MATATAG K to 10 Curriculum Weekly Lesson Log	School:	Visit DepEdResources.com for More	Grade Level:	4
	Name of Teacher		Learning Area:	SCIENCE (CHEMISTRY)
	Teaching Dates and Time:	SEPTEMBER 16 - 20, 2024 (WEEK 8)	Quarter:	First

I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES

A. Content Standards	Learners learn that: 1. Science inventions have brought about major changes to our daily lives. 2. Chemical properties of materials determine their uses. 3. Communication skills and open mindedness are needed in solving environmental issues.
B. Performance Standards	By the end of the Quarter, learners describe chemical properties of materials and change them. They demonstrate an understanding that science processes can solve everyday problems and use creativity and determination to provide examples. They exhibit objectivity and open-mindedness in gathering information related to environmental issues and concerns in the community.
C. Learning Competencies and Objectives	**Learning Competency:** The learners apply science process skills and attitudes in conducting a guided survey about environmental issues and concerns including grouping and classifying, communicating, and open mindedness. *Lesson Objectives:* The learners will be able to: a. give attention to the environmental problems that they could observe in their locality; and b. use science process skills and attitudes in conducting survey about local environmental issues and concerns.
D. Content	1. Science inventions 2. Materials and their uses 3. Gathering scientific information
E. Integration	Environmental Awareness Responsible Steward of Nature

II. LEARNING RESOURCES
• INQUIRER.net. (2023, October 9). Majority of Filipinos noticed climate change impacts in 2023, survey shows | INQToday. YouTube. https://youtu.be/NZDUOPyQ0Rs • Rubrics Poster Slogan | Poster | Communication Design. (n.d.). Scribd. https://www.scribd.com/document/420004355/Rubrics- Poster-Slogan

III. TEACHING AND LEARNING PROCEDURE	**NOTES TO TEACHERS**

A. Activating Prior Knowledge	**DAY 1** **1. Short Review** The teacher will cut this picture and let the learners form the picture. After forming this picture, ask what they can see in the picture.  *Guide Questions:* 1. What can you see in the pictures? Are these real -ife scenarios? Have you seen any of this with your own eyes? 2. In the past lesson, you have learned about using scientific process skills and attitudes. How can knowing and developing these skills and attitude help you solve problems like this?	In this part, talk about the scenarios formed in the puzzle. Let the learners describe the pictures and share their ideas. The review task can be implemented as a group activity, wherein each group will receive a different puzzle set. The pieces shall be assembled as fast as possible, and the group representative or team captain can then explain the picture formed.

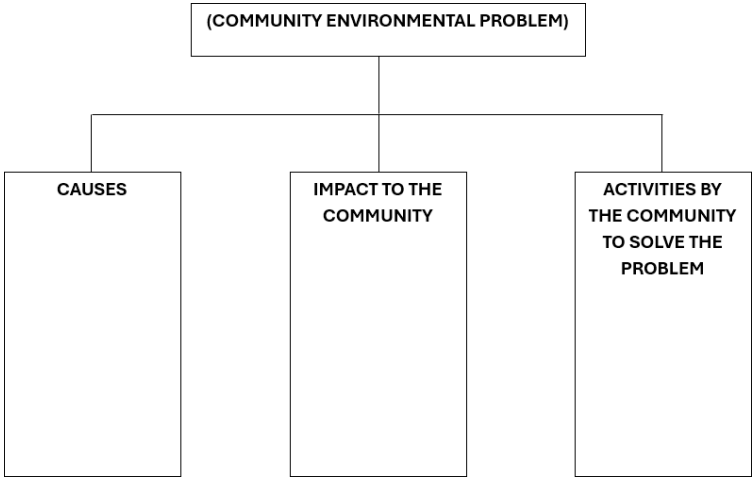
	2. Feedback (Optional)	If the answers to the guide questions spark debate or discussion, continue processing the pupils' answers in this part.

