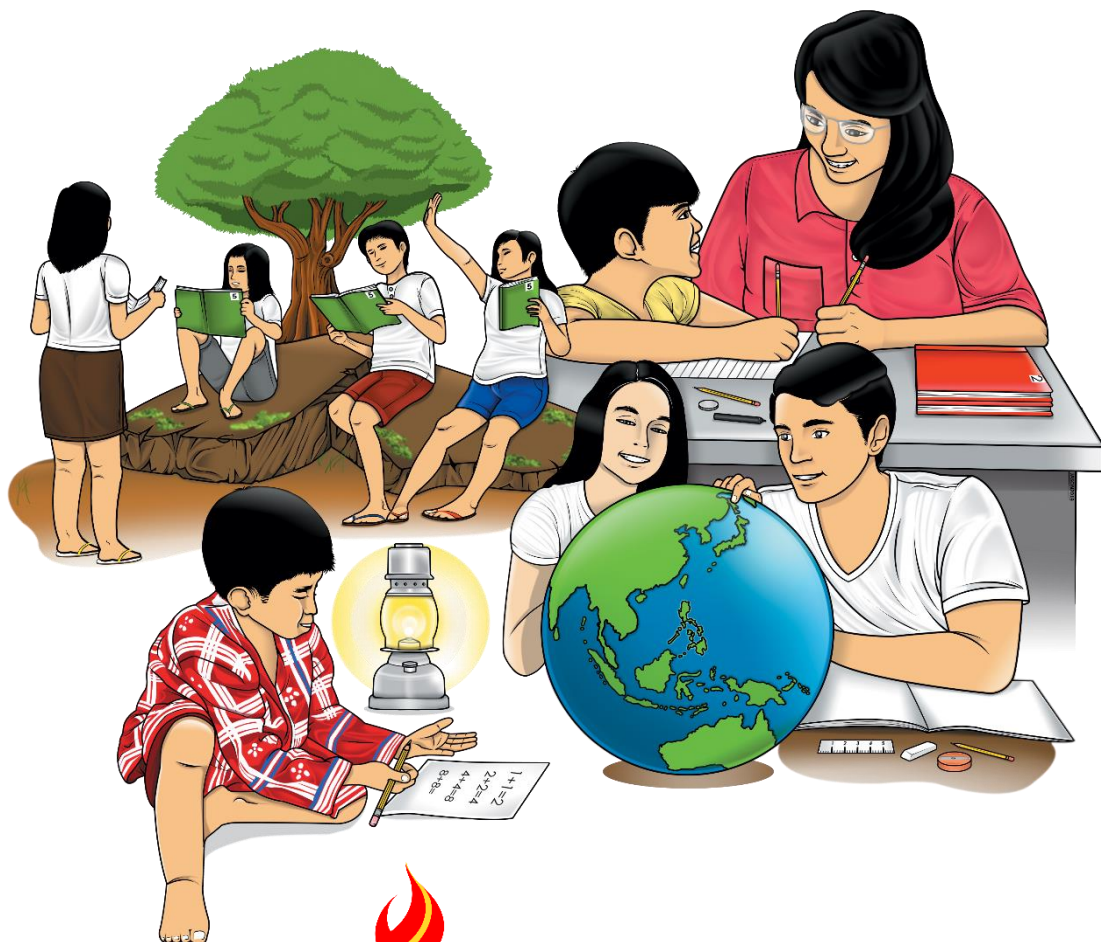


Science

Quarter 1- LIVING THINGS

Module 2: Effects of Lifestyle in the Function of Respiratory and Circulatory System



Science – Grade 9

Alternative Delivery Mode

Quarter 1: Living Things

Module 2: Effects of Lifestyle in the Function of Respiratory and Circulatory System

First Edition, 2020

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Science
Quarter 1- LIVING
THINGS

**Module 2: Effects of Lifestyle
in the Function of Respiratory
and Circulatory System**

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

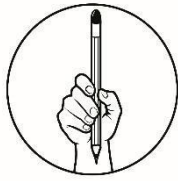
This module was designed and written with you in mind. It is here to help you master the Effects of Lifestyle in the Function of Respiratory and Circulatory System. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

The module focuses on achieving this learning competency:

Infer how one's lifestyle can affect the functioning of respiratory and circulatory systems – (S9LT-Ic -27)

After going through this module, you are expected to:

1. identify the effects of lifestyle to the respiratory and circulatory system;
2. infer how one's lifestyle can affect the functions of respiratory and circulatory systems;
3. infer how to detect and prevent diseases in the circulatory system and respiratory system;
4. create an infographic on effective ways of taking care of the respiratory and circulatory system.



What I Know

Multiple Choices. Choose the letter of the best answer. Write your answer on a separate sheet of paper.

1. Smoking is the common cause of emphysema. What happens when you have emphysema?
 - a. The blood in your lungs becomes oxygenated
 - b. The amount of oxygen in your blood increases
 - c. The blood pressure in your pulmonary artery decreases
 - d. The amount of oxygen in your bloodstream ultimately decreases
2. What disease does not usually include shortness of breath as a symptom?
 - a. Asthma
 - b. Chronic Bronchitis
 - c. Common Colds
 - d. Emphysema
3. What type of activity helps strengthen our lungs, muscles, and makes our heart more efficient?
 - a. Eating
 - b. Exercising
 - c. Sleeping
 - d. Smoking
4. What is this disease that stimulates the increased secretion of mucus due to an irritant reaching the bronchi and bronchioles?
 - a. Asthma
 - b. Bronchitis
 - c. Emphysema
 - d. Pneumonia
5. Who are you going to consult if you are having a difficulty in breathing?
 - a. A Cardiologist
 - b. A Urologist
 - c. A Neurologist
 - d. A Pulmonologist
6. What occurs when the blood supply to a part of your brain is interrupted due to an abrupt blockage of arteries?
 - a. Anemia
 - b. Heart attack
 - c. Heart failure
 - d. Stroke

