frequent loud sounds from the loud speaker. She has _____ upon monitoring her blood pressure.

5.



Carlo lives in a noisy place. He is likely to develop a _____.

3.



Liz used to wake up at night every time she hears a strong sound of an ambulance. She experiences _____.



Assessment

Direction: Write **True** if the statement about the effect of a noisy environment is correct and **False** if it is not. Write your answer in a separate sheet of paper.

1. Noise affects one's ability to focus.
2. Loud sound can lead to headache or migraine.
3. People who have sleepless night due to irritating sound heard tend to suffer sleepiness and tiredness at day time.
4. Permanent hearing loss or deafness can be caused by noisy environment.
5. People who are living in a quieter environment usually suffer from insomnia.
6. Psychological effects of noise pollution include high blood pressure, heart disease and headache.
7. Listening to a loud music in headphones develops hearing impairment.
8. Adult appear to be more sensitive to noise pollution.
9. Exposure for more than 8 hours to constant noise beyond 85 decibels may be dangerous.
10. People exposed to noise pollution are more likely to have heart problems compare to those unaffected by noise.



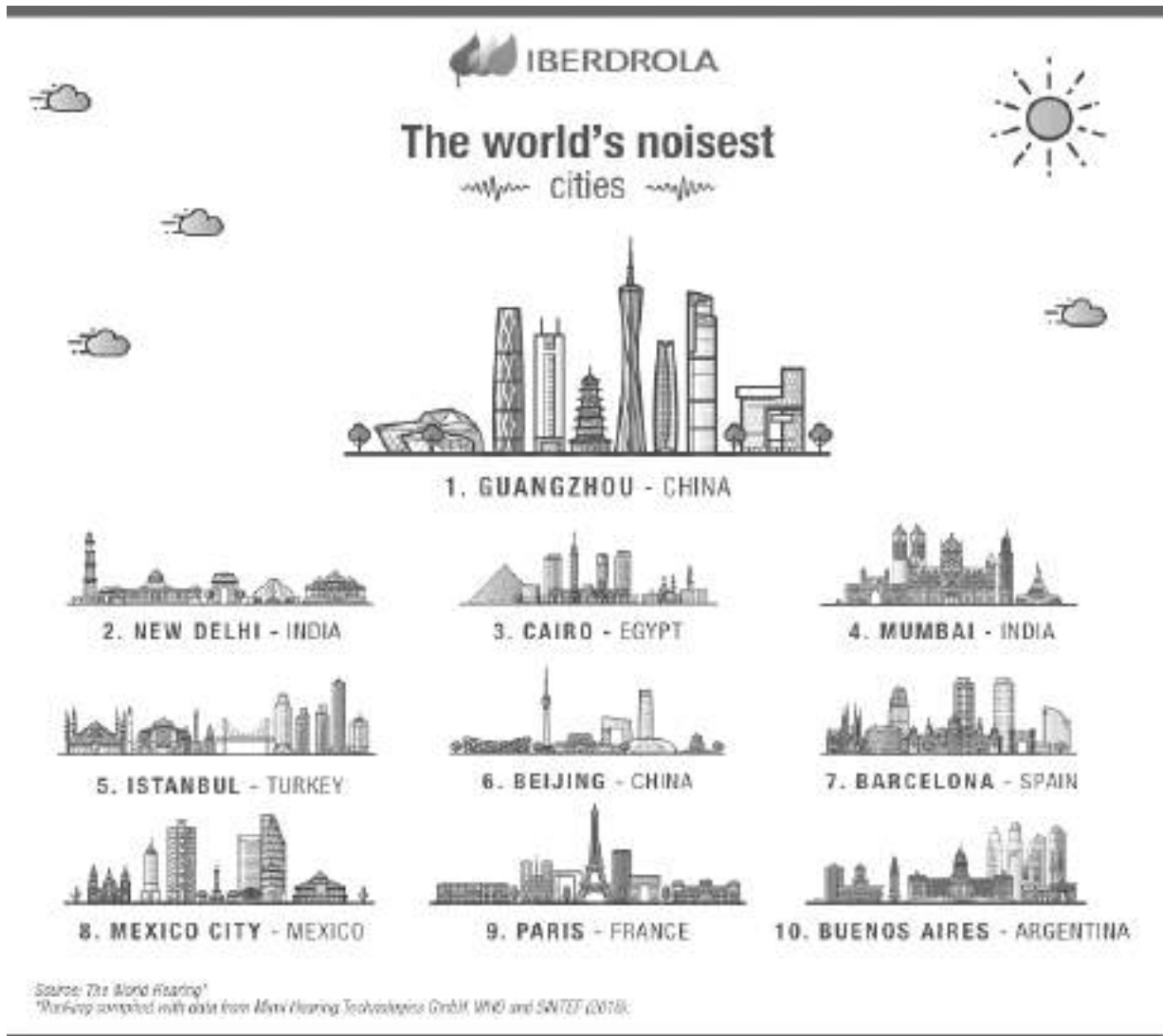
Additional Activity

Direction: Identify at least five (5) words relating to the effects of a noisy environment whether arranged vertically or horizontally. Write the answer in a separate sheet of paper.

S	T	R	E	S	S	E	C	O	W	O	H	I	F	D	E
G	E	R	O	C	L	E	A	N	G	I	E	H	W	E	E
S	F	H	H	J	K	L	Q	W	E	R	A	E	I	P	A
A	T	S	E	E	N	E	U	R	O	L	D	A	I	R	T
s	O	N	D	K	C	I	V	E	L	Y	A	L	S	E	F
A	X	S	H	A	L	V	O	A	O	G	C	T	Q	S	F
Z	O	T	R	E	W	W	B	G	H	J	H	H	N	S	G
F	I	N	S	O	M	N	I	A	C	V	E	Y	S	I	H
V	I	D	T	D	S	D	T	W	S	U	R	S	E	O	N
S	A	S	F	P	E	A	X	E	F	U	L	C	H	N	J
A	T	C	V	T	D	A	T	P	O	I	U	H	G	F	Y
F	R	C	B	N	E	P	R	R	O	L	O	O	I	S	T
E	I	E	V	E	F	G	I	J	F	Q	A	O	Z	C	N
I	S	S	C	F	G	E	C	R	T	B	L	L	T	Y	U
S	T	R	G	H	J	K	I	W	S	X	C	L	E	S	R
D	E	A	F	N	E	S	S	T	R	I	Z	T	E	R	S
H	A	R	M	L	E	S	S	S	D	F	F	G	R	E	E
F	T	Y	C	E	D	U	A	T	R	R	C	I	E	N	V

Additional Information:

Did you know that:





Answer Key

<p>What I Know</p> <ol style="list-style-type: none"> 1. loud 2. unpleasant 3. damage 4. deafness 3. heart disease headache 4. sound brain 5. sleepiness decreased <p>What's More</p> <ol style="list-style-type: none"> 1. Disagree 2. Agree 3. Disagree 4. Agree 5. Agree 	<p>What I Have Learned</p> <ol style="list-style-type: none"> 1. PE 2. Psye 3. Psye 4. PE 5. MC 6. Psye 7. PE 8. Psye 9. PE 10. Psye <p>What Can I Do</p> <ol style="list-style-type: none"> 1. deafness 2. high blood pressure 3. sleep disturbances 4. stress 5. heart disease 	<p>Assessment</p> <ol style="list-style-type: none"> 1. True 2. True 3. True 4. True 5. False 6. False 7. True 8. False 9. True 10. True <p>Additional Activities</p> <p>INSOMIA STRESS DEAFNESS DEPRESSION HEADACHE</p>
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References

Health effects of environmental noise pollution. Retrieved on July 6, 2020 at <https://www.science.org.au/curious/earth-environment/health-effects-environment-noise-pollution>

K to 12 Health Curriculum Guide August 2016 page 57

MELC –Health 6 page 353

Teacher’s Guide Health 6

Noise pollution: how to reduce the impact of an invisible treat. Retrieved on July 6, 2020 at <https://www.iberdola.com/environment/what-is-noise-pollution-causes-effects-solutions>

Noise pollution isn’t just annoying-it’s bad for your health. Retrieved on July 7, 2020 at <https://www.brainfacts.org/thinking-sensing-and-behaving/diet-and-lifestyle/2018/noise-pollution-isnt-just-annoying-its-bad-for-your-health-062718>

What is noise pollution. Retrieved on July 6, 2020 at <https://www.environmentalpollution.org/noise-pollution/>

Your hearing matters. Retrieved on July 9, 2020 at <https://bellman.com/en/your-hearing/facts-about-hearing/>

The World Noisiest Cities. Retrieved on February 16, 2021 at <https://www.iberdrola.com/environment/what-is-noise-pollution-causes-effects-solutions>

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Health

Quarter 3 – Module 4: Managing Noise Pollution



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Alternative Delivery Mode
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Health

Quarter 3 – Module 4: Managing Noise Pollution

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Thank you.



Need to Know

This module was designed and written with you in mind. It is here to suggest ways how to control or manage noise pollution.

The module consists of one lesson only.

- Lesson 1 – Managing Noise Pollution

After going through this module, you are expected to suggest ways to control or manage noise pollution. **(MELC H6EH-IIIe-5)**



What I Know

Direction: Write a check (✓) if the statement suggests how to control noise pollution and (✗) if it does not. Write your answer on a sheet of paper.

