

**PERIODIC TABLE BATTLESHIP: ADDRESSING THE LEARNING GAPS IN  
SCIENCE AMONG GRADE 8 STUDENTS AT MAYGNAWAY  
NATIONAL HIGH SCHOOL**

A Completed Action Research Report  
Submitted to the  
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**JANEGRACE T. TESORERO**  
Education Program Specialist II - ALS  
Curriculum Implementation Division

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## ABSTRACT

### **TESORERO, JANEGRACE T. PERIODIC TABLE BATTLESHIP: ADDRESSING THE LEARNING GAPS IN SCIENCE AMONG GRADE 8 STUDENTS OF MAYGNAWAY NATIONAL HIGH SCHOOL**

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This study aimed to address learning gaps in science specifically in topics on Periodic Table of Elements among Grade 8 students by integrating educational games into instruction. It sought to evaluate the effectiveness of the "Periodic Table Battleship" game in enhancing student learning outcomes. The study focused on the following research questions: (1) What is the academic performance of Grade 8 learners in the fundamentals of the Periodic Table: (a) *Before* the implementation of Periodic Table Battleship? (b) *After* the implementation of Periodic Table Battleship?; (2) Is there a significant difference in the academic performance of Grade 8 learners before and after the implementation of Periodic Table Battleship?; and (3) What feedback do Grade 8 learners provide regarding their experience with the Periodic Table Battleship game?

The participants of this study were the Grade 8 Gratitude and Grade 8 Patience students identified as struggling learners in Science at Maygnaway National High School for the school year 2024–2025. A pre-test and post-test and integration of the Periodic Table Battleship in the lessons in science was given to the participants to determine whether there is significant difference in the academic performance of the Grade 8 students and if the game could address the learning gaps in science specifically in topics on Periodic Table of Elements among grade

8 students. Interviews were also conducted to determine the feedback of the participants. Quantitative and qualitative analysis tools were used to interpret the data gathered.

The following were the findings: 1) Prior to the implementation of the Periodic Table Battleship, the academic and affective profile of the Grade 8 learners in the Fundamentals of the Periodic Table reflected moderate to high levels of engagement and understanding. 1a. The academic performance of Grade 8 learners was 9.03, suggesting that learners had a fair grasp of the content, but there was still potential for improvement, especially in translating their affective traits into stronger academic performance. 1b. Following the implementation of the Periodic Table Battleship, changes were observed in the affective and academic performance of Grade 8 learners in the Fundamentals of the Periodic Table. The Gratitude score increased significantly to a mean of 10.28 (from 9.44). Interestingly, the Patience score slightly decreased to 7.90 (from 8.62). 2) The academic performance of grade 8 learners before and after the implementation of Periodic Table Battleship has no significant difference. 3) The feedback gathered from Grade 8 learners after participating in the Periodic Table Battleship activity revealed a mix of emotions and experiences such as "Nervous", "Difficult", "Difficult but happy", "Fun but nervous", "Happy and enjoyable".

Given the increased engagement and improved academic performance, it is recommended to incorporate game-based strategies like Periodic Table Battleship into regular science instruction. This can help maintain students' interest and motivation. Since some learners found the activity difficult and nerve-wracking,

it's important to provide scaffolding (e.g., guided review before the game, use of hints, or team play). This will help reduce anxiety while maintaining the educational value of the challenge. Additionally, Chemistry teachers are urged to develop or adapt other game-based lessons to promote active learning and cater to diverse learning styles. The use of rewards is also suggested to motivate students and encourage participation, particularly benefiting those less responsive to traditional teaching methods.

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## **I. CONTEXT AND RATIONALE**

The COVID-19 pandemic has affected the whole world and influences the various sector for a longer period. Education system was one of the most affected by this virus. Schools closure brings difficulties for students, teachers and parents. So, distance learning is a solution to continue the education system.

The Philippines government closed schools on March 9, 2020, prematurely ending the school year for 25 million students and postponing the 2020-2021 academic year due to COVID-19 concerns. Enrolment stands at 77% of the previous year, highlighting the pandemic's negative impact on students (UNICEF, 2020).

The country is facing extreme 'learning poverty' due to the pandemic. This is the highest level of learning poverty in East Asia and the Pacific region. This education disruption could also reduce children's wellbeing, mental health, and productivity for decades, making it a significant threat to their recovery from Covid-19 (Lu, 2023).

The World Bank (2021) suggested that the schools should implement in-person schooling for children with parents' consent, improving distance learning delivery through active parental involvement, and enhancing awareness of complementary learning platforms. High-impact learning recovery programs based on individual student assessments are necessary for all students, regardless of in-person or remote learning.

Following the progressive expansion of face-to-face classes, the Department of Education (DepEd) developed a learning recovery plan (LRP)

framework to guide schools in addressing gaps due to pandemic-related disruptions. According to the former Education Secretary Leonor Magtolis Briones, “As more schools open their doors for physical learning, the Department of Education is currently crafting a learning recovery program as part of our post-pandemic efforts. We must ensure that our interventions are effective so that everyone can catch up and accelerate their learning.”

The MATATAG Agenda, launched last January 2023, provides a roadmap of specific deliverables and commitments that DepEd aims to deliver by 2028. The agenda embody the major steps that we will be taking to improve the quality of basic education in the Philippines.

DepEd Order 10, s 2024 Policy Guidelines on the Implementation of the MATATAG Curriculum released on July 23, 2024 provide guidelines to teachers and instructional leaders in the implementation of the MATATAG curriculum. For teachers, it shall serve as a primary guide for instructional planning, covering the selection of the subject matter, implementation of teaching strategies, use of learning resources and application of assessment tools.

As impacted by the pandemic, learning in Math and Science lost more ground and struggles among students to catch up on unfinished learning (Pietro, 2023).

Dr. Susan S. Collano, former Schools Division Superintendent of Division of Catanduanes said that the LRP aims to ensure that the present generation of learners does not suffer a disadvantage in comparison to past and future generation. It also seeks to ascertain that the cohort of learners fully recovers

learning lost during the pandemic and give priority to remedial or accelerated education approaches to address challenges and get all learners to grade-level proficiency.