7. Which practice may weaken our circulatory system?
 - a. Having a daily exercise
 - b. Staying up late at night
 - c. Taking vitamins every day
 - d. Avoiding vices like smoking
8. Why do most people like to eat fast foods, rather than eating healthy foods?
 - a. Because they are ready to eat
 - b. Because they taste better than fruits and vegetables
 - c. Because they are less expensive than fruits and vegetables
 - d. Because they look more delicious than fruits and vegetables
9. What is being described in this situation: a common, continuing respiratory condition that causes difficulty breathing due to inflammation of the airways?
 - a. Asthma
 - b. Bronchitis
 - c. Hypertension
 - d. Stroke
10. What is being described in this situation: it makes the arteries hard caused by high consumption of a fatty diet that leaves fat deposits on the lining of the blood vessels.
 - a. Atherosclerosis
 - b. Hypertension
 - c. Pneumonia
 - d. Stroke
11. What are the common symptoms of Covid-19?
 - a. Fast heartbeat and sweating
 - b. Fever, dry cough, and tiredness
 - c. Aching sensation of neck and jaw
 - d. Weight loss, chest pain, and coughing up blood
12. What are the causes of Pneumonia?
 - a. Allergies
 - b. Dust and smoke
 - c. Weather condition
 - d. Bacteria, viruses, and fungi
13. Which is the cause Anemia?
 - a. Blood Clot
 - b. Hemorrhage
 - c. High Blood Pressure
 - d. Lack of red blood cells

14. Respiratory System: Asthma

- a. Atherosclerosis
- b. Dengue
- c. Emphysema
- d. Pneumonia

Circulatory System: _____

15. Healthy Lifestyle: Regular Exercise

- a. Cigarette Smoking
- b. Sleeping for 8 hours
- c. Taking vitamins everyday
- d. Eating fruits and vegetables

Unhealthy Lifestyle: _____

Lesson 1

Effects of Lifestyle in the Function of Respiratory and Circulatory System

In Module 1, you have learned the parts and functions of the Respiratory and Circulatory Systems. In this module, you will be dealing with ways of detecting and preventing diseases, inform yourselves about the risks of cigarette smoking, and conduct information dissemination of this topic to other people most especially to your loved ones.

Here are some key questions for you to ponder after finishing this module:

1. What are the effects of lifestyle in the function of the respiratory and circulatory systems?
2. What are the ways to detect and prevent diseases of the respiratory and circulatory systems?
3. How does one's lifestyle affect the function of respiratory and circulatory systems?
4. How can we effectively inform and encourage the public regarding the detection and prevention of respiratory and circulatory related diseases?

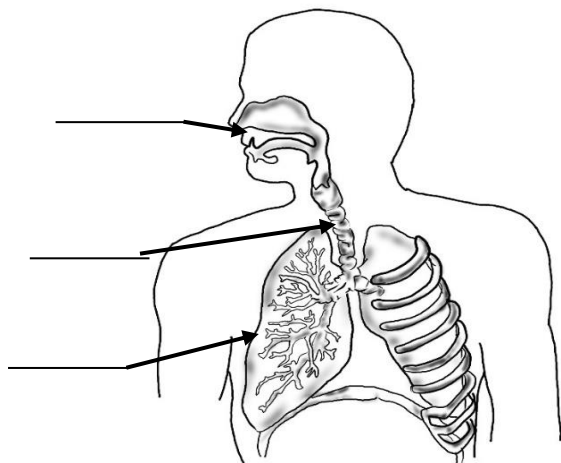


What's In

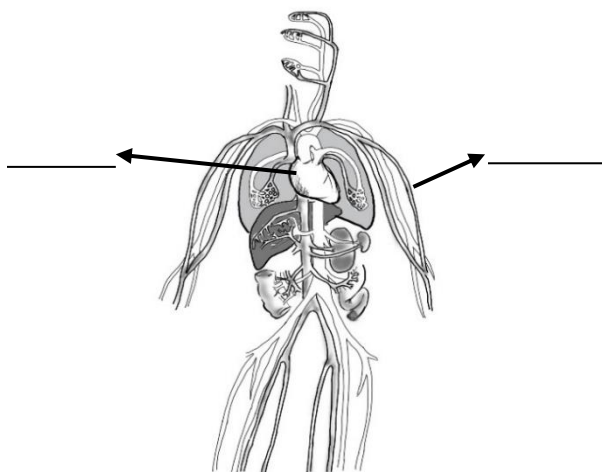
Let us recall the concepts learned from the previous module by answering the following questions:

- What are the primary functions of the respiratory and circulatory systems?
- What are the parts of the respiratory system?
- How about the circulatory system?

Name the parts by labeling the illustration below. Use a separate sheet of paper for your answers.



Source: DepEd BLR Illustrations



Source: DepEd BLR Illustrations



What's New

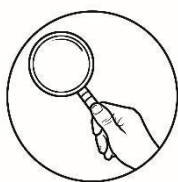
This module shows you how to detect, treat and prevent the diseases of the Respiratory and Circulatory System.



Figure 1. No Tobacco Smoking Campaign by the Department of Health (DOH)

Source 1: <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>

Are you familiar with the posters shown above?
Do you know how we can acquire the diseases?



What is It

DISEASES OF THE RESPIRATORY SYSTEM

Diseases	Causes	Symptoms	Treatment/Prevention
Asthma	(Not exactly the causes but triggers) Allergies Smoking Weather	Coughing Wheezing Chest Pain Shortness of breath Trouble Sleeping	Prevention: Avoid asthma triggers Get vaccinated for influenza and Pneumonia Treatment: Asthma Inhalers Nebulizer
Chronic Obstructive Pulmonary Disease	Cigarette Smoking Emphysema Bronchitis	Shortness of breath Wheezing Chest tightness Cough with sputum	Prevention: Do not smoke/quit smoking Treatment: Medication Lung therapy Bronchodilators
Chronic Bronchitis	Cigarette Smoking Dust Smoke from burning coal Air pollution	Cough with sputum Wheezing Tight chest Shortness of breath	Prevention: Do not smoke/Quit smoking Treatment: Bronchodilators Surgical Procedures
Emphysema	Cigarette Smoking Air Pollution Chemical fumes Dust	Frequent coughing and wheezing Shortness of breath	Prevention: Do not smoke/Quit smoking Avoid secondhand smoking Treatment: Medications Lung therapy Surgical Procedures
Lung Cancer	Cigarette Smoking Secondhand smoke Gene changes	Cough that does not go away Coughing up blood Shortness of breath Chest pain Headache Hoarseness	Prevention: Do not smoke/Quit smoking Avoid secondhand smoke Treatment: Surgery Chemotherapy Radiotherapy
Tuberculosis	Bacteria called Mycobacterium	Cough that lasts for more than 3 weeks Chills and Fever Weight loss Chest pain Coughing up blood	Prevention: Physical distancing Good ventilation Good hygiene Treatment: Medication
Pneumonia	Bacteria Fungi Viruses (including SARS-CoV, MERs-CoV, and recently SARS-CoV-2)	Chest pain Cough with phlegm Fatigue Chills and Fever Shortness of breath Nausea Vomiting	Prevention: Get vaccinated Good hygiene Do not smoke Cure: If bacteria, Antibiotics If viral, Rest with lots of fluid intake