- _____ 1. Control noise level near sensitive places.
- _____ 2. Stay in noisy areas and or crowded places.
- _____ 3. Turn off/ unplug appliances at home and office when not in use.
- _____ 4. Plant more trees.
- _____ 5. Be acquainted with the noise level limits.
- _____ 6. Notify authority if someone is not following rules and regulations regarding noise levels.
- _____ 7. Do not wear earplugs.
- _____ 8. When using noisy machines, use a noise-absorbent tool.
- _____ 9. Lower the volume when listening to music.
- _____ 10. When using a washing machine, open the door of the room where the machine is placed.

Lesson 1

Managing Noise Pollution

Noise pollution is an invisible danger that is present both on land and under the sea. It is considered undesired or annoying sound that harms the health and well-being of individuals and other organisms.



What's In

The pictures below show some examples of the effects of a noisy environment. How can we control or manage noise pollution? You will know the answer to this question after studying this module.



Headache



Stress



Sleep disturbances or
insomnia



Deafness or
hearing loss



Heart Disease



Poor concentration



What's New

Direction: Read this poem about how to manage and control noise pollution.

No to Noise Pollution!

Written by: Mary Lutz P. Panizales

Noise, noise, noise, noise
I don't need it day by day
I can't hear clearly anymore
How can I be free from noise?

Hear the unpleasant sound coming everywhere
So many sleepless nights I need to bear
Bring me to a quiet place, and I'll thank you, I swear.
To escape from all of this noise, just like a sleeping bear.

Eureka!! Controlling noises is easy to distinguish.
We have to follow and maintain noise level limits.
Practice wearing earplugs to minimize unpleasant sounds
Stay at comfortable places; OMG, I'm a tranquil hound.

Listening to the radio, social media, and television
Lower the volume to avoid noise pollution.
To sensitive places like schools, hospitals, and churches,
Keep silent and plant more trees to absorb noises.

Inform authorities of noise rule-breakers
Create healthy noise like soft music and whispers
Start from yourselves to spread awareness
About noise pollution and its harmful effects.

How to prevent noise pollution? Here are some of the suggestions on how to control or manage noise pollution.



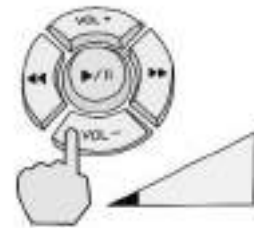
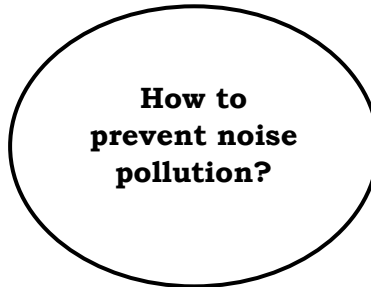
unplug appliances
when not in use



wear earplugs to
avoid unpleasant



refrain from shouting and
establish common sources
of noise and noise level by
understanding the decibel.



lower the volume
to minimize noise







plant trees because they
are noise absorbent



What is It

Let us learn from two friends about some suggestions how to control or manage noise pollution. They have learned these from their teacher

 <p>Do you know already the effects of noise pollution?</p>	 <p>Yes but it's not enough to know only that. There is a need to know also how to control or manage the noise pollution.</p>
 <p>Noise is an unwanted sound. A sound that has unpleasant and harmful effects that creates discomfort to the ears. Generally, sound generated vehicles, loudspeakers, horns, planes, traffic and construction noise are some of the few reasons for noise pollution.</p>	 <p>Noise pollution is also considered environmental pollution although it is not as harmful as water, and air pollution but the effects of noise pollution for longer a period can be dangerous.</p>

Can you name some suggestions and ways on how to manage or control noise pollution?



How to prevent noise pollution?

1. Appliances at home or offices should be turned off / unplugged when not in use.
2. When using noisy machines, close the door of the room where the machine is located.
3. Wear earplugs.
4. Lower the volume level of radio, television, stereo and cellphones.



5. Stay away from noisy and crowded places
6. Follow noise level limits
7. Control noise level near sensitive places
8. Plant trees



Turn off and unplug appliances at home and office when not in use, like television, games, and computers. It can produce unnecessary stress on the ears. Turning appliances off can also save electricity.



Close the door while doing dishwashing or using washing machines for rooms where it is located so that the noise can be reduced.



Using earplugs or earmuffs can reduce loud noises to a manageable and tolerable level. Earplugs are small inserts that fit into our ear canal. Earmuffs fit over the entire outer ear and sealed air to keep ears safe from loud noises.



Listen to radios, televisions, and songs in lower volume especially when listening from headphones or speakers.



Stay away from noisy area or places. Noise generating vehicles, airports, industries should be far from residential areas because it is very dangerous for infants and senior citizens.



Noise level limits should be followed. Community law must check the use of loudspeakers, outdoor parties as well as public and political announcements.



Control and minimize noise level near sensitive places. There should also be a control on noise level or silent zone near churches, schools, and hospitals.



Plant more trees, because they are good noise absorbents. According to studies, trees can reduce noise by 5 to 10 decibels (dB) around them. Noise above 70 dB over a prolonged period of time can damage our hearing. Loud noise above 120 dB can cause instant harm to our ears.



Eliminate unwanted noise by creating healthy noise such as whispering instead of shouting, playing soft music and sound effects of waterfalls, and singing birds in homes or offices.



Check type of machinery that are creating noise due to vibrations and reduce noise by using noise absorbents.



Inform the authority of any breaking noise rules. You can notify government agencies if someone is not following rules and regulations regarding noise levels and also not maintaining the noise limit.



Regular check noise levels in an industrial complex and indoor to keep noise levels within the limit. It is important to control the noises created around us. People must be aware of the ways on how to control and manage noise pollution.



Start from yourselves to spread awareness about noise pollution and its harmful effects on humans and the environment. Noise should have limit and be minimized to avoid health problems.

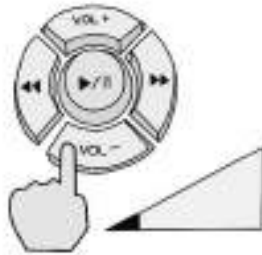




What's More

Direction: Write **Agree** if it if the picture suggests ways on how to control noise pollution and **Disagree** if it does not. Write your answer on a paper.

1.



Lower the volume

4.



Loud Music

2.



Loud public
announcement and
advertisement

5.



Honking of vehicles

3.



Planting trees



What I Have Learned

Direction: Write **Yes** if it suggests ways on a how to control or manage noise pollution and **No** if it does not. Write your answer on a sheet of paper.

1.



Lower the volume of the television.

4.



Control the noise level near this area.

2.



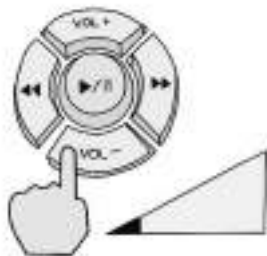
Plant more trees to minimize noise.

5.



Use earplugs to lessen the noise that will get into the ears.

3.








Turn off appliances when not in use.



What I Can Do

Direction: Complete the table below suggesting ways on how to control or manage noise pollution. Do it on a sheet of paper.

Causes of noise pollution	Suggestive Ways to Control or Manage Noise Pollution
1. traffic noise 	
2. Loud public announcement 	
3. A boy shouting 	
4. Loud music 	
5. A vendor passing by. 	



Assessment

Direction: Write **True** if the statement suggests ways on how to control or manage noise pollution and **False** if it does not. Write your answer in a sheet of paper.

- _____ 1. Control noise level near sensitive places like schools and hospitals.
- _____ 2. Avoid wearing earmuffs or earplugs when in a noisy and crowded places.
- _____ 3. Inform authority for breaking noise rules.
- _____ 4. Check noise level regularly in an industrial area to maintain noise level limit.
- _____ 5. Listen to radios, televisions, MP3's, and songs in higher volume.
- _____ 6. Eliminate unwanted noise by creating healthy noise.
- _____ 7. Plant more trees to have more noise absorbents.
- _____ 8. Open the door when using noisy machines to be heard.
- _____ 9. Spread awareness about noise pollution and how to control or manage it.
- _____ 10. Airports and industries should be near the residential areas.



Additional Activity

Direction: Suggest at least five (5) ways on how you can control or manage noise pollution in your place. Write the answer on a sheet of paper.

1. _____.
2. _____.
3. _____.
4. _____.
5. _____.