Like other schools in the SDO-Catanduanes, Maygnaway National High School became steadfast in addressing issues in science education by investing in contextualizing alternative teaching and learning methods, integrating technology in the teaching approach, and providing professional development for science teachers. The school aims to enhance student engagement and interest in science by organizing science camps and competitions. Through these efforts, the school is committed to producing competent and knowledgeable learners in the field of science.

Understanding atomic structure and the periodic table of elements are critical for learners since these topics serve as the foundation for understanding chemistry. Reading a periodic table is like hieroglyphics to others, without formal teaching such as face to face classes, it would be hard to some learners to understand and familiarize these lessons. This lesson is being taught 1<sup>st</sup> quarter in grade 7 Science.

However, based on the result of the academic performance of grade 7 learners in the 1<sup>st</sup> quarter last school year, 37 out of 94 learners are struggling in said topic. This shows that there is a need for enhancement among these students so that they could cope in the lessons on Periodic Table in grade 8.

Specifically, the learning competencies that need to be addressed are: "Recognize that substances are classified into elements and compound" (*S7MTlg-*

*h-5*), “Identify of a substance according to its atomic structure” (*S8MTIIIe-f-10*) and “The periodic table of elements as an organizing tool to determine the chemical properties of elements” (*S8MTIIIi-j-12*).

According to TWF (2024), gamification in science education is a popular strategy to enhance student involvement and reinforce learning. By incorporating educational games into the classroom, students can engage in interactive and enjoyable learning experiences, enhancing retention of information. It can also encourage critical thinking, provide immediate feedback, and cater to different learning styles.

A study of Byusa, et al. (2022) to 57 educational games implemented in chemistry classrooms from 2010 to 2021 reveals that these games enhance students' conceptual understanding of chemistry concepts and increase their motivation to learn.

The research conducted by Burmich, et al. (2023) explored the impact of game-based assessment on learning effectiveness. It highlights how interactive methods like mutual testing and peer review can enhance students' knowledge and skills, improve memorization, and prepare them for real-life applications. It also allows teachers to adapt content and provide feedback, making it a crucial tool in education.

Having these insights and realizations, the researcher adapted a game called Periodic Table Battleship that aims to integrate the delivery of lesson to the learning of Grade 8 struggling learners for them to easily familiarized and understand the content of the Periodic Table of Elements.

This is a gamified approach aimed to boost student engagement and improve learning retention through interactive and enjoyable experiences. It is also deemed to enhance conceptual understanding and motivation.

Thus, this action research was conducted to determine whether a game could address the learning gaps in science, specifically in the familiarization and understanding of the Periodic Table of Elements among grade 8 students at Maygnaway National High School.

## **II. INNOVATION, INTERVENTION AND STRATEGY**

### **A. Periodic Table Battleship as an Innovation**

Periodic Table Battleship is a game that can be played by the students even without prior knowledge of the elements of the Periodic Table. It is a game that aims to familiarize the basic information like the name, symbol, atomic number, group and period of the elements in the periodic table. It is a duel between two students to guess the elements labeled by the opponent. The one who finished to guess the five groups of elements in the periodic table will be the winner and a prize will be given to learner. Students learn this basic concept while enjoying the game.

Printed and laminated Periodic Table of Elements paste in a folder served as game board of the game. Each learner will mark the group of elements in his/her game board horizontally and vertically. Once the game has begun, the learners will not be allowed to erase his/her chosen group of elements in the periodic table.

During the game the player will guess the group of elements labeled by the opponent. The player may say the name, symbol, atomic number, period or group number of the elements until he/she guesses all the elements of his/her opponent. By reciting every element in the Periodic Table while guessing the opponent's group of elements the learner may familiarize the basic information of elements in the Periodic Table.

### **B. Periodic Table Battleship as an Intervention**

To address the identified learning competencies such as: "Recognize that substances are classified into elements and compound" (*S7MTlg-h-5*), "Identify of a substance according to its atomic structure" (*S8MTIIIe-f-10*), and "The periodic table of elements as an organizing tool to determine the chemical properties of elements" (*S8MTIIIi-j-12*); a science game is adapted by the researcher with the hope that the intervention made will improve the performance of the grade 8 learners in the mentioned competencies and to eventually address the learning gaps of the learners in science.

The implementation of this intervention is based on the realization of the researcher that educators who provide playful learning environments for young children, understanding how children describe their own play and learning can suggest opportunities to scaffold their reflection about what it means to learn, as well as the ways that learning can happen through everyday experiences like play (Letourneau and Sobel, 2020).

### **C. Periodic Table Battleship as a Strategy**

The Periodic Table Battleship is a strategy aimed to address the learning gaps in Science among Grade 8 students at Maygnaway National High School helped learners to familiarize themselves with the terms and concepts in the following vocabularies:

- Atomic symbol – the atomic symbol is a one or two letter abbreviation for an element.
- Atomic mass – the average mass of an element – the number of protons plus neutrons
- Period- rows on the periodic table. Elements in the same period have the same number of atomic orbitals. (Period 1 (row1) has only 1 orbital; Period 2 (row 2) has 2 orbitals; etc.)
- Group – columns on the periodic table. Elements in the same group have the same number of valence electrons and act similarly.

The science game used the following materials:

- 2 laminated periodic tables per student
- 1 dry eraser marker per students or wet wipes sheet
- 1 folder per student

This science game has also the following development procedures and mechanics:

#### Procedures in making the “game board”

- Laminate and trim all periodic tables
- Hand out 2 periodic table in a folder to each student

- Staple or tape one periodic table to each side of the folder so that both tables are upright when the folder is open horizontally.

### Mechanics of the Game

Using the periodic table of elements as a grid, guess where the opponent's five ships are located. Take turns calling out a row and group (column name on periodic table), attempting to name an element containing enemy ships.

### Setup

1. Each player takes a marker and a periodic table board and props to open so that the other player cannot see it.
2. Using the marker, mark ships on the lower part of the board. Each player marks five ships either vertical or horizontal (no diagonal).

### Game play

1. Before playing, review the above vocabulary terms with the students. Give examples to each term with the periodic table at hand so students can reference it.
2. After reviewing the terms, have the students label their periodic tables with the terms Group and Period.
3. Decide who will go first – flip a coin or play a paper, rock, scissors.
4. To play the game, each player should use their dry eraser marker to circle a series of elements on the bottom periodic table – this is their game board.
5. Students should circle 5 “ships” of different elements lengths on their board. “Ships” cannot go diagonally across the periodic table; they must be vertical or horizontal.