B. Establishing Lesson Purpose	**1. Lesson Purpose** Ask, *"Do you observe environmental problems in your locality? This week, we'll talk about the different problems that we observe in our own place and conduct a simple investigation to find out their causes and their effects to the society."* **2. Unlocking Content Vocabulary** Before proceeding, the learners need to define the following words which they will be encountering in their lesson for this week. 1. **Water pollution** - the release of substances into bodies of water that makes water unsafe for human use and disrupts aquatic ecosystems. 2. **Land pollution** - the deposition of solid or liquid waste materials on land or underground in a manner that can contaminate the soil and groundwater, threaten public health, and cause unsightly conditions and nuisances. 3. **Garbage pollution**- pollution caused by improper disposal of garbage which inflicts harm to the environment. 4. **Environmental problems** - a state in which the order and law of the ecosystem are collapsed as the ecological function it originally had is destroyed due to the influence of human activities. 5. **Community** – a place where group of people leave together sharing with common resources	The teacher may strategize how to present this part. She may opt to present through a game, using pictures, etc.
C. Developing and Deepening Understanding	**1. Explicitation** Let the learners read this news article (a copy of which is attached to the worksheet).	In this part, the teacher must have to establish already what environmental problems are, what may result to when garbage is not properly disposed.

	Ilocos Norte households told: Segregation key to waste reduction Published on: January 23, 2024 By Ma. Joreina Therese Blanco *Source: https://pia.gov.ph/news/2024/01/23/ilocos-norte-households-told-segregation-key-to-waste-reduction* LAOAG CITY, Ilocos Norte (PIA) – The Environment and Natural Resources Office (ENRO) of the Provincial Government of Ilocos Norte (PGIN) called on residents to adopt effective waste segregation practices within their home. In observance of Zero Waste Month, Tonette Killa, head of ENRO, called on households to properly segregate biodegradable from non-biodegradable waste. "It seems like we really cannot attain zero waste. There is no such thing as zero waste because as long as we live, we keep on consuming. But the principle behind zero waste is actually to reduce waste," said Killa. When wastes are left unsegregated, there is a risk of contamination as different types of waste may be stored together. Further, Killa said wastes that are properly managed are challenging to treat or handle and often find their way into landfills. To lessen environmental issues on waste, the head of ENRO stated that anyone can implement basic waste management in their homes. When properly segregated, households will be able to maintain cleanliness and prevent unwanted odors. "If plastics and biodegradable products are mixed in one trash can, it would produce an unpleasant smell in your house. But when separated, it leaves no odor," said Killa. Moreover, she also shared that when waste segregation is observed, it would be easier to perform different processes such as composting, plastic recycling, and waste diversion. To guide household members in separating different types of wastes, here are other simple tips from ENRO: 1. Keep separate trash cans for dry and wet wastes. If possible, another for papers and one for the plastics; 2. Dispose wet garbage daily; 3. Do not mix batteries and chemicals with regular wastes. Zero Waste Month is observed nationwide every January which aims to promote proper and effective waste segregation and waste management. (MJTAB/PIA Ilocos Norte) ***Guide questions:*** 1. What is the news all about? 2. What is celebrated nationwide as mentioned by the news article? 3. Why do you think there is a nationwide awareness on waste segregation? 4. Is managing our waste a challenge to us as a nation? 5. Does improper waste disposal lead to another environmental problems? Like what? 6. How about in your community, do you have environmental problems, too? The teacher will tell the group that on the succeeding days, they will work on a simple investigation about simple problems that they observe in their place.	In this part, it is important that the learners' attention be led to the environmental problems that they observe in their locality. Since our learners are young, bringing them to actual places during classes might not be possible (However, if possible, to bring them in the actual area, that would be better). It is suggested that the teacher just take a video of the different environmental issues that they can observe in their locality, say polluted body of water, deforestation that resulted to wildfire, air pollution, and other possible environmental problems that they can observe in the locality. If more than one issue is observed, divide the class as to the number of issues so each group will focus to a certain problem.

	DAY 2 - DAY3 *2.* **Worked Example:** *"Zoom-In to Nature" (LAS1)* Tell the learners that they will have a virtual visit to the community where environmental problems are evident. Tell them to be serious and pay attention because this activity concerns their own place. Before showing the different videos, show short video footage (say a footage on their way to the target place) that will help the pupils familiarize themselves with the places that they will visit virtually. **Guide questions:** 1. What environmental problem is shown in the video? 2. What caused this problem? 3. What the community is doing to address this problem? 4. As a grade 4 pupil, how can you help in solving this problem? **3. Lesson Activity** The teacher will facilitate the interactive discussion. The discussion here depends on the observed problem/s in the locality. 1. What environmental problem is observed in the locality? *The observed problem in the locality is the pollution of the river.* 2. What causes water pollution in the river? *Garbage was thrown in the river. Garbage like plastic wrappers, bottles, and dead animals were thrown in the river.* 3. Who is responsible for throwing garbage into the river? *The locals and even the picnic goers just throw their garbage in the water.* 4. What are observed impact or effect of water pollution in the community? *The water gives foul odor to the surroundings, the water is already stagnant, aquatic animals no longer thrive in the river.*	On the second day, let the learners watch the videos and start working on the activity. The teacher may also invite somebody form the locality to talk about the problem like for example the barangay officials in charge of environmental issues in the barangay, personnel from ENRO, or anybody who is knowledgeable of the environmental issue. When taking pictures of the place, inform their parents (through group messaging) that they should accompany their children. For the sake of discussion and providing sample answers, assume that the observed problem is water pollution. The discussion should be localized depending on the observed environmental issue in the community. The teacher can utilize other issue and is free to modify the sample answers here.

