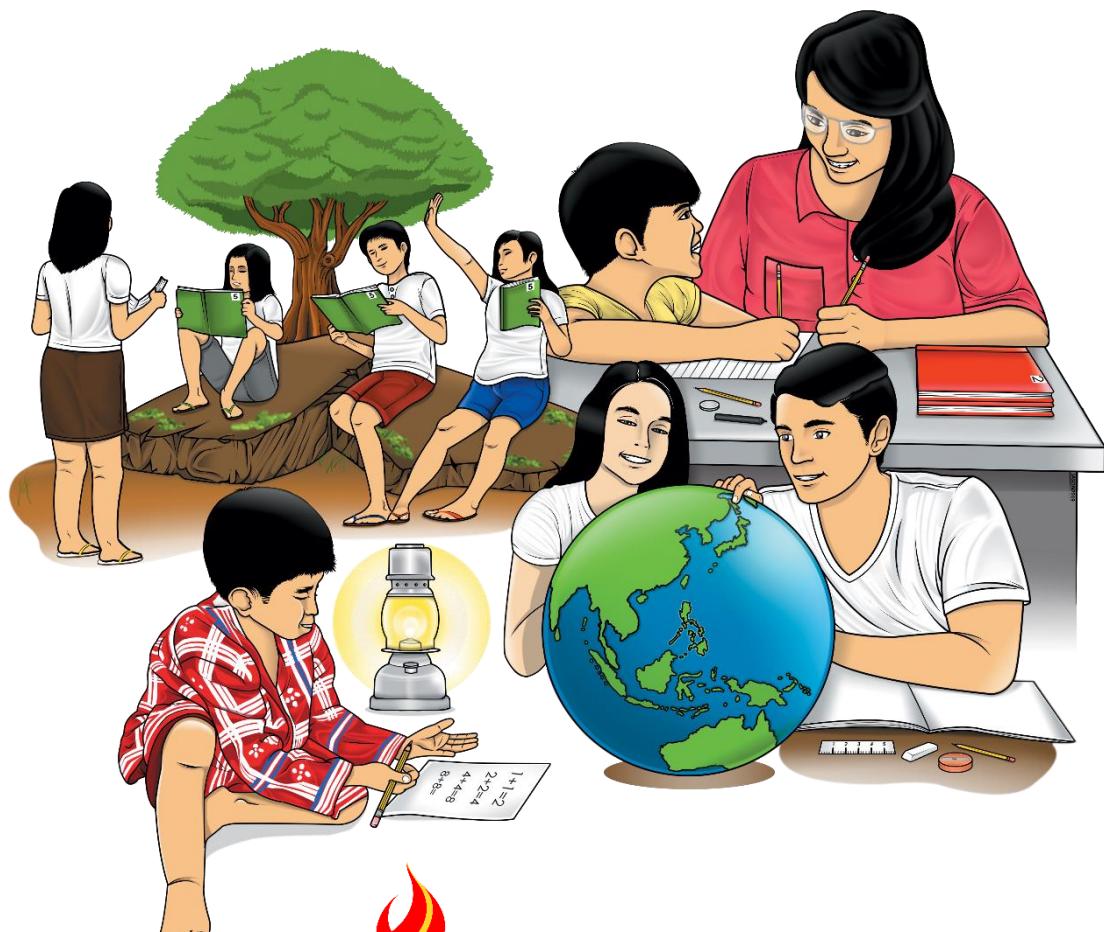


Disaster Readiness and Risk Reduction

Quarter 1 – Module 3:

Disasters and Its Effects



GOVERNMENT PROPERTY
NOT FOR SALE

Disaster Readiness and Risk Reduction
Alternative Delivery Mode
Quarter 1 – Module 3: Disasters and Its Effects
First Edition, 2020

Republic Act 8293, section 176 states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education
Secretary: Leonor Magtolis Briones
Undersecretary: Diosdado M. San Antonio