Answer Key

<p>Assessment</p> <p>1. True 2. False 3. True 4. True 5. False 6. True 7. True 8. False 9. True 10. False</p> <p>Additional Activities</p> <p>Pupils answer may vary</p>	<p>What I Have Learned</p> <p>1. Yes 2. Yes 3. Yes 4. Yes 5. Yes</p> <p>What Can I Do</p> <p>Pupils answers may vary</p>	<p>What I Know</p> <p>1. ✓ 2. X 3. ✓ 4. ✓ 5. ✓ 6. ✓ 7. X 8. ✓ 9. ✓ 10. X</p> <p>What's More</p> <p>1. Agree 2. Disagree 3. Agree 4. Disagree 5. Disagree</p>
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References

K to 12 Health Curriculum Guide August 2016 page 57

MELC –Health 6 page 353

Teacher’s Guide Health 6

What is noise pollution? Retrieved on July 6, 2020 at
<https://www.environmentalpollution.org/noise-pollution/>

How to Reduce Noise Pollution? Retrieved on July 9, 2020 at
https://www.ppsthane-c0m.cdn.amproject.org/v/s/www.ppstane.com/blog/how-to-reduce-noise-pollution/amp?amp_js_v=a2&_gsa=1&usap=mq331AQIKAGwASDYAQE%3D#referrer=https%3A%2F%2Fwww.google.com&aoh=15942869650543&_ct=15942

25+ Easy and Practical Ways to Reduce Noise Pollution at Home of Offices. Retrieved on July 9, 2020 at <https://conserve-energy-future.com/easy-and-practical-ways-to-reduce-noise-pollution.php>

Loud Noise Can Cause Hearing Loss Retrieved on February 28, 2021 at
https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html

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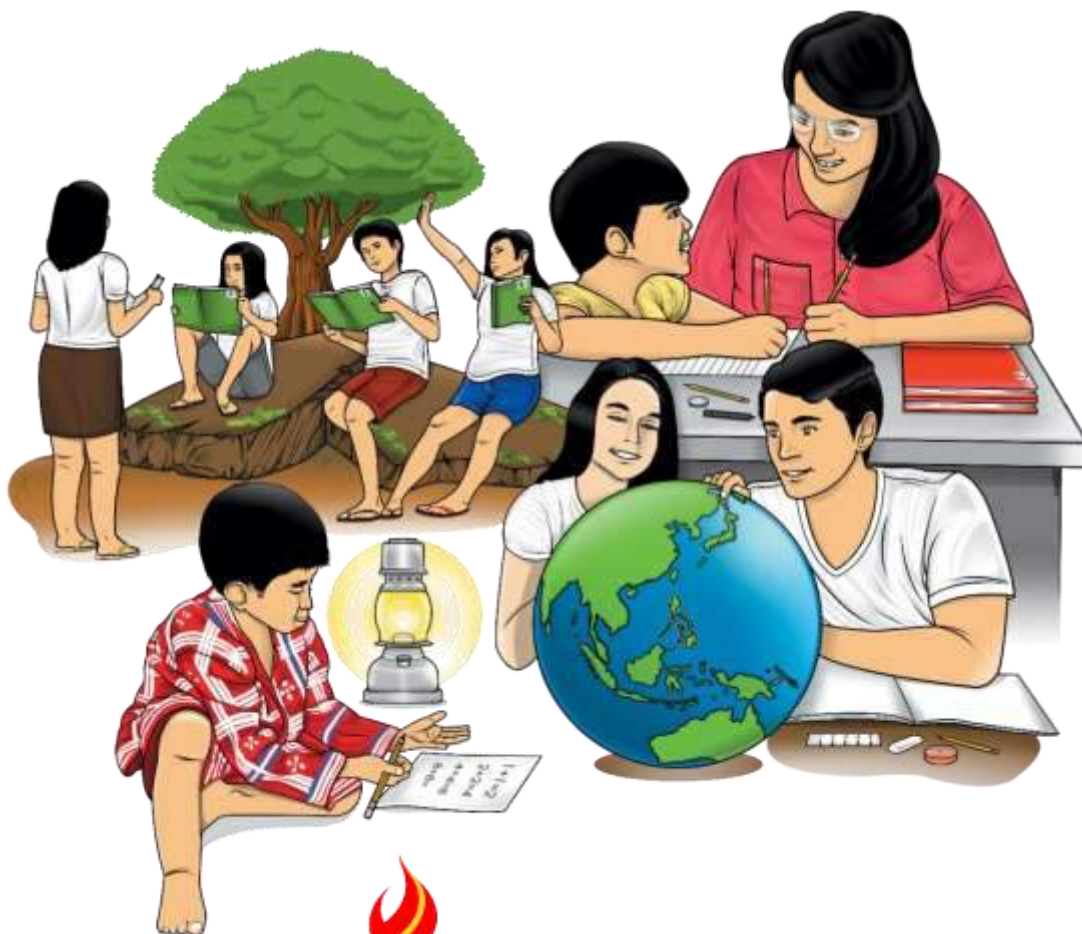
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Health

Quarter 3 – Module 5: Practicing Ways to Control or Manage Noise Pollution



Health – Grade 6
Alternative Delivery Mode
Quarter 3 – Module 5: Practicing Ways to Control or Manage Noise Pollution

First Edition, 2019

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Health

Quarter 3 – Module 5: Practicing Ways to Control or Manage Noise Pollution

Introductory Message

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If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to provide you with essential information which will help you deeply understand and perform ways to handle or address the noise pollution to avoid its negative health impacts.

The module consists of only one lesson.

- Lesson 1 – Practicing Ways to Control or Manage Noise Pollution

After going through this module, you are expected to practice ways to control or manage noise pollution (**MELC H6EH-III^{fg}-6**)



What I Know

Directions: Write **Yes** if the statement is a good practice to control or manage noise pollution and **No** if it is not. Write your answers on a separate sheet of paper.

1. Use earplugs to reduce the amount of noise hitting your ears.
2. Be irresponsible neighbors to maintain noise awareness among others.
3. Plant trees to help absorb unwanted sounds.
4. Open the doors and windows to keep annoying sound.
5. Stay in a quiet space whenever we want to escape from noise.
6. Blow horns to silent zones or areas.
7. Stay away from noisy environment.
8. Avoid using exhaust silencer to reduce noise vibrations.
9. Do unnecessary sounds that might disturb others.
10. Maintain the machinery for better use.

Lesson 1

Practicing Ways to Control or Manage Noise Pollution

Noise pollution is an unwanted loud sound created through activities made by machines, people, wildlife and natural sounds that cause health problems to human and animals both on the land and in the water. Excessive sounds are harmful to us because it may lead to hearing loss, damaged brain, and increased the risk of heart diseases, irregular sleep, and psychological disorders like nervousness, irritability, and stress. We cannot run away from noise in our home, school and community that is why it is best to practice ways to control and manage it.



What's In

Here is something for you to think about where the noise come from.

“When a tree falls in the forest and no one is around, does it make any sound? What is music to one person maybe noise to another. Noise is all around which is repeatedly heard from common activities that surrounds us. Sounds louder than the normal level are harmful. Too much exposure to these can affect our health.

Noise is also created by the family members or neighbors and different kinds of sources such as radio, television, loud speakers, appliances and other gadgets like smartphone, tablet and laptop.

Shouting, walking, running, playing, are examples of activities that make loud sounds at home. It needs to be controlled to make us more comfortable. Managing these loud sounds can help reduce home and environmental noises and their possible negative health impacts..

Knowing the sources of noise is important. There are ways to prevent or control noise but its not enough if they are not put into practice.





What's New

- A. Directions: Let us sing this song using the tune of “Jack and Jill” or you can also recite it as a poem. The song is about sound and how to control and manage some noise. After singing or reciting the piece, answer the questions written below on a sheet of paper.

Sound and Noise

Written by: Receli P. Imas

Sounds are the things we hear around
Can be form of communication
Some were very happy to hear
Others were music to one's ears

*Oh!, where is the sound coming from?
Let's explore and have some fun
Is it good to anyone?
Let's find out where the sound come from?

Radio, stereo were turned on
Also our television
So noise what came out of them
Volume were minimized then.

(Repeat *)

Suddenly heavy rains poured down,
Roaring thunder was heard from afar
Windows closed and doors locked up
Covered our ears and just relax!

(Repeat *)

Sounds came from different sources
Can be natural or man -made
Some are not good to be heard
Noise pollution is in place!

Questions to be answered:

1. What are the sources of sounds and noise mentioned in the song?
2. Have you experienced hearing these sounds? Where? When?
3. How often do you hear those sounds?
4. How did you control or manage the loud sounds?
5. Do you also practice controlling or managing loud sound? Why?

B. Direction: Read and learn from this ABC's on how to practice ways to control and manage noise pollution.

ABC'S to Control or Manage Noise

Written by: Receli P. Imas

A

Ask manufacturers and identify the noise labels when you buy products or machines like home appliances such as television, speakers, washing machine and gadgets like smartphone, tablet and laptop. The lower the number of decibels in these items, the better. This requirement ensures quality and safe product for all.

B

Be sure to minimize the volume of the television, speakers and other gadgets that produce loud sound at home. When exposed to these, wear proper and clean ear protector whenever possible. Turn them off when not in use to save electrical energy.

C

Cooperate with your household members, neighbors and local leaders in creating awareness that can help reduce noise level and make the environment a better place to stay. Join in the noise reduction activity like observing the noise rules and planting more trees that will help block or absorb excessive sounds outdoor.

S

Spend time in silence for quite sometimes. Stay away from noisy places and give yourself a time whenever you want to escape from noise. Be in a peaceful place to relax your mind and calm your body.



What is It

The children are talking about what they have studied on unwanted noise and some ways to control or manage loud sound. Take note of the important points about their conversation.

Rachel, please take a look at the pictures. They are sound producing machines. Have you ever experienced hearing their sounds?



Yes, Lawrence. We have television and radio at home. Sometimes, these things create unwanted noise that is very harmful to my ears. But, we cannot run away from them because they are part of our daily activities.