Coronavirus Disease (COVID-19)	Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)	<p>Most common symptoms are: Fever Dry cough Tiredness</p> <p>Less common symptoms are: Aches and pains Sore throat Diarrhea Conjunctivitis (pink eye) Headache Loss of taste and smell Rashes</p> <p>Serious symptoms: Difficulty in breathing Chest pain Loss of speech and movement</p>	<p>Prevention: Wash your hands regularly Maintain physical distancing Avoid touching your face Cover your mouth when coughing and sneezing Avoid smoking Wear face mask STAY AT HOME</p>
--------------------------------	--	--	---

1. **Asthma**

- a common, continuing respiratory condition that causes difficulty breathing due to inflammation of the airways.

2. **Chronic Obstructive Pulmonary Disease (COPD)**

- the development of sputum makes the infected suffer from difficulty in breathing.

3. **Chronic bronchitis**

- a disease that makes the bronchial tubes swell.

4. **Emphysema**

- another form of COPD that causes damage to the air sacs in the lungs or alveoli.

5. **Lung Cancer**

- bumps are shaped in the lungs that cause cancer.

6. **Tuberculosis**

- mycobacterium targets the lungs and damages the other parts of the body.

7. **Pneumonia**

- the swelling of alveoli is caused by bacteria, virus, or fungi.

8. **Coronavirus Disease (COVID-19)**

- this new disease comes from a type of coronavirus named SARS-CoV-2. Symptoms show up to 14 days. Some are asymptomatic that no symptoms show, but they are already infected and can spread the virus if not in isolation.

DISEASES OF THE CIRCULATORY SYSTEM

Diseases	Causes	Symptoms	Treatment/Prevention
Arteriosclerosis/Atherosclerosis	High Blood Pressure High Cholesterol Cigarette Smoking	Chest pain Transient ischemic attack Kidney failure	Prevention: Do not smoke/quit smoking Exercise regularly Eating healthy foods Treatment: Medication Surgical procedures
Heart Attack	Blocked arteries Coronary artery disease	Pressure in the chest Aching sensation that spreads to neck or jaw Cold Sweat Fatigue Shortness of breath Nausea	Prevention: Medication Exercise regularly Eating healthy foods Treatment: Medication Surgical procedures Cardiac rehabilitation
Myocardial Ischemia	Blood Clot Atherosclerosis Coronary artery spasm	Neck or jaw pain Shoulder or arm pain Fast heartbeat Nausea and vomiting Sweating Fatigue	Prevention: Do not smoke/quit smoking Exercise regularly Eat healthy foods Treatment: Medication Procedure to improve blood flow
Heart Failure	Faulty heart valves Hypertension Abnormal heart rhythms Chronic diseases such as diabetes and AIDS	Shortness of breath Fatigue Rapid or irregular heartbeat Increased urination Chest pain Lack of appetite and nausea	Prevention: Do not smoke/quit smoking Exercise regularly Eating healthy foods Treatment: Medication Surgical procedures
Stroke	Uncontrolled hypertension Trauma from accident Hemorrhage	Trouble speaking Paralysis Headache Trouble walking	Prevention: Control hypertension Do not smoke/quit smoking Exercise regularly Eating healthy foods Treatment: Medication
High Blood Pressure (Hypertension)	Kidney problems Adrenal gland tumors Illegal drugs	Most people do not have any symptom, but few people may have: Headache Shortness of breath Nosebleeds	Prevention and Treatment: Do not smoke/quit smoking Exercise regularly Eat healthy foods

Anemia	Your body does not make enough red blood cell Your body destroys red blood cell	Fatigue Pale skin Shortness of breath Dizziness Chest pain	Prevention: Eat iron-rich food Take vitamins B-12 and C Eat healthy foods Treatment: Medication Blood transfusion
High Cholesterol	Too much consumption of foods high in bad cholesterol	Usually has no symptoms	Prevention: Do not smoke/quit smoking Exercise regularly Eat healthy foods

1. **Atherosclerosis/Arteriosclerosis**

- makes the arteries hard caused by high consumption of a fatty diet that leaves fat deposits on the lining of the blood vessels. These fat deposits make the arteries rigid.

2. **Heart Attack**

- is caused when the heart is blocked from blood supply due to a blood clot.

3. **Myocardial ischemia**

- the buildup of fat deposits congests the blood flow to the heart.

4. **High cholesterol**

- cholesterol-rich food excessive consumption may lead to hypertension.

5. **Heart Failure**

- the unstable behavior of the heart cannot pump sufficient blood for the body's needs.

6. **Stroke**

- can happen if a vessel that supplies blood to the brain either becomes blocked by a blood clot or bursts. These stop blood flow and prevent oxygen from getting to the brain.

7. **High Blood Pressure (Hypertension)**

- the elevation of blood pressure in the vessels gets too high that it can trigger other diseases.

8. **Anemia**

- the insufficient supply of red blood cells in the blood can make you feel easily tired.

Prevention is better than Cure!

Healthy? Or Unhealthy?