Development Team of the Module

Writers:	Rodgem A. Barairo Josefina M. Fabra
Editors:	Cristeta M. Arcos Anne Marielle R. Del Mundo Vanessa R. Ambas
Reviewers:	Richard Brian L. Tutor
Illustrator:	Leumel M. Cadapan Ronan DC Vergara
Layout Artist:	Leumel M. Cadapan Maria Elinor F. Hemedes
Management Team:	Wilfredo E. Cabral Job S. Zape Jr. Eugenio S. Adrao Elaine T. Balaogan Rosemarie D. Torres Ernesto D. Lindo Dolorosa S. De Castro Cristeta M. Arcos

Printed in the Philippines by _____

Department of Education – Region IV-A CALABARZON

Office Address: Gate 2, Karangalan Village 1900, Cainta, Rizal
Telefax: 02-8682-5773/8684-4914/8647-7487
E-mail Address: region4a@deped.gov.ph/ict.calabarzon@deped.gov.ph

Senior High School

Disaster Readiness and Risk Reduction

Quarter 1 – Module 3: Disasters and Its Effects

Introductory Message

For the facilitator:

Welcome to the Disaster Readiness and Risk Reduction for Grade 11/12 Alternative Delivery Mode (ADM) Module on Disaster and Its Effects!

This module was collaboratively designed, developed, and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the Disaster Readiness and Risk Reduction for Grade 11 Alternative Delivery Mode (ADM) Module on Disaster and Its Effects!

The hand is one of the most symbolized parts of the human body. It is often used to depict skill, action and purpose. Through our hands we may learn, create, and accomplish. Hence, the hand in this learning resource signifies that you as a learner is capable and empowered to successfully achieve the relevant competencies and skills at your own pace and time. Your academic success lies in your own hands!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:



**What I Need to
Know**

This will give you an idea of the skills or competencies you are expected to learn in the module.



What I Know

This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.



What's In

This is a brief drill or review to help you link the current lesson with the previous one.



What's New

In this portion, the new lesson will be introduced to you in various ways such as a story, a song, a poem, a problem opener, an activity or a situation.



What is It

This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.



What's More

This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.



What I Have Learned

This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.



What I Can Do

This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.



Assessment

This is a task which aims to evaluate your level of mastery in achieving the learning competency.



Additional Activities

In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned. This also tends retention of learned concepts.



Answer Key

This contains answers to all activities in the module.

At the end of this module you will also find:

References

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



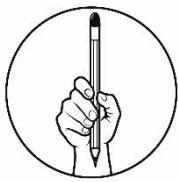
What I Need to Know

This module was designed and written with you in mind. It is here to help you master the lesson on Disaster and Its Effects. 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 and 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 that you are now using.

The Module is intended to equip you with knowledge on different Effects of Disasters in One's Life.

After going through this module, you are expected to:

1. Identify the effects of disasters to human and to the society.
2. Determine ways to lessen the impact of a disaster.
3. Cite personal values that can help one overcome the effects of disasters.
4. Help the community in reducing the effects of natural and human-made disasters.



What I Know

Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1. What is Post Traumatic Stress Disorder (PTSD)?
 - a. Congenital condition
 - b. Neonatal condition
 - c. Pre-existing condition
 - d. Psychological condition

2. What is the collective term used for the condition of people who develop stress reaction that negatively affect their physical and mental behavior after suffering from a disaster?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

3. What do you call the effect of a disaster that causes a group of people forced to leave their homes?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

4. Which among the following is NOT an effect of a disaster?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

5. What effect of disaster refers to the shortage of sustenance among people?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

6. What is the term used referring to damaging incident that happened unexpectedly in a certain society and caused harm to people and their properties?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism
7. COVID19 has caused millions of diseased people and thousands of deaths all over the world. How are you going to name the damaging event?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism
8. How are you going to call a dangerous condition that carries human threat?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism
9. A strong typhoon hit an uninhabited area in the mountainous Sierra Madre region. What are you going to name the damaging event?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism
10. What is it that disasters bring to humans?
 - a. devastation
 - b. excitement
 - c. fame
 - d. power
11. In a situation that you know you and your family are on a disaster risk area, how could you reduce the impact of a disaster that may come in your life?
 - a. Avoid the crowd.
 - b. Watch news to be informed.
 - c. Get the right mindset and preparation.
 - d. Build good relationships among neighbors.