You are right. Sometimes when these things create too loud sound and last long, they become noise pollution. These can cause different health problems if we do not know how to control and manage them at home, in school and community.



I know how noise is made. It can be from man-made sources which can be found from home appliances and gadgets. It can also be from construction sites where noisy equipment is used. Heavy traffic where vehicles are going in and out and other means of transportation by air and water are also sources of unwanted noise.



Roaring thunderstorm, cracking sound of earthquake, heavy downpour of rain, rumbling sea waves, exploding volcanoes and howling wind on the other hand are examples of natural noises.



Yes, sometimes they are harmful too, because they cause stress or nervousness and hearing loss to us. That is why we need to practice some ways to control or manage these noises to avoid health-related illnesses.



You are right Lawrence, here are some helpful practices in avoiding or managing noise pollution.



1. Use proper and clean ear protector whenever possible.
2. If the noise situation is not too long, cover your ears with your clean palm.
3. Chewing, yawning and swallowing during traveling time will help reduce temporary hearing loss due to car noise.
4. When exposed to excessive noise, practice certain measures to ease an ear discomfort like alternately putting cold or warm compress over outside the affected ear for 10 minutes. Gargling water with salt may also help release ear pain.
5. Avoid blowing of horns to silent zones like schools and hospitals.
6. If you are using a machine, be sure to check the noise level it produces. You can apply noise absorber in it.
7. Use device or silencer to reduce noise like car exhaust.

I will surely observe those tips Rachel. Now, Let's have some Trivia about our ears. These are very interesting to know.



Do you know that our ears and hearing never rest?

- a. When we sleep, our brain ignores soft sounds around but only reacts to loud sounds.
- b. We hear music better on our left side.
- c. Eat leafy vegetables to prevent hearing loss caused by exposure to noise.
- d. Ear wax protects our middle ear from unwanted sounds.
- e. In our body, there is the smallest bone called stirrup which is found in the middle ear. We have also the temporal bone which is the hardest bone that protects our inner ear.
- f. Long exposure to noise over 85 decibels (a unit use to measure sound) will cause tinnitus or ringing in the ears.

For me, one of the best ways to manage and control noise is to know the source of the noise and its sound level. With that, you can identify and practice the proper way to control or manage the situation when too loud sounds are heard or produced. Let us take a look at the table below these important information:

LEVEL OF NOISE in decibel (dB)

Painful and dangerous so use hearing protection or avoid	140dB	Fireworks
	130dB	Ambulances, Jack hammers
Uncomfortable and dangerous over 30 seconds so use hearing protection or avoid	120dB	Operating Heavy equipment, Thunder Clap
Very loud and dangerous over 30 seconds so use hearing protection or avoid	110dB	Car horns, Outdoor Events
	100dB	Construction Site
	90dB	Blenders, Power tools, Stereo
Loud	80dB	Alarm clocks
	70dB	Truck Passing by
Moderate	60dB	Normal talking
	50dB	Moderate rainfall
Soft	40dB	Quite Space or room
	30dB	Whisper
Unclear	20 dB	Rustling of leaves
	0-10dB	Breathing





What's More

A. Directions: Study each picture inside the box. Put a check (✓) beside the number if it shows a positive practice on how to control or manage noise pollution and (X) if it does not. Do it on another sheet of paper.

1. _____



Plant more trees to absorb noise.

2. _____



Give yourself a time to relax away from unwanted sound.

3. _____



Turn off home appliances when not in use.

4. _____



Be responsible in keeping free from noise environment.

5. _____



Shouting when talking to someone in a close range.



What I Have Learned

Directions: Write **Agree** if the statement shows a practice to control or manage noise pollution and **Disagree** if it does not. Write your answers on a separate sheet of paper.

1. Avoid noisy places always.
2. Set the volume of the television enough to be heard.
3. Participate in the noise reduction program in your community.
4. Close the door and windows when using noisy or loud equipment.
5. Chewing while traveling reduces the possibility of noise from entering to our ears.



What I Can Do

Directions: Study each picture and their corresponding description then answer the questions below. Accomplish the task in another sheet of paper.

1. Which of the practices shown in the pictures do you observe?
2. Why do you observe or practice them?

- a. Wear proper earplugs when exposed to noise.



- b. Speak in a low but well -modulated voice while talking to someone.



- c. Avoid unnecessary activities that might distract others.



- d. Control the volume of the loud speaker so that it cannot disturb others.



- e. Stay in a quiet room or calm place to relax or get away from noise.





Assessment

Directions: Write **True** if the following situations show practices on how to control or manage noise pollution and **False** if it does not. Write your answers on a separate sheet of paper.






1. Peter do not want to disturb others so he sets his smartphone in a silent mode.
2. Tessa should speak at her big voice when talking to her friend just beside her.
3. Ronaldo shut-off the horns of his car as he passes by the school.
4. Mother told us to play at home while others are still sleeping.
5. Ysabelle joins the tree planting activity in their community as a support to reduce noise pollution.
6. Sandra should turn-on the stereo in a maximum volume when listening to a music at night time.
7. Kathlea can stay in her room to avoid noise while praying.
8. Father should operate his electric equipment in a separate room so as not to create too loud sound.
9. Kiko removes the exhaust silencer in his motorcycle to regulate the noise when using it.
10. Ben should give a big blow of horn from his car upon arriving at their garage.

Thank you for accomplishing this module. Congratulations!



Additional Activity

Directions: Choose the pictures from the box that shows a good practice on ways to control or manage noise pollution. Write the letters of your answers using your answer sheet. Provide the reason/s for your answers.

1. 	_____.
2. 	_____.
3. 	_____.
4. 	_____.
5. 	_____.



Answer Key

<p>What's New</p> <p>1. Answers may vary</p> <p>2. Answers may vary</p> <p>3. Answers may vary</p> <p>4. Answers may vary</p> <p>5. Answers may vary</p> <p>What I Know</p> <p>1. Yes</p> <p>2. No</p> <p>3. Yes</p> <p>4. No</p> <p>5. Yes</p> <p>6. No</p> <p>7. Yes</p> <p>8. No</p> <p>9. No</p> <p>10. Yes</p>	<p>What I Have Learned</p> <p>1. Agree</p> <p>2. Agree</p> <p>3. Agree</p> <p>4. Agree</p> <p>5. Agree</p> <p>What's More</p> <p>1. ✓</p> <p>2. ✓</p> <p>3. ✓</p> <p>4. ✓</p> <p>5. X</p>	<p>Additional Activities</p> <p>1, 2, 3, 4, &</p> <p>Answers may vary...</p> <p>Assessment</p> <p>1. True</p> <p>2. False</p> <p>3. True</p> <p>4. False</p> <p>5. True</p> <p>6. False</p> <p>7. True</p> <p>8. True</p> <p>9. False</p> <p>10. False</p> <p>What Can I Do</p> <p>1, 2, 3, 4 and 5 (in any order)</p> <p>Reasons may vary.....</p>
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References

- 10 Interesting Facts about Ears and hearing-Blog Kiversal. Retrieved on July 12, 2020 at
<https://blog.kiversal.com/en/10-facts-about-ears-and-hearing/>
- 25+ Easy and Practical Ways to Reduce Noise Pollution at Home or Offices- Conserve energy Future. Retrieved on July 13, 2020 at
<https://www.conserve-energy-future-com/easy-and-practical-ways-to-reduce-noise-pollution.php>
- Canadian Centre for Occupational Health and Safety. Retrieved on July 13, 2020 at
https://www.ccohs.ca/oshanswers/phys_agents/noise_control.html
- MELC-H6EH-IIIlg-6, p.354
- Noise Control Manual. Retrieved on July 12, 2020 at
<https://s.docworkspace.com/d/AAtQJDW4k8RJwuzzkl-nFA>
- Why Is Sound Important and What does it Mean to Us? Top 5 Reasons Why We Need Sound. Retrieved on July 12, 2020 at
<https://www.woofonthewall.co.uk/blogs/the-sound-art-blog/why-is-sound-important-and-what-does-it-mean-to-us-top-5-reasons-why-we-need-sound>