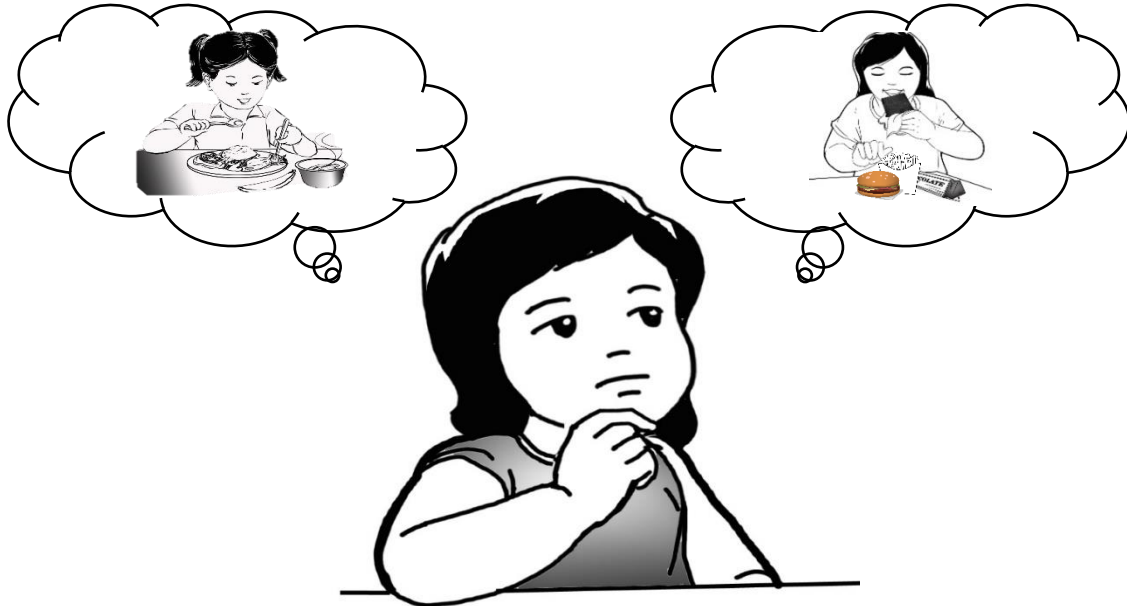


Figure 2. A girl choosing between healthy and unhealthy food

Which do you prefer? Fresh apple or a quarter pound of Burger with cheese?

A banana or an ice cream cone?

What do you want to do? To exercise or to slack off and watch movies all day?

When do you want to sleep? At 9 PM or at 2AM?

Whatever you do, you must always think that you are compromising your health.

Here are the effects of lifestyles instigated diseases that affect your respiratory and circulatory system.

1. Cigarette Smoking

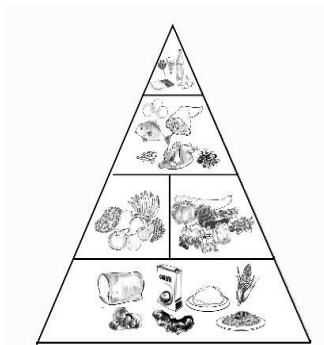
Why is it dangerous? It comprises a lot of substances that are hurtful to both the smoker and the individuals around the smoker. It compromises both the respiratory and circulatory framework and even the entire body!



Cigarette smoking can cause respiratory illnesses by harming the parts of your respiratory system. It is increasingly regular for cigarette smokers to have lung illnesses than non-smokers.

Cigarette smoking additionally represents a more serious hazard for ailments that influences the circulatory system. It is the reason behind numerous sorts of circulatory ailments, for example: stroke, hypertension, and iron deficiency.

2. Healthy Diet



A healthy dieting routine does not mean you simply need to eat berries and greens but also other kinds of foods. Eating a well-balanced diet can help prevent you from having diseases. Your go-to guide on what's optimal to eat is the food pyramid. Remember: You are what you eat!

3. Regular Exercise and Adequate Rest



Keeping your body active can help your respiratory and circulatory system strong. As per the Centers for Disease Control and Prevention's (CDC) suggestion, at least 150 minutes of exercise each week improves the prevention of diseases.

4. Proper Hygiene

Washing your hands appropriately for 20 seconds, particularly in the wake of wheezing, coughing, or cleaning out your nose, assists with shielding you and others from ailments, such as colds and influenza. Protect yourself by wearing a protective mask. This is very important especially this time that we are confronting a pandemic.