	Tourists are no longer attracted to visit the place. Swimming is no *longer possible because of the dirty water.* 5. What is the community doing to address the problem? *A barangay ordinance was crafted to protect the river, whoever caught dumping garbage in the river will be punished.* *Washing clothes and cars/jeepneys is prohibited.* *Regular clean-up drive along the riverbank is conducted every weekend.*	

D. Making Generalizations	**DAY 4** **1. Learners' Takeaways** Fill out the chart below to know if you've learned something from our activity this week.  **2. Reflection on Learning** Reflect on this. You may write your answer in your notebook.	The teacher prepares the concept map ahead of time, can be printed and can be given individually or prepare a big one to be posted on the board. The learners can answer in their notebook and put their answers in the posted one on the board. Either way, the teacher lets the learners complete the chart. Afterwards, s/he will call at least two (2) students to explain their answer. The teacher can always insert reflection in every lesson or activity if s/he deems necessary

	My Role in Addressing Environmental Problem of My Community	not just at the end of the lessons.

IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER'S REFLECTION		**NOTES TO TEACHERS**
A. Evaluating Learning	**1. Formative Assessment**	

	In a 1/8 sized illustration board, make a poster – slogan showing proper care to environment.  Refer to the rubric below for scoring.	Other drawing material can be utilized depending on the availability in the locality. The main point is to master the goal of the lesson and see if pupils can really empathize with the issue at hand.

RUBRICS ENVIRONMENTAL POSTER					
CRITERIA	**POOR**	**FAIR**	**GOOD**	**EXCELLENT**	**SCORE**
Graphics Poster has original graphics that clearly relate an environmental issue. (15 points)	Graphics are not original or do not relate to Earth Day or any environmental issue. (8-9)	Some graphics are original, but many are borrowed from the work of friends, other posters or advertisements. (10-11)	All graphics are original and relate to an environmental issue. (12-13)	Graphics are all original and masterfully relate to an environmental issue. The poster looks professional. (14-15)	
Slogan The poster has an original slogan that is memorable and a message about an environmental issue (10 points)	The poster does not send a message about an environmental issue. (3-4)	The poster has a slogan, but it does not send a very strong message about an environmental issue. (5-6)	Slogan on the poster is memorable and does a good job of sending a message about an environmental issue. (7-8)	Slogan on the poster is catchy, very memorable, and strongly conveys a message about environmental issues. (9-10)	
Neatness Poster is neat, organized, and visually appealing. (10 points)	Poster is not neat or organize. Few details are included, and it is not visually appealing. (7)	Poster is not very neat or well organized. More time could be spent on details. (8)	Poster is neat, well-organized, and visually appealing with many details included. (9)	Poster is very neat, well-organized, and extremely visually appealing with many details included. (10)	
				TOTAL	

Adapted from: https://www.scribd.com/document/420004355/Rubrics-Poster-Slogan

2. Homework (Optional)

Unfinished activities can be brought home.

The teacher may opt to give homework if s/he thinks the competency is not yet mastered.

B. Teacher's Remarks	*Note observations on any of the following areas:*	**Effective Practices**	**Problems Encountered**
	strategies explored		
	materials used		

	learner engagement/ interaction			
	others			
C. Teacher's Reflection	*Reflection guide or prompt can be on:* ▪ *<u>principles behind the teaching</u>* *What principles and beliefs informed my lesson? Why did I teach the lesson the way I did?* ▪ *<u>students</u>* *What roles did my students play in my lesson? What did my students learn? How did they learn?* ▪ *<u>ways forward</u>* *What could I have done differently? What can I explore in the next lesson?*			