6. Ships should have the following lengths: Destroyer – 1 element, Cruiser – 2 elements, Submarine – 3 elements, Battleship – 4 elements, Aircraft Carrier – 5 elements
7. Once “ship” is selected, players take turns asking their opponent possible positions for their “ships”. Players should ask in the form of Period number, group number or by asking for atomic number, symbol or name of element.
8. Players should mark off when they “hit” or “miss” their opponent’s “ships” on the periodic table. Players can choose their own marks for hit or miss.
9. If a player’s “ship” is hit, the player should write an X over the element that the opponent has called.
10. The game is over when a player has sunk all the opponent’s “ship”.

### **III. ACTION RESEARCH QUESTIONS**

This action research aimed to address the learning gaps in Science among Grade 8 students at Maygnaway National High School. Specifically, it sought to answer the following questions:

1. What is the academic performance of Grade 8 learners in the fundamentals of Periodic Table:
  - a. Before the implementation of Periodic Table Battleship; and
  - b. After the implementation of Periodic Table Battleship?
2. Is there a significant difference between the academic performance of Grade 8 learners before and after the implementation of Periodic Table Battleship?

3. What is the feedback of Grade 8 learners in the implementation of the Periodic Table Battleship?

#### **IV. ACTION RESEARCH METHODS**

##### **A. Participants/Other Sources of Data and Information**

The participants for this action research are all Grade 8 struggling learners specifically Grade 8 Gratitude and Grade 8 Patience of Maygnaway National High School for School Year 2024-2025. From 63 learners of two sections, the researcher chosen the struggling learners to participate in the study.

Table 1

##### **Profile of Grade 8 Learners of Maygnaway National High School**

Section	Male	Female	Total
Gratitude	14	17	31
Patience	15	17	32

Formative test results through pre and posttest of Grade 8 struggling learners were used. Evaluation tool of the learning materials presented to the Junior and Senior High School Science teachers at this school was one of the sources of data and information for this action research.

##### **B. Data Gathering Methods**

Before the conduct of the study, parental consent and media release consent form were secured from the parents/or guardian of the participants, in compliance to Republic Act 10173 (Data Privacy Act of 2012), to protect the right of privacy of the learners. Learners with no parental consent and media release consent were not included to participate in the study. The researcher also practiced

confidentiality of learner's record and oriented them that they have the right to withdraw anytime at the conduct of the study.

The researcher then conducted pretest to determine the level of familiarity of the learners about the Periodic Table. The researcher prepared the materials needed like printing and laminating of periodic table and pasting it on the folder. This learning materials was evaluated by Junior and Senior High School Science Teachers before the administration of the game to the learners.

The researcher administered the game for one week. She initially presented first the topic, and the game was introduced as an enhancement activity.

After the administration of Periodic Table Battleship, a posttest was given to the learners. The average score was computed to determine if there is a significant difference in the familiarization of the elements in the Periodic Table.

The pretest and posttest result were analyzed through mean score. It is the preferred method to compare the participant groups and measure the degree of change occurring because of treatments or interventions.

To test of the significant difference between two sample means (pre-test and posttest scores), t-test was utilized. It is used to test whether the difference between the response of two groups is statistically significant or not.

An interview to the learners was also conducted to gather their feedback in the integration of this game in the delivery of lesson on Periodic Table.

Thematic analysis was utilized to analyze the response of the learners from the intervention given.

## V. DISCUSSION OF RESULTS AND REFLECTION

This section presents the data collected, data analysis, and reflections to interprets the study's findings.

### 1. Academic Performance of Grade 8 learners in the Fundamentals of Periodic Table

The academic performance of Grade 8 learners was identified before and after the implementation of Periodic Table Battleship.

#### a. Before Implementation of Periodic Table Battleship

Table 2 shows the academic performance of grade 8 learners grouped by section, before the implementation of Periodic Table Battleship.

Table 2

#### Academic Performance of Grade 8 learners in the Fundamentals of Periodic Table Before Implementation of Periodic Table Battleship

Section	Mean Score	Mean Percentage	Academic Performance
8 – Gratitude	9.44	62.93	Nearly Proficient
8 – Patience	8.62	57.47	Nearly Proficient
Average	9.03	60.20	Nearly Proficient

The academic performance of Grade 8 learners in the Fundamentals of the Periodic Table prior to the implementation of the Periodic Table Battleship game shows varied levels of understanding and engagement, particularly when analyzed through the lens of affective traits such as *gratitude* and *patience*.

The recorded mean score for Gratitude is 9.44, indicating that students generally expressed a high level of appreciation or positive disposition toward the subject or learning experience, even before the intervention. This suggests an openness to learning and possibly a positive classroom atmosphere.

On the other hand, the mean score for Patience is 8.62, slightly lower than that of gratitude. This may reflect the challenges students face in staying focused or enduring difficulties when learning abstract concepts like atomic structure, element classification, or periodic trends.

The overall average score of 9.03 suggests that while learners have a good foundational grasp of the periodic table concepts, there is still room for improvement—especially in developing cognitive perseverance (as hinted by the lower patience score).

These pre-intervention results highlight the importance of interactive and engaging teaching strategies. The use of Periodic Table Battleship—a game-based approach—could help bridge the gap by enhancing motivation, sustaining attention, and encouraging deeper learning through active participation.

#### **b. After Implementation of Periodic Table Battleship**

Table 3 shows the academic performance of grade 8 learners grouped by section, after the implementation of Periodic Table Battleship.

Table 3

#### **Academic Performance of Grade 8 learners in the Fundamentals of Periodic Table After Implementation of Periodic Table Battleship**

Section	Mean Score	Mean Percentage	Academic Performance
8 – Gratitude	10.28	68.53	Nearly Proficient
8 – Patience	7.90	52.67	Nearly Proficient
Average	9.09	60.60	Nearly Proficient

After the implementation of the Periodic Table Battleship, the academic performance of Grade 8 learners in the Fundamentals of the Periodic Table showed subtle but important shifts.

The mean gratitude score increased to 10.28 from the previous 9.44. This rise suggests that students became more appreciative of the learning experience, likely due to the more interactive and engaging nature of the game-based activity. Gratitude, in this context, may reflect enjoyment, acknowledgment of fun learning, and a positive attitude toward science.