12. Why should people need to plan and be ready for the possible consequences of a disaster?
- So that people would show their own capabilities.
 - So that people could set an example to others.
 - So that people would reduce the potential effects of disasters.
 - So that people could prepare ahead of time.
13. Which should be the right attitude in dealing the effects of a disaster?
- Let us be mindful of others.
 - Try to be a leader for others.
 - Show positivity in dealing with it.
 - Be grateful on what the government can provide.
14. Which of the following characteristics will help a person to recover quickly after a disaster?
- One must be happy and hopeful.
 - One must be prayerful and friendly.
 - One must be wise and cooperative.
 - One must be resourceful and determined.
15. Coronavirus disease 2019 (COVID-19) is an infectious disease caused by coronavirus 2 (SARS-CoV-2), a serious acute respiratory syndrome. This was first detected in Wuhan, China in December 2019 and then spread around the globe, triggering a continuing pandemic SITUATION. How can the Philippine win against disasters like COVID19?
- Quarantine protocols must be continued.
 - People must maintain a clean environment at all time.
 - The citizens must follow health guidelines and safety measures.
 - The government must be allowed to decide for the good of the fellow people.

Lesson 1

Effects of Disasters on one's Life

A natural disaster can bring about many devastating effects. Among these are deaths, destruction of infrastructures, loss of livelihood and services, and other physical and nonphysical effects. Since we are partly responsible for the disasters happening around us, we must change some of our ways, in order to prevent or minimize the effects of disasters in our lives.



What's In

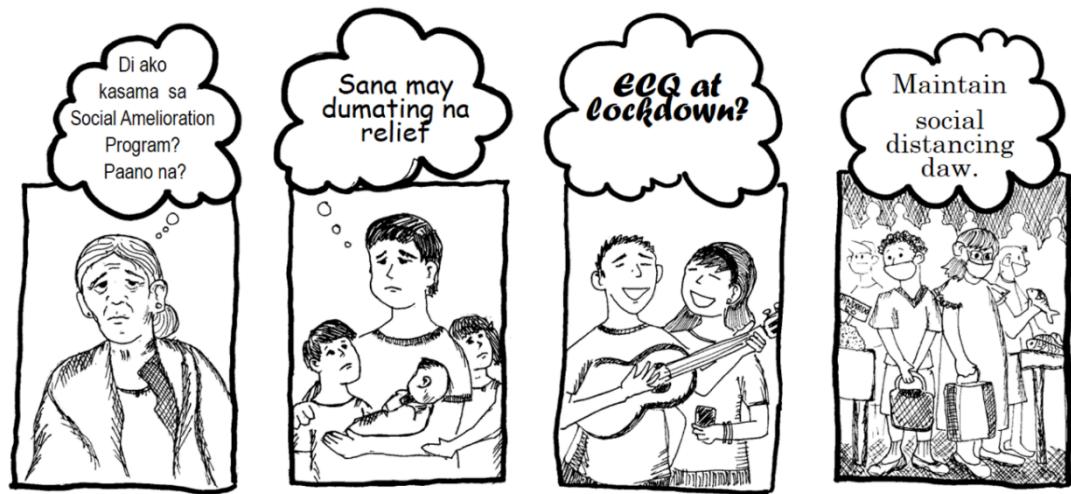
Direction: Think of five (5) disasters that you had experienced, watched, or read in the past two years. Then, write how you feel while experiencing, watching, or reading it.