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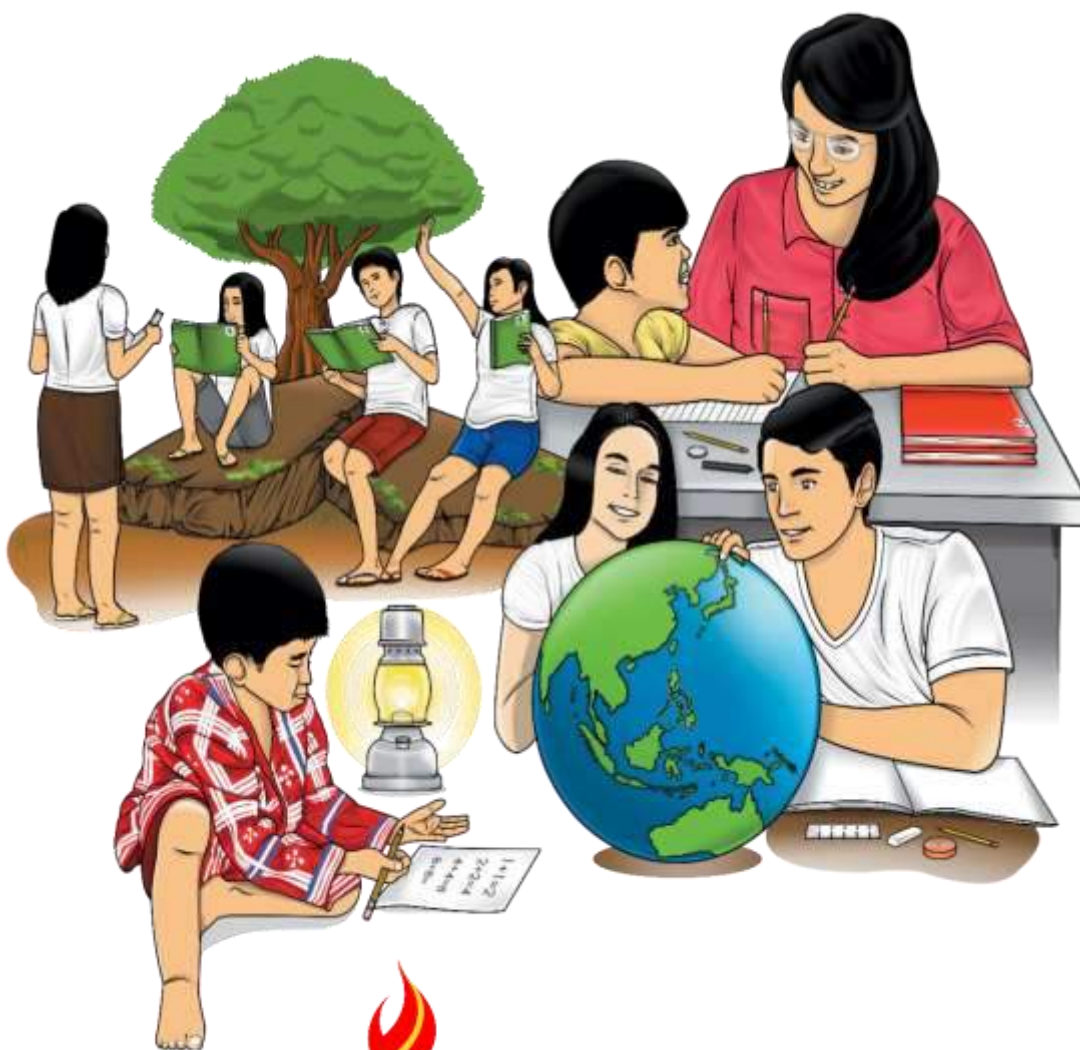
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Health

Quarter 3 – Module 6: Effects of Pests and Rodents to One's Health



Health – Grade 6
Alternative Delivery Mode
Quarter 3 – Module 6: Effects of Pests and Rodents to One's Health
First Edition, 2019

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Health

Quarter 3 – Module 6: Effects of Pests and Rodents to One's Health

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Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you explain the effects of pests and rodents to one's health.

The module consists of only one lesson:

- Lesson 1 – Effects of Pests and Rodents to One's Health

After going through this module, you are expected to:

Explain the effect of pests and rodents to one's health **(MELC H6EH-IIIhi-7)**

Practice ways on how to prevent pests and rodents **(MELC H6EH-IIIj-9)**



What I Know

A. Direction: Write **True** if the statement correctly tells about the effect of pests and rodents and **False** if it does not. Write your answers in a separate sheet of paper.

1. Mosquito bites can cause swelling of the brain or Encephalitis.
2. Cockroaches that crawl on our cooking equipment and food make food harmless to eat.
3. Water that is infected by rat's urine can cause a deadly disease called Leptospirosis.
4. Pests and rodents cannot contaminate our food and water supply.
5. Mosquitoes are small insects but can spread virus through their bites.
6. Pests and rodents are disease-carriers. They can spread diseases to a community.
7. Food and water that is contaminated by flies and cockroaches can cause inflammation of the intestine that leads to diarrhea and abdominal pain.
8. We should not control or eliminate pests and rodents because they do not bring problem to our health.
9. Insect like flies carry infectious diseases by transferring infection from their feet or from their mouth after feeding on something that is infected.
10. Dengue virus which is carried by female mosquitoes can cause dengue fever which is very deadly.

Lesson 1

Effects of Pests and Rodents to One's Health

Pests like insects and rodents are animals that bring harm. Rats and mice are rodents that destroy crops, stored food and things at home. They also bring diseases to people.

Insects are six-legged animals like flies, cockroaches and mosquitoes. Once they crawl through dirt and manure, these insects pick up microorganisms, bacteria and worms' eggs with their legs. Flying from garbage dump to your home and crawling over things, they can contaminate food and cooking equipment which could make food harmful and dangerous to eat.

These pests are carriers of virus and bacteria that can make people very ill. If not treated, the diseases could lead to illness and even death.



What's In




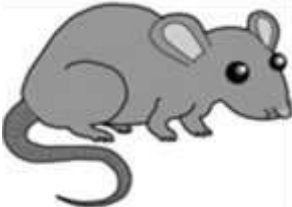


Direction: Read and guess. What am I? Write your answers in a separate sheet of paper.

1. I am mostly active at night. I hide in cracks of walls, door frames and furniture. I have six legs, long antennae and have flat and low-lying winged body that is oval-shaped. I am also fast-moving. What am I?
2. I am small but dangerous. You can see me flying in smelly areas like garbage, rotten plants and animals. People use swatter, rolled newspaper or sticky trap to get rid of me. What am I?
3. I chew your clothes, stored food and electrical wires. I can also damage the crops of farmers. My bite and urine can bring you illness. What am I?
4. I am a small-winged insect with proboscis to suck your blood. Every time I bite, I leave red patches on your skin. I can also disturb your sleep using my buzzing wings. What am I?



Insects like mosquitoes, flies, cockroaches and rats are small animals that bring diseases to people. They are considered pests because they bring harm to health and put people's lives in danger. These small animals bring diseases that can make people sick. Such sickness if untreated can lead to death. Below are pictures of these small animals.

	Cockroach
	Fly
	Mosquito
	Rat






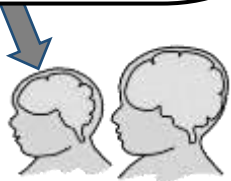


What's New

Mosquito is a small winged insect that flies from one place to another and can bring diseases to people. Read the story below and learn about the effect of this pest to one's health.

Mosquito's Diary of Common Illness



<p>I am mosquito, a Spanish name which means "little fly". I may be a small insect, but I can bring big problem to your health.</p> 	<p>I can bring you malaria. Malaria is a disease caused by a parasite transmitted to humans through the bites of infected <i>Anopheles</i> mosquitoes.</p> 
<p>The parasites multiply in the person's liver and then infects and destroys red blood cells.</p> 	<p>Malaria can make you very sick. You will experience high fever and shaking chills.</p> 
<p>Zika virus is also another disease caused by mosquitoes. This can be passed from a pregnant woman to her fetus.</p> 	<p>This can cause brain and eye damage to the fetus. Microcephaly is a condition caused by Zika virus wherein the brain does not develop properly. This results to a head size that gets smaller than</p> 

Chikungunya is an infection caused by the Chikungunya virus (CHIKV) transmitted by a bite from infected female mosquito.



The virus is not fatal but infected human will experience fever and joint pain.



I can also cause **Encephalitis** or swelling of the brain. The bite from *Culex* mosquitoes can give you fever, headache and vomiting. It can make your brain swell, may put you to coma and also death.



And yes, I can also bring you **Filariasis**. It is a parasitic disease caused by an infection with roundworms.



Filariasis or Elephantiasis can lead to abnormal enlargement of your body part.



Just like the leg which is so big than the usual one.



I am a mosquito with white markings on my legs and marking in the form of a lyre on the upper part of my head. I am a female mosquito mainly of the species *Aedes aegypti* (yellow fever mosquito) that brings dengue virus.



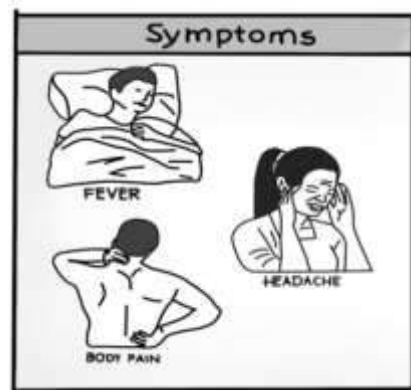
Source: <https://www.vcstar.com/story/news/2018/09/01/invasive-aedes-mosquitoes-spreading-across-southern-california/1177648002/>

I am *Aedes albopictus* also called the Asian tiger mosquito or forest mosquito. Just like the *Aedes aegypti*, I also bring dengue virus.



Source: <https://bugguide.net/node/view/7644>

Dengue virus can cause dengue fever which is very deadly. Take a look at some of the symptoms.



Truly, I am a small-winged insect but I can carry many diseases. Do not be fooled of my size. When you see me flying and buzzing, remember the common diseases that I can bring.



Here I am...