In contrast, the mean patience score slightly decreased to 7.90 from 8.62. This drop might seem counterintuitive at first; however, it could be attributed to the fast-paced and competitive elements of the game, which may have challenged students' ability to remain calm or persistent during play. Despite this, it's possible that the game encouraged quick thinking rather than long-term endurance, shifting how patience was expressed.

The overall average academic score slightly improved from 9.03 to 9.09. While the increase is modest, it suggests that the Periodic Table Battleship had a positive impact on learners' understanding or retention of concepts. This improvement, though not drastic, is meaningful considering the short time frame and the complex nature of the topic.

The results indicate that integrating game-based learning like the Periodic Table Battleship can positively influence students' affective engagement—particularly in increasing enjoyment and appreciation for science learning. While it may challenge patience due to its interactive nature, it ultimately supports academic growth and makes the learning experience more memorable.

## 2. Significant Difference between the Academic Performance of Grade 8 Learners Before and After the Implementation of Periodic Table Battleship

Table 4 presents the test of difference significance between the academic performance of grade 8 learners before and after the implementation of Periodic Table Battleship.

Table 4

### Test of Significance on the Academic Performance of Grade 8 Learners Before and After the Implementation of Periodic Table Battleship

$H_0: m_1 = m_2$ $\alpha = 0.5$	<i>Before the Implementation of Periodic Table Battleship</i>	<i>After the Implementation of Periodic Table Battleship</i>
Mean	9.03	9.09
df	38	
t Stat	0	
t Critical two-tail	2.025	

As shown, the null hypothesis is that there is no significant difference between the academic performance of grade 8 learners before and after the implementation of Periodic Table Battleship at 0.05 level of significance. The mean score before and after the implementation of Periodic Table Battleship is 9.03 and 9.09 out of 15, respectively.

The null hypothesis will be rejected if the t Stat is equal or greater than the t Critical value = 2.025, otherwise, accept the null hypothesis. Since the t Stat= 0 is less than the t Critical value = 2.025, thus accept the null hypothesis. That means

that the academic performance of grade 8 learners before and after the implementation of Periodic Table Battleship has no significant difference.

This implies that while the game might have affected engagement, enjoyment, or motivation, it did not lead to a significant change in test scores or measurable academic outcomes—at least based on the available data.

However, it's important to note that "no significant difference" does not mean no effect at all—just that the effect was not strong enough to be statistically confirmed. It may suggest a need to examine the duration or reliability of implementation, the assessment tools used, and explore other non-academic benefits the game may have provided.

### 3. Feedback of Grade 8 learners in the Implementation of the Periodic Table Battleship

Table 5 presents the thematic analysis of feedback of grade 8 learners in the implementation of Periodic Table Battleship.

Table 5

#### Feedback of Grade 8 Learners in the Implementation of Periodic Table Battleship

Theme	Frequency	Description
Nervous	1	<i>A learner felt nervous without indicating enjoyment or fun.</i>
Difficult	2	<i>Few learners focused on the difficulty of the task without expressing positive emotions.</i>
Difficult but happy	3	<i>Few learners acknowledged the challenge but still reported positive feelings</i>
Fun but Nervous	7	<i>Some learners expressed mixed emotions—while they found the game enjoyable, they also felt nervous, likely due to performance pressure or unfamiliarity with the activity.</i>
Happy and Enjoyable	26	<i>Most of the learners emphasize a combination of happiness and enjoyment.</i>



As shown, five themes emerged from the feedback of the Grade 8 learners in the implementation of Periodic Table Battleship, these are: nervous, difficult, difficult but happy, fun but nervous, happy and enjoyable.

**Nervous.** A learner felt nervous without indicating enjoyment or fun. The learner said, “Nakakakaba (It makes me nervous)”.

This response may suggest anxiety due to performance tasks, peer observation, or time pressure during the game. Supportive scaffolding or clearer instructions may help reduce anxiety.

**Difficult.** Few learners focused on the difficulty of the task without expressing positive emotions. “Mahirap ang larong ito kasi ito ay hinuhulaan lamang. (This game is difficult because it's based on guessing)”. Said by one of the learners. Another learner said, “Mahirap kasi naghahanapan ng sagot para ma- HIT. (It's difficult because you have to search for the right answer to get a HIT)”.

This may indicate a need for additional support or scaffolding. The challenge might have overshadowed enjoyment, possibly impacting learning outcomes.

**Difficult but happy.** Few learners acknowledged the challenge but still reported positive feelings. One learner shared, “Mahirap ang laro na to pero masaya maglaro (This game is difficult, but it's fun to play)”. Another said, “Masaya kasi may natutunan ako kahit talo at medyo mahirap din. (It was fun because I learned something even though I lost, and it was also a bit difficult)”. And the third

learner said, “Medyo mahirap din pero ayos lang ang saya naman (It was a bit difficult, but it's okay because it was fun)”.

This indicates productive struggles wherein learners were intellectually challenged but still found the experience rewarding, which is ideal for deep learning.

**Fun but nervous.** Some learners expressed mixed emotions—while they found the game enjoyable, they also felt nervous, likely due to performance pressure or unfamiliarity with the activity. “It’s fun, but I nervous when I play and very challenging but I won and very interesting it’s not boring”, shared by one of the learners.

Thus, the game sparked excitement but also triggered anxiety, which may stem from competitiveness or fear of making mistakes.

**Happy and enjoyable.** The majority of students highlighted feelings of happiness and enjoyment while playing Periodic Table Battleship. Many expressed how fun the game was, especially when played with friends and classmates. One student shared, “Nakakaenjoy ito laruin (Playing this game is really enjoyable)”. Another commented, “Nakakaenjoy ito sa amin at maganda ito laruin at ang saya nito (We had so much fun—it’s a great game to play and very entertaining)”. Others echoed similar sentiments, saying, “Ang saya maglaro ng Periodic Table Battleship and nag-enjoy po ako (It’s so much fun to play Periodic Table Battleship, and I really enjoyed it)”.

This means that majority of the learners were fully engaged and motivated, suggesting that the game effectively created a positive learning atmosphere.