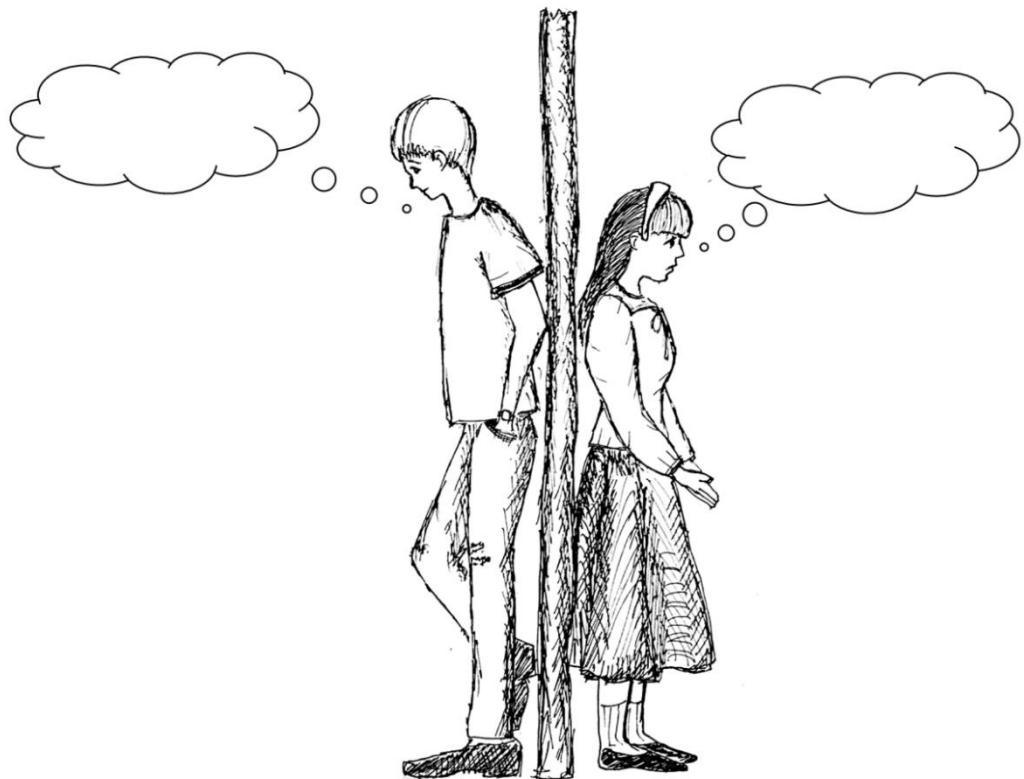
Calamity/Disaster	Your Feeling
1.	
2.	
3.	
4.	
5.	



What's New

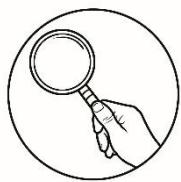
Direction: Below are some illustrations depicting expressions about COVID 19 pandemic. Read them silently and try to figure out by answering the questions on the next page.





What troubling situations reminded you of the scenarios? Share the feelings and opinions that you had related to the situations as shown in the illustrations.

(Write your thoughts and ideas below)



What is It

A disaster is a damaging event that occurs suddenly and involves loss of life and property. It can be of two types, natural and man-made.

Natural disasters can destroy a whole community in an instant. Examples of natural disasters are volcanic eruptions, tsunamis, earthquakes, and typhoons which are destructive to people's lives.

Man-made disasters on the other hand are caused by human beings. Some of the man-made disasters are bomb explosions, terrorism, wars, leakage of poisonous chemicals, pollutions, industrial accidents, and epidemics. They are identified as man-made disasters because they happen due to human actions and not by natural forces.

What is the difference between hazard and disaster?

A hazard is a dangerous situation or event that carries a threat to humans. A disaster is an event that harms humans and disrupts the operations of society. Hazards can only be considered disasters once it affected humans. If a disaster happened in an unpopulated area, it is still a hazard.