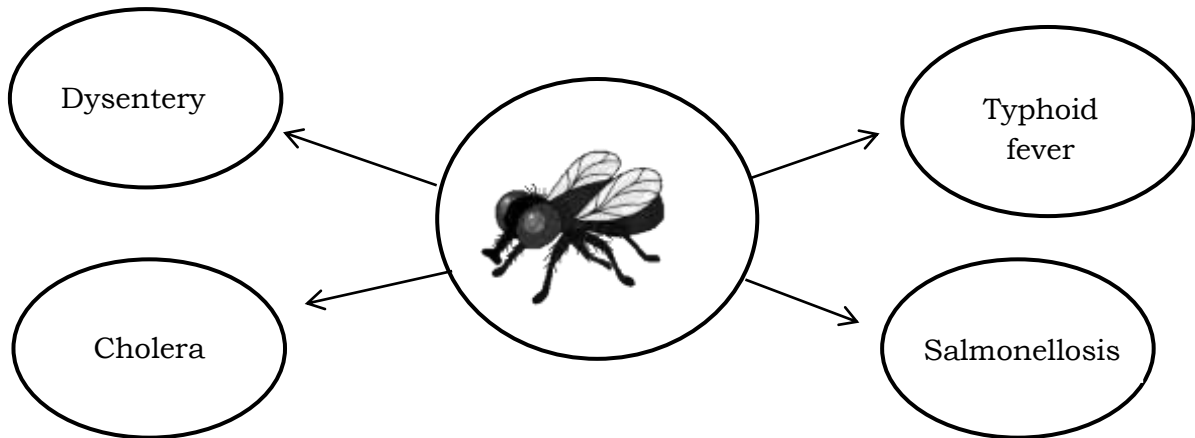
M- Merciless **Encephalitis**
 O- Outrageous **Malaria**
 S- Scary **Yellow Fever**
 Q- Quick Killing **Dengue**
 U- Unlikable **Chikungunya**
 I- Intense **Zika**
 T- Terrifying **Filariasis**
 O- Observe diseases symptoms or else you will be sorry!

Flies



Flies can be found anywhere. This insect carry infectious diseases by transferring infection from their feet or from their mouth after feeding on something that is infected. Large numbers of flies are seen in places like garbage dumps, wet market, poultry and piggery. You can also see this six-legged animal feasting on rotten plants and animals.

These are some of the diseases that can affect one's health. They are transmitted by flies from dirty surroundings.





Now, sing with us! Let us use the tune of “Bahay Kubo” for you to know the effect of flies to our health. You can also have it as a poem.



I am a Fly

Written by: Francilet R. Padios

I am a fly
I fly around
Let me then tell you this
I can bring you disease.



A bacterial infection
Called **Salmonellosis**
Diarrhea and fever
Some symptoms of this illness.



The swelling of your intestine
Is called **Dysentery**
Causing you abdominal pain
And severe diarrhea.

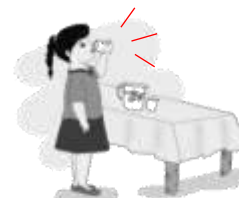


I also bring **Typhoid fever**
That is caused by bacteria
The symptoms are stomach ache
Fever and headache.



Going on with the **Cholera**
Brought by *Vibrio cholerae* bacteria
It's an infectious disease
A severe, watery diarrhea.

Drinking water and eating food
Contaminated by bacteria
You'll become dehydrated
Or even die if untreated.



Rodents



Rodents like rats bring common disease such as Leptospirosis and Rat bite fever. The urine and droppings of rodents can cause health problems.



Leptospirosis or *Weil's disease* is an infection caused by the bacteria *Leptospira* caught by people through contact with rat's urine. This causes fever, chills, headache, muscle aches, vomiting and diarrhea. To avoid such infection, it is advised not to step or play in flood water especially if you have a wound. If the water is infected by rat's urine, you may have leptospirosis which is a deadly disease if not treated right away.

Rat bite fever is caused by rat's bite on human skin. This causes inflammation or swelling of the skin and fever.



Cockroaches



Cockroaches are insects that crawl everywhere so they spread germs that cause diseases or illnesses.
Below is a poem to give more ideas about a cockroach.



Creepy, Crawly Cockroach

Written by: Francilet R. Padios

I am a creepy, crawly insect that is active at night
Some shout and cry in fear whenever I'm in sight
My saliva and droppings can cause an **Allergy**
For sure you'll sneeze and feel itchy!



I could give you **Dysentery**; oh you are going to cry
This severe diarrhea, will make your poop wet with blood
My bacteria *Salmonella typhi* will cause you **Typhoid fever**
A fever that is so alarming when it is severe.



I could also bring **Salmonellosis** caused by *Salmonella* bacteria
Eating contaminated food, you will vomit and have diarrhea
If the water is contaminated by *Vibrio cholerae* bacteria
This **Cholera** will make you suffer from dehydration and diarrhea.



I can also carry polio virus within my guts which is one of the viral diseases
Causing **Polio or Poliomyelitis** that cause muscle weakness and paralysis
Virus spreads by taking contaminated food or contact with feces
Or when an infected person coughs or sneezes.



I am also a fast-moving winged insect always seen most everywhere
I contaminate the food and spread germs anywhere
When you see me crawl or fly, you must be aware
You will likely to have diseases as long as I am there.



What is It

Direction: Match Column A with Column B as to the effects caused by pests and rodents to one's health. Write the letter of the correct answers in a separate sheet of paper.

Column A

1. Fly



2. Mosquito



3. Rodent



4. Cockroach



Column B

A. This pest causes Leptospirosis and Rat bite fever that makes a person ill.

B. This pest crawls over things and contaminates food and water. Dysentery, Allergy, Typhoid fever and Salmonellosis are some of the diseases that it brings.

C. Flying from garbage dump and other smelly areas, this pest carries diseases like Salmonellosis, Dysentery and Cholera.

D. This buzzing pest makes a person sick with Dengue fever, Zika virus and Filariasis.



What's More

Preventive Measures from the Harmful Effects of Pests and Rodents to One's Health



Clean up. Keep your house clean and tidy.



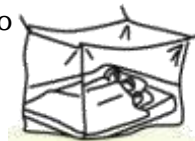
Repel and kill pests and rodents.



Get vaccinated.



Use mosquito nets when sleeping.



If you are not feeling well, visit your medical specialists immediately.



What I Have Learned

Pests and rodents are carriers of bacteria, virus and germs. They spread diseases through biting, sucking blood, urine contact and contaminating food and water.

Direction: Remember what you have learned. Read and understand the following questions. Write your answers in a separate sheet of paper.

1. What is true about the effect of mosquitoes to one's health?
 - A. Mosquitoes contaminate our food and water.
 - B. Mosquitoes bring virus that can make us sick.
 - C. Mosquitoes' urine makes the water infectious.
2. How do cockroaches give problem to people's health?
 - A. They bite and destroy furniture.
 - B. They sting and transmits dengue virus.
 - C. They contaminate food and water supply that can harm our health.
3. Why is growing population of rats dangerous to the community?
 - A. Rats attack crops and bring diseases like Leptospirosis and Rat bite fever.
 - B. Rats bring Malaria.
 - C. Rats cause Allergy and Dengue fever.
4. Which is **not** true about the effect of pests and rodents to one's health?
 - A. They make our lives comfortable and stress-free.
 - B. They transmit parasites that can make people get sick.
 - C. They carry viruses that are deadly.
5. Which is correct about the effect of pests and rodents to one's health?
 - A. They make people healthy.
 - B. They are harmless creatures.
 - C. They are disease-carriers that could infect people and cause sickness or death.



What I Can Do

A. Direction: Sing the song in the tune of “Leron Leron Sinta”. You may also have it as a poem.

“Pests”

by: Francilet R. Padios

Here comes the cockroach
With its droppings everywhere
Surely ‘twill contaminate the food
If it has no cover.

Here comes the mosquito
Buzzing here and there
Don’t give a chance to bite
To avoid Dengue fever.

Here comes the tricky rat
Looking for a food
Beware of its bite
And dangerous urine.

Small pests they may seem
But they will make you scream
They bring serious disease
Causing severe damage.

Maintaining the cleanliness
Inside and outside our home
Can help control the pest
Get rid or keep them out.

Using an organic bait
Or pest repellent
With proper handling
A pest free place there can be

Let’s control the pest
For a place to be problem free.



Assessment

Direction: Write **Yes** if the statement explains about the effect of pests and rodents to one's health and **No** if it does not. Write your answers in a separate sheet of paper.

1. A female mosquito of the species *Aedes aegypti* and *Aedes albopictus* transmits dengue virus that causes headache, fever, rashes and nose bleeding.
2. Food that is contaminated by flies can cause severe watery diarrhea once eaten.
3. Cockroaches are harmless insects. We can let them crawl on our food and cooking equipment.
4. A person who has a contact with rat's urine can get infection which causes fever, chills, headache, muscle aches, vomiting and diarrhea.
5. Droppings and urine from cockroaches can cause allergy.
6. Malaria, a disease caused by mosquitoes, can make you very sick. You will experience high fever and shaking chills.
7. Zika virus, a disease caused by mosquitoes, can be passed from a pregnant woman to her fetus wherein the brain does not develop properly.
8. Mosquitoes are just small insects. They do not bring illness at all.
9. Rat bites are not dangerous to health.
10. Germs are carried by pests and rodents that can make a person sick if the immune system is weak.

Thank you for accomplishing this module. Congratulations!



Additional Activity

Directions: Make a poster or drawing about the effects of pests and rodents to one's health. Do it in a short bond paper.