Based on these feedback, Periodic Table Battleship was generally well-received, with most students finding it enjoyable and engaging. However, feelings of nervousness and difficulty highlight the need to balance challenge with support through differentiated instructions, gradual introduction of game mechanics, and emphasis on collaboration rather than competition to help mitigate anxiety and improve learner experience.

## **VI. ACTION PLAN**

Upon the approval of the activity proposal by the OIC – Schools Division Superintendent, the results of the action research were disseminated at Maygnaway National High School on April 4, 2025. This one-day activity was attended by Grade 8 learners who also served as participants in the action research. The school principal, Grade 8 advisers, as well as Junior and Senior High School Science teachers, also took part in the said activity.

Out of the 50 Grade 8 students who participated in the action research, 17 were present during the dissemination of the research findings. The activity began at 8:00 AM with a short opening program, followed by the presentation of the results. The students appeared somewhat surprised by the outcome, as the findings revealed no significant difference in performance before and after the integration of the *Periodic Table Battleship* game into the lesson. This reaction indicated that the students had expected a more noticeable improvement in their learning outcomes.

The researcher asked the students why this outcome occurred. Some learners explained that they were more focused on playing the game rather than concentrating on the pre- and post-tests administered by the researcher.

The students also shared that their excitement was largely driven by the prizes they received for winning the game, which shifted their focus away from the tests and more toward playing and competing.

Even though the overall results of the pre- and post-tests showed no significant difference, individual performances demonstrated positive impact. Some learners who scored the lowest on the pretest achieved higher scores on the posttest. This indicates that the *Periodic Table Battleship* game was effective for certain students, suggesting that while not all learners benefited equally, it helped some improve their understanding of the topic

After a brief discussion of the results, snacks were served to the students.

The second part was attended by the Junior and Senior Science teachers as well as the advisers of the Grade 8 learners.

After a short program, the researcher presented her journey in conducting the action research, from crafting the proposal to the dissemination of the results, encouraging others to undertake similar research to improve teaching and learning.

The researcher also presented the findings to the teachers. Some teachers commented that learners nowadays do not take tests seriously. According to them, it is common to see low scores because many students do not thoroughly read or

understand the questions; instead, they often select answers without comprehension.

The researcher also introduced the Periodic Table Battleship game to the teachers and encouraged them to try it. Two teachers initially declined to play, stating they were not science teachers. However, the researcher assured them that even non-science teachers could participate since the game board included basic information about the periodic table. Eventually, the teachers enjoyed playing Periodic Table Battleship and appreciated its potential as a learning tool.

Given the positive impact of the Periodic Table Battleship on Grade 8 learners, the researcher plans to disseminate this action research to ALS (Alternative Learning System) teachers during their LAC (Learning Action Cell) sessions. This aims to encourage them to adopt and integrate the innovation into their lessons under Learning Strand 2: Scientific and Critical Thinking Skills (Science).

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## VIII. FINANCIAL REPORT

Table 6 presents the expenses incurred during the implementation of the action research, which was funded by the Basic Education Research Fund (BERF):

Table 6

### Financial Report


Activity / Expenses	Cash-out	Balance
<b>Basic Education Research Fund (BERF)</b>		<b>Php 15, 000. 00</b>
Load / internet allowance	Php 2, 000. 00	13, 000. 00
Meals /snacks	2, 200. 00	10, 800. 00
Transportation	2, 600. 00	8, 200. 00
Supplies	6, 060. 00	2, 140. 00
MOA notary	200. 00	1, 940. 00
Printing and binding of final manuscript	1, 940. 00	0. 00

# ANNEXES



## Annex 1

## Approved Letter from the RRC



Republic of the Philippines  
Department of Education  
REGION V - BICOL

**Office of the Assistant Regional Director**

October 3, 2024

**JANEGRACE T. TESORERO**  
Teacher III  
Maygnaway National High School  
Maygnaway, Catanduanes

DEPARTMENT OF EDUCATION  
REGION V - BICOL  
OFFICE OF THE ASSISTANT REGIONAL DIRECTOR  
019169  
By: *[Signature]*

Dear Ms. Tesorero:

This letter of information pertains to the research proposal that received approval from the Schools Division Research Committee (SDRC) and was subsequently submitted to the Regional Research Committee (RRC) for funding through the CY 2025 Basic Education Research Fund (BERF) Grant Facility.

We are pleased to inform you, through the Regional Research Committee (RRC), that the research proposal titled **"PERIODIC TABLE BATTLESHIP: ADDRESSING THE LEARNING GAPS IN SCIENCE AMONG GRADE 8 STUDENTS AT MAYGNAWAY NHS"** has been approved for implementation, in accordance with the provisions outlined in DepEd Order No. 16, s. 2017. To streamline funding for the BERF Facility and ensure deliverable compliance, please refer to the table below. It will also serve as documentation for liquidation.

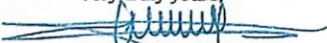
TYPE OF RESEARCH	TRANCHE	PERCENTAGE	DELIVERABLES
<b>ACTION RESEARCH</b>	FIRST TRANCHE	80 %	<ul style="list-style-type: none"> <li>Work Plan</li> <li>Certificate of Acceptance for the Deliverable</li> <li>Copy of MOA</li> </ul>
	LAST TRANCHE	20 %	<ul style="list-style-type: none"> <li>Final Report</li> <li>Certificate of Acceptance from Regional Research Committee (RRC)</li> <li>Copy of MOA</li> </ul>

Please note that if the research proponent fails to complete and submit the deliverables as scheduled, they will be required to return the full amount granted. This payment must be made within six (6) months, either through direct payment or salary deduction. Additionally, strict compliance with the provisions of DepEd Order No. 16, s. 2017 dated March 20, 2017, is mandated.

For any questions or further clarifications, please contact the Regional Research Committee through the **Policy, Planning, and Research Division (PPRD)**.

We look forward to the successful implementation of your research. Thank you.