The Human Effect of Natural and Man-Made Disasters

1. Displaced Populations

One of the most immediate effects of natural disasters is population displacement. When countries are ravaged by earthquakes or other powerful forces of nature, many people need to abandon their homes and seek shelter in other regions. A large influx of refugees can disrupt accessibility of health care and education, as well as food supplies and clean water.

2. Health Risks

Aside from the obvious immediate danger that natural disasters present, the secondary effect can be just as damaging. Severe flooding can result in stagnant water that allows breeding of waterborne bacteria and malaria-carrying mosquitoes. Without emergency relief from international aid

organizations and others, death tolls can rise even after the immediate danger has passed.

3. Food Scarcity

The aftermath of natural disasters affects the food supplies. Thousands of people around the world are hungry because of destroyed crops and loss of agricultural supplies, whether it happens suddenly in a storm or gradually in a drought. As a result, food prices rise reducing families' purchasing power and increasing the risk of severe malnutrition or worse. The impacts of hunger following an earthquake, typhoon or hurricane can be tremendous, causing lifelong damage to children's development.

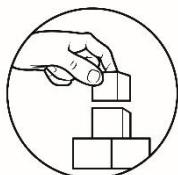
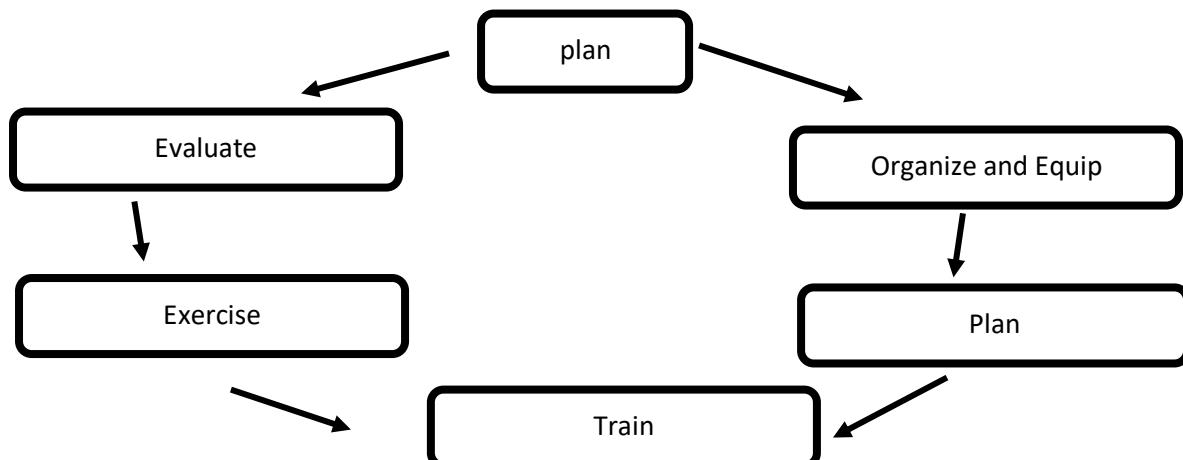
4. Emotional Aftershocks

Natural disasters can be particularly traumatic for young children. Confronted with scenes of destruction and the deaths of friends and loved ones, many children develop post-traumatic stress disorder (PTSD), a serious psychological condition resulting from extreme trauma. Left untreated, children suffering from PTSD can be prone to lasting psychological damage and emotional distress.

'The Devastating Impact on Natural Disasters', ChildFund, last modified May 30, 2020,
<https://www.childfund.org/Content/NewsDetail/2147489272/>

Great damage caused by a disaster can be reduced if everyone will take responsibility in anticipating its effects. Here are some ways on how to plan ahead of a disaster:

1. Check for hazards at home.
2. Identify safe place indoors and outdoors
3. Educate yourself and family members
4. Have Disaster kits/supplies on hand.
5. Develop an emergency communication plan.
6. Help your community get ready.
7. Practice the **Disaster Preparedness Cycle**



What's More

Direction: Consider yourself as a friend to the following people. Given their situations and the fact that they are suffering from a previous disaster, state the impact / effects of the disasters they are experiencing and what tips, advice or words can you give them to help them recover? Put your answer on a clean sheet of paper.