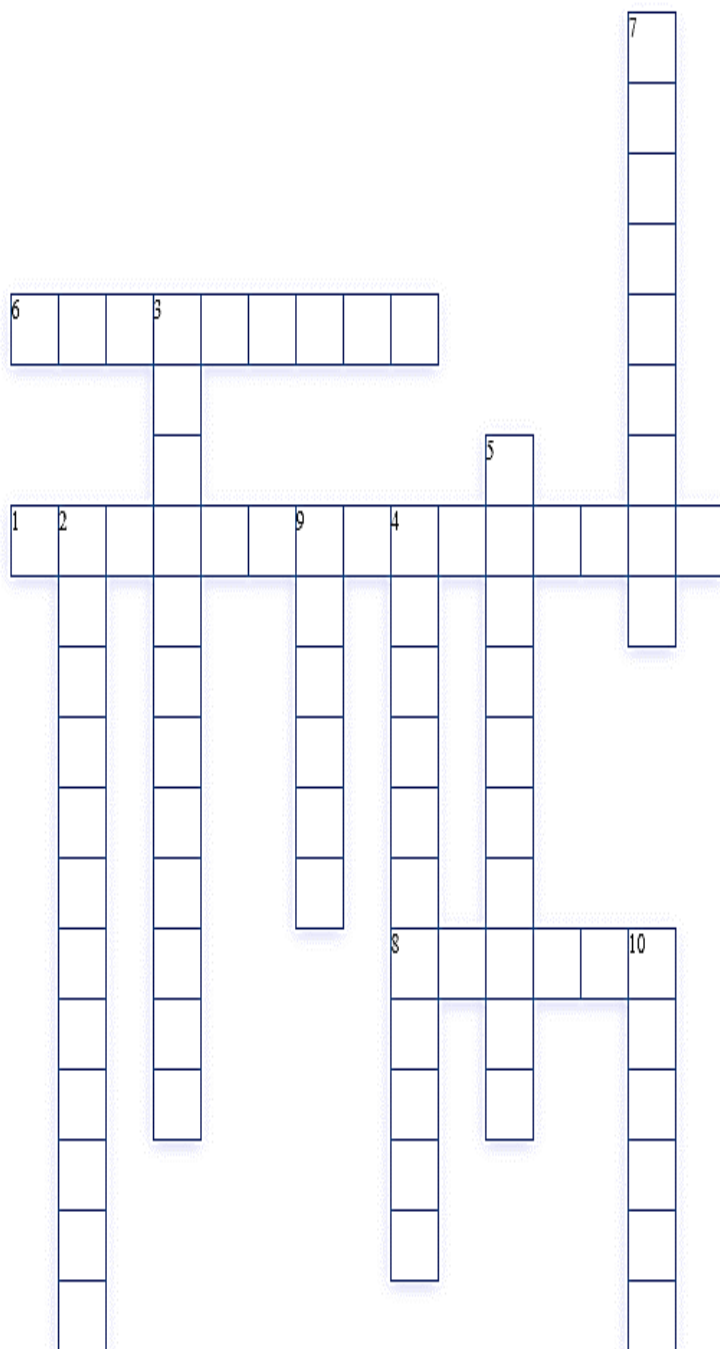




What's More

Activity 1. Crossword Puzzle (Effects of Lifestyle to the Respiratory and Circulatory System)

Answer the questions below and complete the puzzle. Write your answers in a separate sheet of paper



Across

1. a disease that restricts blood flow because of the fats built up on the artery walls
6. the air sacs in the lungs (alveoli) are damaged
8. a condition in which your airways narrow and swell

Down

2. a disease caused by a bacteria called Mycobacterium
3. if a person has a reading of 130/100, what disease do
4. a condition in which there is a growth of tumors in the lungs that reduces the person's ability to breath
5. an inflammation of the lining of your bronchi
7. a common lung disease that can be caused by a bacterial, viral or fungal infection
9. is caused by an abrupt blockage in the arteries that restricts blood supply to the brain
10. is a condition where the supply of red blood cell is lacking

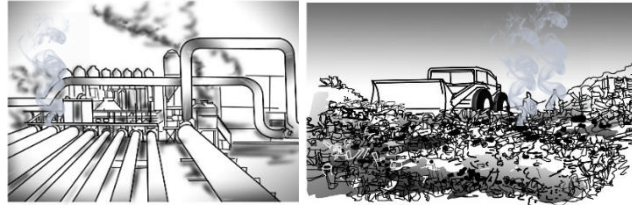
Activity 2. Guess the Word!

Fill in the missing letters to complete the name of the disease caused by unhealthy lifestyles as depicted in each set of pictures. Add two practices that can prevent the disease. Write your answers in a separate sheet of paper.

1. **A _ _ H _ A**

Hint: this is a common respiratory disease

Practices:

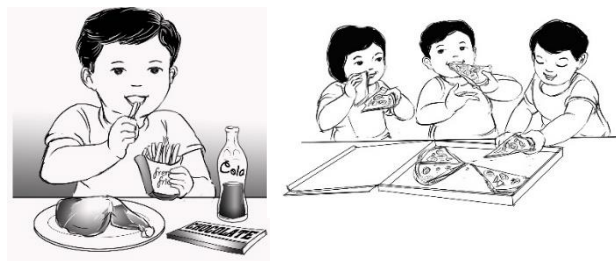


Source: DepEd BLR Illustrations

2. **H _ P _ _ _ E _ _ _ _ N**

Hint: this is also called High Blood Pressure

Practices:

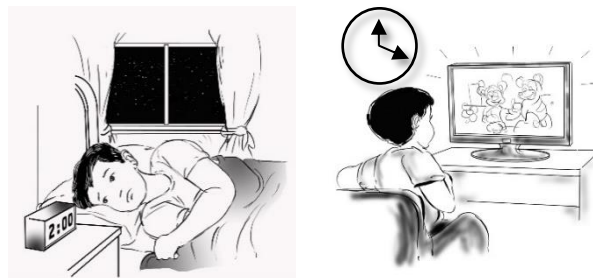


Source: DepEd BLR Illustrations

3. **A _ _ M _ A**

Hint: this is due to the lack of red blood cell

Practices:



Source: DepEd BLR Illustrations

4. **_ T R _ K _**

Hint: this is due to the blood clot in a vessel going to the brain

Practices:



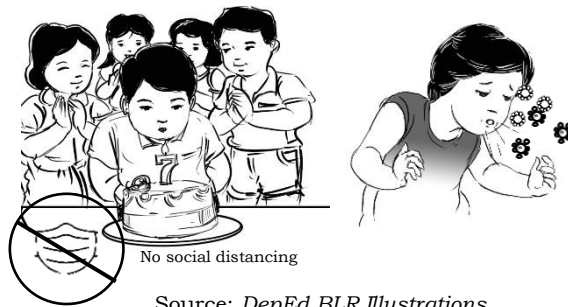
Source: DepEd BLR Illustrations

5.

C _ V _ D - _ 9

Hint: this is due to the recently discovered coronavirus

Practices:



Activity 3. Gibberish challenge.

Gibberish is a form of nonsense speech. Below are concepts discussed in our lessons for this module. Identify each using the gibberish as your clue. Write 2 words that would best describe the gibberish term discovered. Write your answers in a separate sheet of paper.

1. As ma

_____ = _____ & _____

2. High per tense shown

_____ = _____ & _____

3. Art at axe

_____ = _____ & _____

4. Straw oak

_____ = _____ & _____

5. Crown ink brown kite this

_____ = _____ & _____

6. Hen pie see mwah

_____ = _____ & _____

7. High cool less tar role

_____ = _____ & _____

8. New moon yeah

_____ = _____ & _____

9. Exert size

_____ = _____ & _____

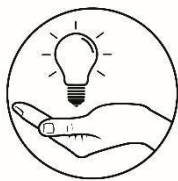
10. See car rent

_____ = _____ & _____

Activity 4. Information Dissemination.

You are going to make an infographic showing how to take care of the respiratory and circulatory systems. You can draw/write or print the infographic and attach it on this module.