Very truly yours,




**BEBIANNO J. SENTILLAS**  
Assistant Regional Director  
Chair, Regional Research Committee

SGOD OFFICE  
**RECEIVED**  
Date: 10/4/24  
By: *[Signature]*


PPRD/hrm  
10/03/2024




**DepEd**  
MAYAGNAY



**REGION V - BICOL**



**Regional Center Site, Rawis, Legazpi City 4500**  
0969 516 9555  
region5@depd.gov.ph



**DepEd**  
Catanduanes

## Annex 2

## Research Information and Proponent Information

**A. RESEARCH INFORMATION**

<b>RESEARCH TITLE:</b> Periodic Table Battleship: Addressing the Learning Gaps in Science Among Grade 8 Students at Maygnaway National High School	
<b>SHORT DESCRIPTION OF THE RESEARCH:</b> Understanding atomic structure and the periodic table of elements are critical for learners since these topics serve as the foundation for understanding chemistry. This lesson is introduced in Grade 7 1 <sup>st</sup> quarter hence the transition from Elementary to High School is very crucial, the students find it difficult to catch up with the new lesson. Reading a periodic table is like hieroglyphics to others, without formal teaching such as face to face classes, it would be hard to some learners to understand and familiarize these lessons. Integrating interactive game in the delivery of lesson to the learning of Grade 8 learners of Maygnaway National High School is the purpose of this action research to address the learning gap between the lessons in Grade 7 to Grade 8. This research proposal consists of one interactive game for Grade 8 students and is also aligned in the Most Essential Learning Competencies (MELC).	
<b>RESEARCH CATEGORY</b> <i>(check <u>only one</u>)</i> <ul style="list-style-type: none"> <li>○ National</li> <li>○ Region</li> <li>○ School Division</li> <li>○ District</li> <li>● School</li> </ul> <i>(check <u>only one</u>)</i> <ul style="list-style-type: none"> <li>● Action Research</li> <li>○ Basic Research</li> </ul>	<b>RESEARCH AGENDA CATEGORY</b> <i>(check <u>only one</u> main research theme)</i> <ul style="list-style-type: none"> <li>● Teaching and Learning</li> <li>○ Child Protection</li> <li>○ Human Resource Development</li> <li>○ Governance</li> </ul> <i>(check <u>up to one</u> cross-cutting theme, if applicable)</i> <ul style="list-style-type: none"> <li>○ DRRM</li> <li>○ Gender and Development</li> <li>○ Inclusive education</li> <li>○ Others (please specify): _____</li> </ul>
<b>FUND SOURCE</b> (e.g. BERF, SEF, others)* BERF	<b>AMOUNT:</b> Php 15, 000.00
<b>TOTAL AMOUNT:</b> Php 15, 000.00	

*\*indicate also if the proponent will use personal funds*

## B. PROPONENT INFORMATION

### **LEAD PROPONENT/INDIVIDUAL PROPONENT**

LAST NAME: <b>TESORERO</b>	FIRST NAME: <b>JANEGRACE</b>	MIDDLE NAME: <b>TABOR</b>
BIRTHDATE:(MM/DD/YYYY) <b>10/27/1984</b>	SEX: <b>FEMALE</b>	POSITION/DESIGNATION: <b>EPS II - ALS</b>
REGION/DIVISION/ SCHOOL: <i>(whichever is applicable)</i> <b>MAYGNAWAY NATIONAL HIGH SCHOOL</b>		
CONTACT NUMBER 1: <b>09302942737</b>	CONTACT NUMBER 2:	EMAIL ADDRESS: <a href="mailto:janegrace.tesorero@deped.gov.ph">janegrace.tesorero@deped.gov.ph</a>
EDUCATIONAL ATTAINMENT (DEGREE TITLE) <b>BACHELOR of SCIENCE in NURSING, 18 UNITS PROFESSIONAL EDUCATION, MASTER of ARTS in EDUCATION (Completed the Academic Requirement in Diploma in Administration and Supervision)</b>	TITLE OF THESIS / RELATED RESEARCH PROJECT	
SIGNATURE OF PROPONENT:		

### **IMMEDIATE SUPERVISOR'S CONFORME**

I hereby endorse the attached research proposal. I certify that the proponent has the capacity to implement a research study without compromising her office functions.

**JENYLIN I. TAPO**

Name and Signature of Immediate Supervisor

**School Principal I**  
Position/Designation

\_\_\_\_\_  
Date

## Annex 3

**Declaration of Anti-Plagiarism**

1. I, **JANEGRACE T. TESORERO**, understand that plagiarism is the act of taking and using another's ideas and works and passing them off as one's own. This includes explicitly copying the whole work of another person and/or using some parts of their work without proper acknowledgment and referencing.
2. I hereby attest to the originality of this research proposal and has cited properly all the references used. I further commit that all deliverables and the final research study emanating from this proposal shall be of original content. I shall use appropriate citations in referencing other works from various sources.
3. I understand that violation from this declaration and commitment shall be subject to consequences and shall be dealt with accordingly by the Department of Education.

PROPONENT: **JANEGRACE T. TESORERO**

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

## Annex 4

**Declaration of Absence of Conflict of Interest**

1. I, **JANEGRACE T. TESORERO**, understand that conflict of interest refers to the situations in which financial or other personal consideration may compromise my judgment in evaluating, conducting, or reporting research.
2. I hereby declare that I do not have any personal conflict of interest that may arise from my application and submission of my research proposal. I understand that my research proposal may be returned to me if found out that there is conflict of interest during the initial screening.
3. Further, in case of any form of conflict of conflict of interest (possible or actual) which may inadvertently emerge during the conduct of my research, I will duly report it to the research committee for immediate action.
4. I understand that I may be held accountable by the department of Education for any conflict of interest which I have intentionally concealed.