Answer Key

<p>Assessment</p> <p>1. Yes 2. Yes 3. No 4. Yes 5. Yes 6. Yes 7. Yes 8. No 9. No 10. Yes</p>	<p>What I Have Learned</p> <p>1. B 2. C 3. A 4. A 5. C</p>	<p>What's In</p> <p>1. Cockroach 2. Fly 3. Rat 4. Mosquito</p> <p>What I Know</p> <p>1. True 2. False 3. True 4. False 5. True 6. True 7. True 8. False 9. True 10. True</p>
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References

- BugGuide. Species *Aedes albopictus*-Asian Tiger Mosquito. Iowa State University, Department of Entomology, 2003-2009. Retrieved on November 25, 2019 from <https://bugguide.net/node/view/7644>
- Gholam Hossein Shahraki, Saadat Parhizkar, Alireza Raygan Shirazi Nejad, "Cockroach Infestation and Factors Affecting the Estimation of Cockroach Population in Urban Communities", *International Journal of Zoology*, vol.2013, Article ID 649089, 6 pages, 2013. <https://doi.org/10.1155/2013/649089>
- Invasive *Aedes* mosquitoes spreading across Southern California. Staff and Wire Reports. Ventura County Star, September 2, 2018. Retrieved on November 25, 2019 from <https://www.vcstar.com/story/news/2018/09/01/invasive-aedes-mosquitoes-spreading-across-southern-california/1177648002/>
- K to 12 Health Curriculum Guide August 2016 page 59
- MELC Health 6, page 354
- Mosquitoes. National Geographic. April 11, 2010. Retrieved on October 4, 2019 from <https://www.google.com/amp/s/relay.nationalgeographic.com/proxy/distribution/public/amp/animals/invertebrates/group/mosquitoes>
- Rat-Borne Diseases. 2019. Retrieved on November 25, 2019 from <https://www.orkin.com/rodents/rats/rat-borne-diseases>
- Ray, Claiborne. 2018. "Do Cockroaches Carry Diseases?". *New York Times*, August 3, 2018. <https://www.nytimes.com/2018/08/03/science/cockroach-diseases.html>
- World Health Organization. 2017. "Vector-borne diseases". Retrieved on October 6, 2019 from <https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases>
- World Health Organization. 2019. "Neglected tropical diseases". Retrieved on October 4, 2019 from https://www.who.int/neglected-diseases/vector_ecology/mosquito-borne-diseases/en

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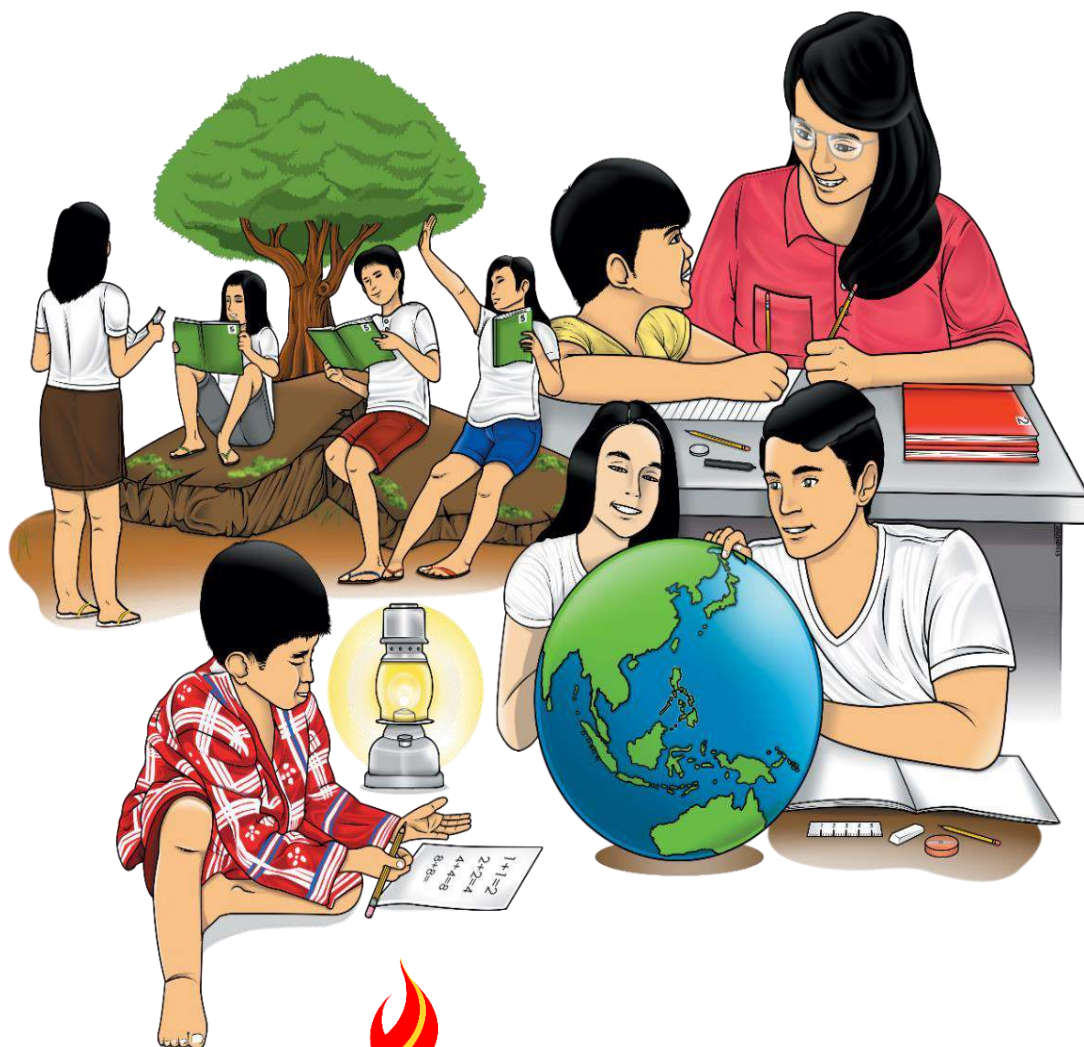
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Health

Quarter 3 – Module 7: Ways to Prevent and Control Pests and Rodents



Health – Grade 6
Alternative Delivery Mode
Quarter 3 – Module 7: Ways to Prevent and Control Pests and Rodents

First Edition, 2019

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Health

Quarter 3 – Module 7

**Ways to Prevent and Control
Pests and Rodents**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you practice the ways to prevent and control pests and rodents.

The module consists of only one lesson:

- Lesson 1 – Practicing Ways to Prevent and Control Pests and Rodents

After going through this module, you are expected to practice ways to prevent and control pests and rodents. **(MELC H6EH-IIIj-9)**



What I Know

Activity 1

Directions: Read and understand the following statements. Write **Agree** if the statement shows correct practices to prevent pests and rodents to infest the environment and **Disagree** if it does not. Write your answer on a separate sheet of paper.

1. Grow pest-repelling plants.
2. Use hazardous pesticide at home.
3. Leave overripe fruits and rotten vegetables on the table.
4. Apply insect repellents or lotion in the body.
5. Clean and sanitize pet's cage regularly.
6. Use open trash bins and trash cans.
7. Have household pets like cats and dogs to hunt and scare pests and rodents.
8. Clean the surroundings once a week.
9. Bury dead animals in an open pit.
10. Keep the kitchen and bathroom pest free.

Lesson 1

Prevention and Control of Pests and Rodents

Did you know that a great number of diseases are transmitted to humans by animals and insect vectors? These insects and rodents thrive in filthy environments. Your home, school and community might not be spared from these pests and rodents if you fail to observe proper attitudes, behaviour and practices that will keep your environment healthy and safe.



What's In



Activity 2: Answer these on a sheet of paper.

Describe the kind of community portrayed above. _____

Do you want to live in a similar community? Yes____. Why?

No____ Why not? _____

Do you have any idea on how to keep insects and rodents away from home, school and community? How? _____



What's New

Activity 3

A. Directions: Read the poem. Answer the questions below. Write your answer on a separate sheet.

Rats Here!

Written by: Receli P. Imas

Rats are here roaming around once, twice or thrice
Crawling along the walls, so sneaky and tricky mice
Creating sounds, scratching things, gnawing boxes, bags and clothes
and chewing cabinets or papers
Leaving tear marks and all behind!

How can you drive away these rodents from home?
Check the cracks and the corners of your home
Foods should be kept in storage tight
And out of sight when they come out!

Place the traps where all they hide
But keep them out of children's reach
Adopt a pet like cat or dog to hunt them down and scare them out
These and more are practices
to prevent and control rats around!



1. What is the poem all about? _____.
2. What message is conveyed to you? _____.
3. What dangers do they bring? _____.
4. What practices are suggested to get rid of them? _____.
 - a. _____
 - b. _____
 - c. _____
5. What problems do rats bring? _____.

B. Direction: The term COCKROACH is spelled out for you to serve as your guide in getting rid of them.



Rid the COCKROACH!

Written by: Receli P. Imas



C

Cover the food container and store in clean areas.



O

Odorless homemade repellents can drive away the insects. (Mix equal parts of sugar and baking soda in lid or dish.)



C

Clear-out spilled food from eating surfaces, under stoves and in the cupboards.