Criteria	Exceptional / 10 pts	Admirable / 8 pts	Marginal / 4 pts
Content (Creativity and Originality)	Topic is focused, with a clear, engaging story. All data is relevant and conveys meaningful information to the viewer. The data tells the full story and does not leave out major information.	Topic is focused, and most of the data is relevant, if not especially compelling. Data may not paint a complete informational picture of the topic.	Little or no focus of the topic, with no clear story. Data is missing or irrelevant.
Layout	Layout shows clear organization and creates an easy-to-follow and easy to read storyline. Excellent use of graphics and color to help guide the reader.	Mostly clear and organized but may be confusing in spots. Some use of graphics and color to help guide the reader.	Confusing layout and/or data. Little use of color or graphics to guide the reader.
Visual Appeal	Eye-catching and effective use of graphics, color, and fonts. All elements work together to reinforce the data and story, without being distracting. The visuals tell the story, with text there only to supplement. Readers could still get the gist of the story if text were removed.	Good use of graphics, color and fonts. Most elements add to the overall theme and story. Visuals are good, but there may be an over-reliance on text to tell important information.	Poor use of graphics, color and/or fonts. Visually distracting--may use too many colors or fonts. Graphics merely decorate, with the text telling the story.

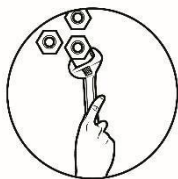


What I Have Learned

To sum up what you have learned from this module, fill in the blanks using the words inside the box. Write your answers on a separate sheet of paper.

Asthma	Stroke	Information Literacy
Cigarette smokers	Tuberculosis	Information Dissemination
Hypertension	Go, grow, and glow foods	Emphysema
Lung Cancer	60 minutes	Heart Failure
Pneumonia	120 minutes	Covid-19

1. _____ poses greater risk of having diseases rather than non-smokers.
2. _____, one of the most common respiratory diseases, can be prevented through identifying and avoiding the things that can trigger it.
3. _____ is considered the leading cause of cancer death nationwide.
4. _____ is a disease caused by a bacterium called Mycobacterium.
5. _____ is caused by a bacterial, viral, or fungal infection.
6. _____ can happen abruptly when one of the blood vessels that leads to the brain is blocked or clots.
7. _____ or high blood pressure is a condition where symptoms are unnoticeable.
8. Healthy diet is not all about fruits and vegetables, it is a complete package of _____.
9. According to CDC's recommendation, at least _____ of moderate exercise per week can contribute to overall health and decrease the risk of chronic diseases such as diabetes and hypertension.
10. Conducting an _____ activity on effective ways of taking care of the respiratory and circulatory system is a good thing for our peers and most especially for our loved ones.



What I Can Do

One-month Healthy Lifestyle Challenge. Your objective is to make a 30-day planner of having a healthy lifestyle. From day 1 – 30 you are going to plan what you eat, how many minutes you will exercise for the day, and what time you are going to bed. Use a separate sheet of paper for your answers. You can copy the layout of the table below the rubrics.

Rubrics:	Excellent / 2 pts	Good / 1 pt.	Fair / 0 pts
Eating Healthy Foods	Has planned to eat healthy foods for the day. Go, grow, and glow foods	Has planned to eat healthy foods but only 2 types among go, grow, and glow	Has planned to eat no healthy foods for the day
Regular Exercise	Has planned of having 30 minutes of exercise or 10,000 steps for the day	Has planned of having 15 minutes or less of exercise or less than 5,000 steps	Has planned to slack off for the day
Sleeping Early at night	Has planned to sleep at 8-9 PM	Has planned to sleep at 10-11 PM	Has planned to sleep at 12 AM-onwards

[illegible]



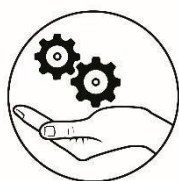
Assessment

Multiple Choices. Choose the letter of the best answer. Write your answer on a separate sheet of paper.

1. Smoking is the common cause of emphysema. Which situation will happen when you quit smoking immediately?
 - a. The blood in your lungs will lack oxygen
 - b. The amount of oxygen in your lungs will decrease
 - c. The blood pressure in your pulmonary artery will increase
 - d. The amount of oxygen in your blood stream will, ultimately, increase
2. What are you going to do to lessen the risk of having a disease?
 - a. Eat junk foods
 - b. Exercise regularly
 - c. Sleep late at night
 - d. Slack off and watch Netflix all day
3. What type of activity will weaken our lungs, muscles, and makes our heart more inefficient?
 - a. Eating
 - b. Exercising
 - c. Sleeping
 - d. Smoking
4. What is the chronic respiratory condition that causes difficulty in breathing due to inflammation of the airways?
 - a. Asthma
 - b. Bronchitis
 - c. Emphysema
 - d. Pneumonia
5. Who are you going to consult if you are having a fast heartbeat?
 - a. A Cardiologist
 - b. A Urologist
 - c. A Neurologist
 - d. A Pulmonologist
6. What occurs when a blood clot blocks the blood supply from the heart?
 - a. Anemia
 - b. Heart attack
 - c. Heart failure
 - d. Stroke

7. Which practice may strengthen our circulatory system?
 - a. Cigarette Smoking
 - b. Having a daily exercise
 - c. Staying up late at night
 - d. Eating junk foods everyday
8. Why do people ended up eating fast foods, rather than eating fruits and vegetables?
 - a. Because they are ready to eat
 - b. Because they taste better than fruits and vegetables
 - c. Because they are less expensive than fruits and vegetables
 - d. Because they look more delicious than fruits and vegetables
9. What is being described in this situation: the elevation of blood pressure in the vessels gets too high that it can trigger other diseases?
 - a. Asthma
 - b. Bronchitis
 - c. Hypertension
 - d. Stroke
10. What is being described in this situation: it can happen if a vessel that supplies blood to the brain either becomes blocked by a blood clot or bursts?
 - a. Atherosclerosis
 - b. Hypertension
 - c. Pneumonia
 - d. Stroke
11. What are the symptoms of heart failure?
 - a. Fast heartbeat and sweating
 - b. Fever, dry cough, and tiredness
 - c. Aching sensation of neck and jaw
 - d. Shortness of breath, rapid or irregular heartbeat, and chest pain
12. What are the symptoms of lung cancer?
 - a. Diarrhea and sneezing
 - b. Coughing and wheezing
 - c. Loss of speech and movement
 - d. Chest pain and coughing up blood
13. What are the symptoms of emphysema?
 - a. Diarrhea and sneezing
 - b. Coughing and wheezing
 - c. Loss of speech and movement
 - d. Chest pain and coughing up blood

14. How can you protect yourself from contracting COVID-19?
- Not wearing face mask for better ventilation
 - Frequent handwashing and social distancing
 - Going outside your home and play with friends
 - Attending social gatherings and Zumba sessions
15. What is the bottom line of this module?
- To help you detect and prevent diseases in the circulatory and respiratory system
 - To help you explain the mechanism of how the respiratory and circulatory system work together
 - To help you identify the key parts of the breathing system and describe the function of each part
 - To help you identify the parts of the circulatory system and explain how oxygen-rich blood transport to the different parts of the body



Additional Activities

I. Write **Do** if the statement is good for your respiratory and circulatory systems and **Don't** if it is bad. Write your answers in a separate sheet of paper.