1. Dale Marc is a 16-year-old student. He lives in Taal, Batangas, together with his family. Fishing is their primary source of income. They found out that the Taal volcano had erupted in Taal Batangas. What are the possible effects / effects of this condition on their family, and what advice are you going to give him?
-
-
-

2. Anna is a primary school teacher in Cainta, Rizal. She used to be the mother of two beautiful children. Their community was hit by a Super Typhoon submerging and washed away their homes and properties. It

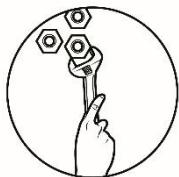
is noticeably clear to her mind how her two children tried to hold their hands tightly, but their hands slipped away. What would be the potential effect / effects of the Super Typhoon teacher Anna is experiencing? How do you think can she be helped in coping up from the tragedy?

3. Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by severe acute coronavirus 2 respiratory syndrome (SARS-CoV-2). It was first identified in Wuhan, Hubei, China in December 2019 and resulted in a continuing pandemic. The first confirmed case in Hubei dates back to 17 November 2019. The virus arrived in the Philippines on 30 January 2020 when the first case of the disease was confirmed in Metro Manila. After more than a month without recording any cases, the Philippines confirmed its first local transmission on 7 March 2020. Since then, the virus has spread to the country with at least one case recorded in the 17 regions of the country. During this pandemic situation, Nurses serves as a “**frontliner**” to help COVID patients obtain good health and recover from their current situation. What could be the potential effect / impact of the increasingly confirmed cases of COVID patients on Nurses in the Philippines?
-
-
-



What I Have Learned

Knowing that a disaster disturbs the usual pattern of life and can cause both physical and emotional harm among people, how would you ensure that you are prepared to face the possible effects of ANY disaster that you may encounter in life?



What I Can Do

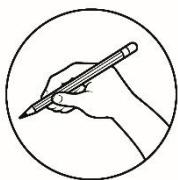
Suppose you have watched a true-to-life story featured on a television. On your journal, compose a letter addressed to Ate Charing (a TV program host). Your letter should narrate how the main character/s in the story inspired you with everything that he/she went through and the process on how he/she survived over the challenges of the disaster that he/she had experienced. Make sure that emphasis will be given on the disaster effects to the life of the main character.

Your output will be graded according to this rubric.

	4	3	2	1
Story/ Content	The story adheres to the theme/topic	The story is on topic but the substance is satisfactory.	The story is on topic and the substance is fair.	The story is neither on topic nor has substance.
Chain of events	The story is very well organized, and	Clear transitions are	Some transitions are not clear	Ideas and scenes seem to be randomly

	scenes follow a logical sequence.	used in most scenes.	and hard to follow.	arranged and improvement is needed.
Characters	Readers could describe the characters accurately.	Most readers would have clear idea on the role of the characters.	The reader knows a little about the characters.	It is difficult to tell the actual role of the characters.

***derived from google/teacherspayteachers.com –



Assessment

Choose the letter of the best answer. Write the chosen letter on a separate sheet of paper.

1. What is Post Traumatic Stress Disorder (PTSD)?
 - e. Congenital condition
 - f. Neonatal condition
 - g. Pre-existing condition
 - h. Psychological condition

2. What is the collective term used for the condition of people who develop stress reaction that negatively affect their physical and mental behavior after suffering from a disaster?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

3. What do you call the effect of a disaster that causes a group of people forced to leave their homes?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

4. Which among the following is NOT an effect of a disaster?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

5. What effect of disaster refers to the shortage of sustenance among people?
 - a. displaced population
 - b. emotional aftershock
 - c. food scarcity
 - d. health risk

6. What is the term used referring to damaging incident that happened unexpectedly in a certain society and caused harm to people and their properties?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism

7. COVID19 has caused millions of diseased people and thousands of deaths all over the world. How are you going to name the damaging event?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism

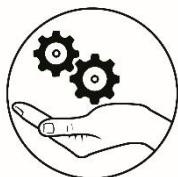
8. How are you going to call a dangerous condition that carries human threat?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism

9. A strong typhoon hit an uninhabited area in the mountainous Sierra Madre region. What are you going to name the damaging event?
 - a. disaster
 - b. hazard
 - c. politicking
 - d. terrorism

10. What is it that disasters bring to humans?
 - a. devastation
 - b. excitement
 - c. fame
 - d. power
11. In a situation that you know you and your family are on a disaster risk area, how could you reduce the impact of a disaster that may come in your life?
 - a. Avoid the crowd.
 - b. Watch news to be informed.
 - c. Get the right mindset and preparation.
 - d. Build good relationships among neighbors.
12. Why should people need to plan and be ready for the possible consequences of a disaster?
 - a. So that people would show their own capabilities.
 - b. So that people could set an example to others.
 - c. So that people would reduce the potential effects of disasters.
 - d. So that people could prepare ahead of time.
13. Which should be the right attitude in dealing the effects of a disaster?
 - a. Let us be mindful of others.
 - b. Try to be a leader for others.
 - c. Show positivity in dealing with it.
 - d. Be grateful on what the government can provide.
14. Which of the following characteristics will help a person to recover quickly after a disaster?
 - a. One must be happy and hopeful.
 - b. One must be prayerful and friendly.
 - c. One must be wise and cooperative.
 - d. One must be resourceful and determined.
15. Coronavirus disease 2019 (COVID-19) is an infectious disease caused by coronavirus 2 (SARS-CoV-2), a serious acute respiratory syndrome. This was first detected in Wuhan, China in December 2019 and then spread around the globe, triggering a continuing

pandemic SITUATION. How can the Philippine win against disasters like COVID19?

- a. Quarantine protocols must be continued.
- b. People must maintain a clean environment at all time.
- c. The citizens must follow health guidelines and safety measures.
- d. The government must be allowed to decide for the good of the fellow people.

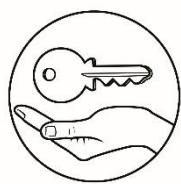


Additional Activities

Read the quotation below. Then, write your agreement or disagreement to the message that it conveys.

“Disasters gave me two things:
a moment to REACT and
a decision to OVERCOME.”

Michael Dooley



Answer Key

Other Activities:

***require varied
answers

What I Know

- | | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1. D | 2. B | 3. A | 4. B | 5. C | 6. A | 7. A | 8. B | 9. B | 10. A | 11. C | 12. C | 13. C | 14. C | 15. C |
|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|

Assessment

References

Choudhary, Richa. "Important Short Notes on Disaster Management". Eck School. Eckovation Padhte Chalo, Badhte Chalo, May 29, 2017. <https://school.eckovation.com/disaster-management-short-notes/>

Castro, Ryan, "Disaster Risk Reduction and Management", Slideshare, November 19, 2013, <https://www.slideshare.net/irpex/disaster-risk-reduction-and-management-28415360>

Mahar, Patrick, et.al.' "Disasters and their Effects on the Population: Key Concepts", https://www.aap.org/en-us/Documents/disasters_dpac_PEDsModule

"What is a disaster?". The international Federation of Red Cross and Red Crescent, 2020. <https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/>

"The Devastating Impact of Natural Disasters". Child Fund International, February 6, 2013. <https://www.childfund.org/Content/NewsDetail/2147489272/>

For inquiries or feedback, please write or call:

Department of Education - Bureau of Learning Resources (DepEd-BLR)

Ground Floor, Bonifacio Bldg., DepEd Complex
Meralco Avenue, Pasig City, Philippines 1600

Telefax: (632) 8634-1072; 8634-1054; 8631-4985

Email Address: blr.lrqad@deped.gov.ph * blr.lrpd@deped.gov.ph