PROPONENT: **JANEGRACE T. TESORERO**

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

## Annex 5

## Sample Pre -Test

  
 Republika ng Pilipinas  
**Kagawaran ng Edukasyon**  
 REHIYON V - BICOL  
**TANGGAPANG PANSANGAY NG CATANDUANES**

---




**Pre-test in Science 8**

**Name:** \_\_\_\_\_ **Score:** 4  
**Section:** \_\_\_\_\_

**Learning Competency:** The periodic table of elements as an organizing tool to determine the chemical properties of elements (S8MTIII-j-12)

**Direction:** Read the following statement below. Encircle the letter of the correct answer.

- Dmitri Mendeleev organized the elements:
  - ☒ a. By number of electrons
  - ☐ b. By increasing atomic weight and similar properties
  - ☐ c. By increasing atomic number and similar properties
  - ☐ d. In alphabetical order
- The elements in the present periodic table are arranged according to their:
  - ☒ a. Atomic mass
  - ☐ b. Mass number
  - ☐ c. Atomic number
  - ☐ d. Atomic weight
- A vertical column in the periodic table is called:
  - ☐ a. Valence
  - ☐ b. Branch
  - ☒ c. Group
  - ☐ d. Period
- A horizontal row in the periodic table is called:
  - ☐ a. Shells
  - ☒ b. Branch
  - ☐ c. Group
  - ☐ d. Period
- Elements in the same group have:
  - ☐ a. Similar symbols
  - ☐ b. The same number of neutrons
  - ☒ c. The same number of valence electrons
  - ☐ d. The same number of electrons
- Elements in the same period have:
  - ☐ a. The same number of neutrons
  - ☒ b. Gradually changing properties
  - ☐ c. Similar symbols
  - ☐ d. Identical chemical properties
- How many periods or rows are there on the periodic table?
  - ☒ a. 7
  - ☐ b. 8

San Roque, Virac, Catanduanes  
 053-8114543  
 catanduanes@deped.gov.ph  
 www.depedcatanduanes.com / www.catanduanes.deped.gov.ph






Republika ng Pilipinas  
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REHIYON V - BICOL

**TANGGAPANG PANSANGAY NG CATANDUANES**

- c. 9  
d. 10
8. Most of the elements on the periodic table are \_\_\_\_\_.  
a. Metals  
b. Metalloids  
c. Nonmetal
9. What is the symbol for calcium on the periodic table?  
a. Ca  
b. Cl  
c. Cm  
d. C
10. Which of the following element is not a halogen?  
a. Fluorine  
b. Chlorine  
c. Selenium  
d. Bromine
11. What is the atomic mass of Calcium?  
a. 30  
b. 40  
c. 50  
d. 60
12. Mercury, Cadmium and Zinc all belong to which group on the periodic table?  
a. 12  
b. 13  
c. 14  
d. 15
13. What is the atomic number of aluminum?  
a. 10  
b. 13  
c. 16  
d. 20
14. Which of the following sources of food is often contaminated with heavy metals like mercury, arsenic or cadmium?  
a. Mushroom  
b. Shellfish  
c. Beef
15. Mercury and silver are often used together for which dental applications?  
a. Teeth braces  
b. Teeth fillings  
c. Dental crown  
d. Dental cleaning

## Sample Post -Test

  
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 REHIYON V - BICOL  
**TANGGAPANG PANSANGAY NG CATANDUANES**

---




**Posttest in Science 8**

**Name:** \_\_\_\_\_ **Score:** 7  
**Section:** 8 - PATIENCE

**Learning Competency:** The periodic table of elements as an organizing tool to determine the chemical properties of elements (S8MTIII-j-12)

Direction: Read the following statement below. Encircle the letter of the correct answer.

1. Dmitri Mendeleev organized the elements:
  - a. By number of electrons
  - ☒ b. By increasing atomic weight and similar properties
  - c. By increasing atomic number and similar properties
  - d. In alphabetical order
2. The elements in the present periodic table are arranged according to their:
  - a. Atomic mass
  - b. Mass number
  - ☒ c. Atomic number
  - d. Atomic weight
3. A vertical column in the periodic table is called:
  - ☒ a. Valence
  - b. Branch
  - c. Group
  - d. Period
4. A horizontal row in the periodic table is called:
  - a. Shells
  - b. Branch
  - c. Group
  - ☒ d. Period
5. Elements in the same group have:
  - a. Similar symbols
  - b. The same number of neutrons
  - ☒ c. The same number of valence electrons
  - d. The same number of electrons
6. Elements in the same period have:
  - a. The same number of neutrons
  - ☒ b. Gradually changing properties
  - c. Similar symbols
  - d. Identical chemical properties
7. How many periods or rows are there on the periodic table?
  - ☒ a. 7
  - b. 8

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 053-8114063  
 catanduanes@deped.gov.ph  
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REHIYON V - BICOL

**TANGGAPANG PANSANGAY NG CATANDUANES**

- c. 9  
d. 10
8. Most of the elements on the periodic table are \_\_\_\_\_.  
☒ a. Metals  
☐ b. Metalloids  
☐ c. Nonmetal
9. What is the symbol for calcium on the periodic table?  
☒ a. Ca  
☐ b. Cl  
☐ c. Cm  
☐ d. C
10. Which of the following element is not a halogen?  
☒ a. Fluorine  
☐ b. Chlorine  
☐ c. Selenium  
☐ d. Bromine
11. What is the atomic mass of Calcium?  
☒ a. 30  
☐ b. 40  
☐ c. 50  
☐ d. 60
12. Mercury, Cadmium and Zinc all belong to which group on the periodic table?  
☒ a. 12  
☐ b. 13  
☐ c. 14  
☐ d. 15
13. What is the atomic number of aluminum?  
☒ a. 10  
☐ b. 13  
☐ c. 16  
☐ d. 20
14. Which of the following sources of food is often contaminated with heavy metals like mercury, arsenic or cadmium?  
☒ a. Mushroom  
☐ b. Shellfish  
☐ c. Beef
15. Mercury and silver are often used together for which dental applications?  
☒ a. Teeth braces  
☐ b. Teeth fillings  
☐ c. Dental crown  
☐ d. Dental cleaning




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catanduanes@deped.gov.ph  
www.deped.gov.ph/catatanduanes / www.catanduanes.deped.gov.ph



## Annex 6

## Parent Consent Form



Republika ng Pilipinas  
**Kagawaran ng Edukasyon**  
 REHIYON V - BICOL  
**TANGGAPANG PANSANGAY NG CATANDUANES**

---

**PARENTAL CONSENT**

I/We hereby willingly and voluntarily give consent to the participation of my/our son/daughter Ashley Mae C. Capistrano in the conduct of the action research of **Periodic Table Battleship: Addressing the Learning Gaps Among Grade 8 Students at Maygnaway National High School.**


I/We have considered the benefits that my son or daughter may get from his/her participation in this activity provided that due care, diligence and necessary precaution will be observed to ensure his/her health and safety.

I/We give the facilitators/researcher the right to collect any information they may need such as his/her daughter's/son's name, email address, contact number, and personal life stories but with utmost confidentiality.