- _____ 1. Avoid cigarette smoking.
- _____ 2. Exercise regularly and have an active lifestyle.
- _____ 3. Eat fast food because it is delicious and healthy.
- _____ 4. Cigarette smoking is good for your health.
- _____ 5. Adequate sleep gives you a healthy blood flow.
- _____ 6. Eating well-balanced diet will make you healthy.
- _____ 7. Eating too much salty and fatty foods will make you healthy.
- _____ 8. Sleeping late at night is the best way to take good care of your body.
- _____ 9. Avoiding cigarette smokers while they are smoking may help you prevent diseases.
- _____ 10. An effective way for the community to have a healthy lifestyle is through proper information dissemination.

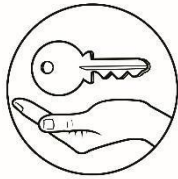
II. Essay Writing:

COVID-19 poses great threat not only to the economy of the country, but most especially to our health. Explain what we can do as a healthy lifestyle advocate to disseminate information regarding the danger that this pandemic brings. Write your composition in a separate sheet of paper.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

Rubric for the Essay:

	Level 4 / 5pts	Level 3 / 4pts	Level 2 / 3pts	Level 1 / 2pts
Details from Text	Two to three sentences that directly answer the short-answer question. Two or more details are used from the text or power points to support the thesis.	One to two sentence that directly answer the short-answer question. One or two details are used from the text or power points to support the thesis. The details somewhat support and respond to the question.	One detail is used from the text or power point. The detail only slightly supports and responds to the question.	No or only one detail from the text or power point is used in the written reading response. The detail has no connection or support to the response.
Elaboration of Ideas	The elaboration of details from the text or power points clearly and completely support/explain the response to the question.	There are one or two sentences that do not clearly explain the details chosen from the text to respond to the question.	There is just one sentence that further explains the details from the text and how it connects to the response.	There is nothing written that further explains the details from the text and how it connects to the response.
Mechanics	Sentences begin with a capital and have end punctuation. Sentences are complete. Punctuation is used correctly through-out. Words are spelled correctly. Paragraphs are used correctly when needed.	Sentences begin with a capital and have end punctuation. Sentences are complete. Punctuation is mostly used correctly. Most words are spelled correctly. Paragraphs are mostly used correctly.	Most sentences begin with a capital and have end punctuation with some sentence fragments. Punctuation is sometimes used correctly. Most words are spelled correctly. Paragraphs are sometimes used correctly.	Some sentences begin with a capital and end with the appropriate punctuation. There are sentence fragments. Punctuation is sometimes used correctly. There are many misspelled words. There are no paragraphs used when needed.
Healthy Lifestyle Advocate	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health and understands how it benefits them with examples of how it can benefit them and others.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health and understands how it benefits them.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.	The students do not acknowledge the importance of information dissemination with family, peers, and others to enhance health.



Answer Key

II.	Details from Text	Two to three sentences that directly answer the short-answer question. Two or more details are used from the text or power points to support the thesis.	The elaboration of details from the text or power points clearly and completely support/explain the response to the question.	Mechanics	Sentences begin with a capital and have end punctuation. Sentences are complete. Punctuation is used correctly through-out. Words are spelled correctly. Paragraphs are used correctly when needed.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health and understands how it benefits them with examples of how it can benefit them and others.	Healthy Lifestyle Advocate
Level 4 / 5pts	One to two sentences that directly answer the short-answer question. One or two details are used from the text or power points to support the thesis.	The details somewhat support and respond to the question.	There are one or two sentences that explain the details chosen from the text to respond to the question.	Sentences begin with a capital and have end punctuation. Sentences are complete. Punctuation is mostly used correctly.	Most words are spelled correctly. Paragraphs are mostly used correctly.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health and understands how it benefits them.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.
Level 3 / 4pts	One detail is used from the text or power point slightly responds to the question.	The detail only point or power text is used in the written response.	There is just one sentence that further explains the details from the text and how it connects to the response.	Most sentences begin with a capital and have end punctuation with some sentence fragments. Punctuation is sometimes used correctly.	Most words are spelled correctly. Paragraphs are sometimes used correctly.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.
Level 2 / 3pts	No or only one detail from the text or power point is used in the written response.	The detail has no support to the response.	There is nothing written that further explains the details from the text and how it connects to the response.	Some sentences begin with a capital and end with the appropriate punctuation. There are sentence fragments. Punctuation is sometimes used correctly.	Paragraphs are misspelled. There are many words. There are no paragraphs used when needed.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.	The student acknowledges the importance of information dissemination with family, peers, and other to enhance health.
Level 1 / 2pts							

What I can do			
	Eating Healthy	Has planned to eat healthy foods for the day. Go, grow, and glow foods	Has planned to eat healthy foods but only 2 types among go, grow, and glow
	Regular Exercise	Has planned of having 30 minutes of exercise or 10,000 steps for the day	Has planned of having 15 minutes or less of exercise or less than 5,000 steps
	Sleeping Early at night	Has planned to sleep at 8-9 PM	Has planned to sleep at 10-11 PM
Additional Activities			
1. DO	2. DO	3. DONT	4. DONT
5. DO	6. DO	7. DONT	8. DONT
9. DO	10. DO		