K

Keep trash cans or bins covered and throw the garbage regularly.

R

Rid them out by applying essential oils like, peppermint, oregano, citrus and eucalyptus in a piece of cotton. Wipe it in all places where they gather. Reapply it whenever possible.

O

Observe proper sanitation in and out of your home at all times.

A

Ask and visit the doctor immediately if you experience severe diarrhea due to contaminations caused by cockroaches.

C

Clean all the spaces where they stay such as cabinets, packages, boxes, appliances and other furniture.

H

Help keep your home pest-free so you rid the cockroaches.



What is It

Activity 4.

Directions: A. Read the story below. Find out how flies can make people ill and suggest later how to get rid of them.



Hi! I am Wally the amazing fly. Have you ever wondered why people get sick because of me?

Let me introduce myself to you...



I am an insect. I have no teeth or stinger. My tongue is like a straw. My mouth absorbs food like a sponge. I can turn many solid foods through spitting and vomiting on it. I land on tasty meal, and defecate. I lay bacteria by passing them to other things. I carry different illnesses like dysentery, typhoid fever, cholera and salmonellosis.

Do you want me in your home, school or in your community and bring diseases?

If not, then tell me how you can get rid of me?



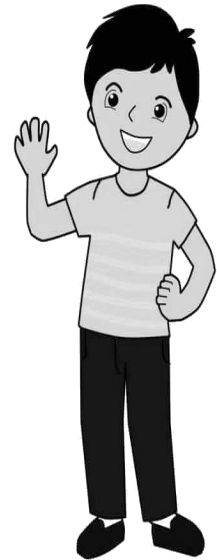
B. Enumerate ways how your family gets rid of flies to prevent diseases.
Write your answers on a separate sheet of paper.

1. _____
2. _____
3. _____
4. _____
5. _____

Have you ever bitten by a mosquito? Did you know that like flies, they can infect people with diseases? Unlike flies, mosquitoes can bite. They can spread diseases such as dengue, Zika, Chikungunya virus and malaria.

Here are some of the practices to keep mosquitoes away from us.

1. Apply coconut oil or you can use mosquito repellent lotion like citronella oil in your body.
2. Crush garlic cloves and mix with water. Boil for a few minutes then let it cooled down and spray in areas where insects are present.
3. Place water with a bubbling soap in an open container to trap the insects in the bubbles.
4. Clean the breeding grounds such as empty flower pots and used tires, gutters and other items that holds water.
5. Pour a ground coffee in any stagnant water in your home or environment to kill their eggs.
6. Grow pest repellent plants like lemon grass and mint to drive away mosquitoes and other insects.
7. Use mosquito net when sleeping.



Remember these Do's and Don'ts in using pesticides at home.

1. After preventive steps have been taken, use minimum risk pesticides whenever possible.
2. Dispose or keep leftover pesticides and its tight container.
3. Limit or minimize the use of these hazardous materials. They can harm your family's health.
4. Never re-use empty pesticides containers as storage. They are poisonous.
5. Store pesticides in their original containers.
6. Identify the pests you have at home and find the effective ways to prevent and control them.



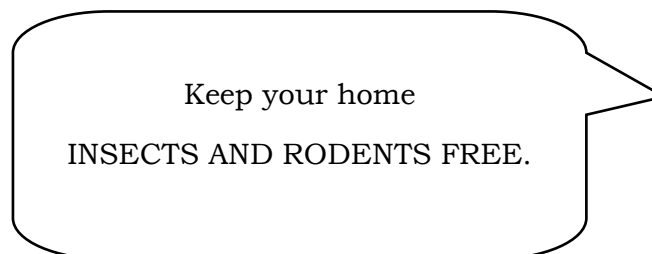


What's More

Activity 5

Directions: Write **C** if the statement shows a **Correct** practice to prevent and control pests and rodents and **W** if it is a **Wrong** practice. Write your answer on a separate sheet of paper.

1. Leave tables and other eating surfaces unclean.
2. Use a mosquito net to avoid insect bites.
3. Clean all the areas where pests stay or hide.
4. Food should be stored in covered containers.
5. Apply insect repellent lotion on the body.





What I Have Learned

Activity 6

Directions: Read and understand each situation carefully. Draw a happy face 😊 if the statement shows a good way to prevent and control pests and rodents and a ☹️ sad face if not. Write your answer on a separate sheet of paper.

1. Apply insect repellents on the face only.
2. Observe proper sanitation in and out of your home at all times.
3. Cover the garbage cans and bins.
4. Use hazardous pesticide to kill pests.
5. Leave overripe fruits on the table.



What I Can Do

Directions: Write (**√**) if it practices proper way to prevent and control pests and rodents and (**X**) if it does not. Write your answer on a separate sheet of paper.

- _____ 1. Healthy vegetables are growing in the backyard garden.
The owner grows also insect repellent plants in the yard to prevent insects getting near the vegetable garden.
- _____ 2. Minerva throws the fruit peelings in the garbage bin.
She sees to it that she returns the cover of the bin to prevent the swarm of flies from coming in.
- _____ 3. Armando cleans the kitchen every morning as a way to avoid insects and rodents.
- _____ 4. Rosa has birds in the cage. The birds' wastes are just scattering under the cage. Sometimes she cleans it but most of the time she is so busy to clean it.
- _____ 5. Contaminated food and water can harm our body. It is safe to cover the food and water containers tightly to avoid contamination.



Assessment

Directions: Write **Yes** if the children practice correct ways on how to prevent and control pests and rodents and **No** if it does not. Do this on a separate sheet of paper.

1. The children buy food in the canteen. They throw their food wrappers in the proper bin after eating.
2. There is a dead puppy at the back of Linda's house. Nobody gets and bury it. Few hours later, a group of flies gather around that area.
3. Ana is eating her breakfast. After eating, she leaves spilled surfaces unclean.
4. Lino cleans their surroundings. He tried to classify the wastes and dispose them properly.
5. Keeping trash cans open all the time is a good practice to prevent and control pests and rodents.
6. One way to protect the food from contamination is to place it in a sealed container.
7. We need to have a storage area at home for our things. It is better to leave storage areas unclean most of the time.
8. Let us make it a habit to keep our environment clean to avoid diseases brought by pests and rodents.
9. Place water with a bubbling soap in an open container to trap the insects in the bubbles.
10. A responsible pet owner maintains the cleanliness of his pet's pen.

Thank you for accomplishing this module. Congratulations!



Additional Activity

Directions: Study each picture inside the box. Pick-out the pictures that show practices how to prevent and control pests and rodents. Write the letter of the correct answer on your paper and answer the following questions below.



A.



B.



C.



D.



E.

Questions to be answered:

1. Which of the following do you practice at home?
2. Why do you do these practices?



Answer Key

<p>What I Know</p> <p>1. Agree 2. Disagree 3. Disagree 4. Agree 5. Agree 6. Disagree 7. Agree 8. Disagree 9. Disagree 10. Agree</p> <p>What's In</p> <p>Activity 1</p> <p>1. Answer may vary</p> <p>Activity 2</p> <p>1. Answer may vary</p> <p>2. Answer may vary 3. Answer may vary 4. Answer may vary</p> <p>What's New</p> <p>Activity 3.A.</p> <p>1. Answer may vary 2. Answer may vary 3. Answer may vary 4. a, b, c, d answer may vary 5. Answer may vary</p> <p>Activity 4.</p> <p>1-5 Answers may vary</p>	<p>What's More</p> <p>Activity 5</p> <p>1. W 2. C 3. C 4. C 5. C</p> <p>Activity 6</p> <p>What I Have Learned</p> <p>1. ☹️ 2. ☹️ 3. ☹️ 4. ☹️ 5. ☹️</p> <p>What I Can Do</p> <p>1. ✓ 2. ✓ 3. ✓ 4. X 5. ✓</p>	<p>Assessment</p> <p>1. Yes 2. No 3. No 4. Yes 5. No 6. Yes 7. No 8. Yes 9. Yes 10. Yes</p> <p>Additional Activities</p> <p>B, D, E (in any order) 1 and 2 Reasons may vary.....</p>
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References

Are Rats Dangerous? Retrieved on July 14, 2020 at
<https://www.nozzlenolen.com/blog/post/are-rats-dangerous>

Best Ways to Get Rid of Roaches. Retrieved on July 15, 2020 at
<https://www.terminix.com/pest-control/cockroaches/removal/>

Do's and Don'ts of Pest Control US EPA. Retrieved on July 23, 2020 at
<https://www.epa.gov/safepestcontrol/dos-and-donts-pest-control>

Food poisoning, diarrhea, and Staph, Oh MY! Cockroaches carry bacteria that can contaminate your food and make you sick!. Retrieved on July 15, 2020 at
<https://www.batzner.com/resources/blog-posts/food-poisoning-diarrhea-and-staph-oh-my-coackroaches-carry-bacteria-that-can-contaminate-your-food-and-make-you-sick/>

MELC Health 6, p.353

Ways to Prevent Mosquito. Retrieved on July 15, 2020 at
<https://www.onemedical.com/blog/live-well/7-ways-to-prevent-mosquito-bites>

What Are Flies Attracted To? Retrieved on July 15, 2020 at
<https://www.terminix.com/blog/whats-buzzing/what-attracts-flies>

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