Criteria	Content (Creativity and Originality)	Layout	Visual Appeal
Exceptional / 10 pts	Topic is focused, with a clear, engaging story. All data is relevant and conveys meaningful information to the viewer. The data tells the full story and does not leave out major information.	Layout shows clear organization and creates an easy-to-follow and easy-to-read storyline. Excellent use of graphics and color to help guide the reader.	Eye-catching and effective use of graphics, color, and fonts. All elements work together to reinforce the data and story, without being distracting. The visuals tell the story, with text supplement. Readers could still get the gist of the story if text were removed.
Admirable / 8 pts	Topic is focused, and most of the data is relevant, if not especially compelling. Data may not paint a complete informational picture of the topic.	Mostly clear and organized but may be confusing in use of color or graphics and color to help guide the reader.	Good use of graphics, color and fonts. Most elements add to the overall theme and story. Visuals are good, but there may be an over-reliance on text to tell important information.
Marginal / 3 pts	Little or no focus of the topic, with no clear story. Data is missing or irrelevant.	Confusing layout and/or data. Little use of color or graphics to guide the reader.	Poor use of graphics, color and/or fonts. Visually distracting-may use too many colors or fonts. Graphics merely decorate, with the text telling the story.

<p>Activity 3</p> <ol style="list-style-type: none"> 1. Asthma 2. Hypertension 3. Heart attack 4. Stroke 5. Chronic Bronchitis 6. Emphysema 7. High Cholesterol 8. Pneumonia 9. Exercise 10. Cigarette 	<p>Assessment</p> <ol style="list-style-type: none"> 1. d. 2. b. 3. d. 4. a. 5. a. 6. b. 7. b. 8. a. 9. c. 10. d. 11. d. 12. d. 13. b. 14. b. 15. a. <p>What I have learned</p> <ol style="list-style-type: none"> 1. Cigarette smokers 2. Asthma 3. Lung Cancer 4. Tuberculosis 5. Pneumonia 6. Stroke 7. Hypertension 8. Go, grow, and glow foods 9. 150 minutes 10. information dissemination 	<p>What I know</p> <ol style="list-style-type: none"> 1. d. 2. c. 3. b. 4. b. 5. d. 6. d. 7. b. 8. a. 9. a. 10. a. 11. b. 12. d. 13. d. 14. a. 15. a. <p>What's more</p> <p>Activity 1</p> <ol style="list-style-type: none"> 1. Atherosclerosis 2. Tuberculosis 3. Hypertension 4. Lung cancer 5. Bronchitis 6. Emphysema 7. Pneumonia 8. Asthma 9. Stroke 10. Anemia 	<p>Activity 2</p> <ol style="list-style-type: none"> 1. Asthma <p>Practices (Possible answers): Regular Exercise, avoiding vices like smoking cigarette, avoiding Cigarette smokers, avoiding smoke belching vehicles, avoiding anything that can trigger asthma</p> <ol style="list-style-type: none"> 2. Hypertension <p>Practices (Possible answers): Avoid Fatty foods, avoid eating unhealthy foods, avoid drinking alcoholic drinks, regular exercise, eat healthy foods, avoid eating fast food.</p> <ol style="list-style-type: none"> 3. Anemia <p>Practices (Possible answers): Enough amount of sleep, don't stay up all night, avoid eating junk foods, eat healthy foods, eat fruits and vegetables, eat iron-rich foods</p> <ol style="list-style-type: none"> 4. Stroke <p>Practices (Possible answers): Avoid Fatty foods, avoid eating unhealthy foods, avoid drinking alcoholic drinks, regular exercise, eat healthy foods, avoid eating fast food.</p> <ol style="list-style-type: none"> 5. Covid-19 <p>Practices (Possible answers): Regular Exercise, avoiding vices like smoking cigarette, practice Social/Physical distancing, stay at home, wearing PPEs like face mask.</p>
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References

Online Resources:

- “Asthma.” Mayo Clinic. Mayo Foundation for Medical Education and Research, June 4, 2020. <https://www.mayoclinic.org/diseases-conditions/asthma/symptoms-causes/syc-20369653>.
- Barell, Amanda. “15 Circulatory System Diseases: Symptoms and Risk Factors.” Medical News Today. MediLexicon International. Accessed July 23, 2020. <https://www.medicalnewstoday.com/articles/321695>.
- “Coronavirus.” World Health Organization. World Health Organization. Accessed July 23, 2020. <https://www.who.int/health-topics/coronavirus>.
- “Health Effects of Cigarette Smoking.” Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, April 28, 2020. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm
- “Naming the Coronavirus Disease (COVID-19) and the Virus That Causes It.” World Health Organization. World Health Organization. Accessed July 23, 2020. [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it).
- “No Tobacco Smoking Campaign: Department of Health Website.” No Tobacco Smoking Campaign | Department of Health website. Accessed July 23, 2020. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- “UnityPoint Health at Home: About Us.” UnityPoint Health at Home | About Us. Accessed July 23, 2020. <https://www.unitypoint.org/homecare/about-unitypoint-home-care.aspx>.

Image Sources:

- Department of Health – No Tobacco Smoking Campaign. LTFRB sticker copy. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- Department of Health – No Tobacco Smoking Campaign. Sticker 4x8 copy. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- Department of Health – No Tobacco Smoking Campaign. No smoking poster tagalog copy. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- Department of Health – No Tobacco Smoking Campaign. Smoking area breast. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- Department of Health – No Tobacco Smoking Campaign. Smoking area leeg. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- Department of Health – No Tobacco Smoking Campaign. Kanser sa bibig. <https://www.doh.gov.ph/Health-Promotion/no-tobacco-smoking-campaign>.
- DepEd – Bureau of Learning Resources (BLR) Illustrations. Respiratory System. <https://lrmds.deped.gov.ph>
- DepEd – Bureau of Learning Resources (BLR) Illustrations. Circulatory System. <https://lrmds.deped.gov.ph>
- DepEd – Bureau of Learning Resources (BLR) Illustrations. Girl Thinking. <https://lrmds.deped.gov.ph>
- DepEd – Bureau of Learning Resources (BLR) Illustrations. No smoking signs. <https://lrmds.deped.gov.ph>
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<https://lrmds.deped.gov.ph>

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<https://lrmds.deped.gov.ph>

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<https://lrmds.deped.gov.ph>

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<https://lrmds.deped.gov.ph>

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