Signed:

\_\_\_\_\_




*Signature of Father Over Printed Name*

  
ANGELINE C. CAPISTRANO  
*Signature of Mother Over Printed Name*

\_\_\_\_\_

*Signature of Guardian Over Printed Name*


---

Maygnaway, San Andres, Catanduanes, 4810  
 302092@deped.gov.ph  
 Maygnaway National High School

## Annex 7

## Media Release Form

  
 Republika ng Pilipinas  
**Kagawaran ng Edukasyon**  
 REHIYON V - BICOL  
**TANGGAPANG PANSANGAY NG CATANDUANES**

---

**MEDIA RELEASE CONSENT FORM**

I, the undersigned, hereby grant the Department of Education- Maygnaway National High School the right to record, film, photograph, audiotape, or videotape me and my performances during the conduct of action research titled *PERIODIC TABLE BATTLESHIP: ADDRESSING THE LEARNING GAPS AMONG GRADE 8 STUDENTS OF MAYGNAWAY NATIONAL HIGH SCHOOL*.

I also grant the right to edit, use, and reuse said products for nonprofit purposes including print, on the internet, and all other forms of media.

I also hereby release the Department of Education- Maygnaway National High School and its agents and employees from all claims, demands, and liabilities whatsoever in connection with the above.

I certify that I have read the Media Consent and Release Form and fully understand its terms and conditions.

**Agreed and accepted by:**

Signature over Printed Name of the Student: Ashley Mae C. Capistrano

Date: 3-5-25

Address of Student: Maygnaway San Andres Catanduanes

**Parental Consent:**

I hereby certify that I am the parent/ guardian of Ashley Mae C. Capistrano  
(Name of Student)




a minor under the age of 18 years, I hereby agree to assume the legal responsibility for his/ her authorizations referred to in this Media Content and Releases.

Signature over Printed Name of Parent/ Guardian: ANGELINE C. CAPISTRANO

Address: Maygnaway, San Andra, Catanduanes

CP Number: \_\_\_\_\_ Date: March 3, 2025

---

Maygnaway, San Andres, Catanduanes, 4810  
 302052@deped.gov.ph  
 Maygnaway National High School



[illegible]

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>March 5, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - AUS</u> (Official Designation)	
the amount of <u>three hundred pesos (\$300.00)</u>	
in payment for <u>transportation expenses from residence to Maygnaway NHS during the conduct of action research by integrating my innovation to Grade 8 science classes at Maygnaway NHS</u> (Payments for substance, services, rental of transportation should show inclusive dates, purpose distance, inclusive points of travel, etc)	
PAYEE	
Name/Signature <u>John Mark Tabor</u>	Address <u>Bah</u>
WITNESS	
Name/Signature _____	Address _____

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>March 5, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - AUS</u> (Official Designation)	
the amount of <u>three hundred pesos (\$300.00)</u>	
in payment for <u>transportation expenses from Maygnaway NHS to residence during the conduct of action research by integrating my innovation to Grade 8 science classes at Maygnaway NHS</u> (Payments for substance, services, rental of transportation should show inclusive dates, purpose distance, inclusive points of travel, etc)	
PAYEE	
Name/Signature <u>Garry Eborola</u>	Address <u>Maygnaway NHS</u>
WITNESS	
Name/Signature _____	Address _____

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>March 6, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - AUS</u> (Official Designation)	
the amount of <u>three hundred pesos (\$300.00)</u>	
in payment for <u>transportation expenses from residence to Maygnaway NHS to conduct action research by integrating my innovation to Grade 8 science classes at Maygnaway NHS</u> (Payments for substance, services, rental of transportation should show inclusive dates, purpose distance, inclusive points of travel, etc)	
PAYEE	
Name/Signature <u>Garry Eborola</u>	Address <u>Maygnaway, San Andres</u>
WITNESS	
Name/Signature _____	Address _____

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>March 6, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - AUS</u> (Official Designation)	
the amount of <u>three hundred pesos (\$300.00)</u>	
in payment for <u>transportation expenses from Maygnaway NHS to residence during the conduct of action research by integrating my innovation to Grade 8 science classes at Maygnaway NHS</u> (Payments for substance, services, rental of transportation should show inclusive dates, purpose distance, inclusive points of travel, etc)	
PAYEE	
Name/Signature <u>Garry Eborola</u>	Address <u>Maygnaway, San Andres</u>
WITNESS	
Name/Signature _____	Address _____



General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>May 14, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. TESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount Of <u>two hundred pesos (P 200.00)</u>	
in payment for <u>transportation expenses from Residence</u> (Payments for substance, services, <u>to Rakdell Inn, Virac, Catanduanes during the progress</u> rental of transportation should show inclusive dates, <u>monitoring for the implementation of Basic Education</u> <u>Research of the 2025 BERE Grants</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>John Mark Tabor</u>	PAYEE
Address <u>Bato</u>	
WITNESS	
Name/Signature _____	
Address _____	

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>May 14, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. TESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount Of <u>two hundred pesos (P 200.00)</u>	
in payment for <u>transportation expenses from Rakdell Inn, Virac,</u> (Payments for substance, services, <u>Catanduanes to Residence during the progress monitoring</u> rental of transportation should show inclusive dates, <u>for the implementation of Basic Education Research of the</u> <u>2025 BERE Grants</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>Charles Lojo</u>	PAYEE
Address <u>Bato</u>	
WITNESS	
Name/Signature _____	
Address _____	

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>May 15, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. TESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount of <u>two hundred pesos (P 200.00)</u>	
in payment for <u>transportation expenses from Residence to</u> (Payments for substance, services, <u>Rakdell Inn, Virac, Catanduanes during the progress monitoring</u> rental of transportation should show inclusive dates, <u>for the implementation of Basic Education Research of the</u> <u>2025 BERE Grants</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>John Mark Tabor</u>	PAYEE
Address <u>Bato</u>	
WITNESS	
Name/Signature _____	
Address _____	

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>May 15, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. TESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount of <u>two hundred pesos (P 200.00)</u>	
in payment for <u>transportation expenses from Rakdell Inn, Virac,</u> (Payments for substance, services, <u>Catanduanes to Residence during the progress monitoring</u> rental of transportation should show inclusive dates, <u>for the implementation of Basic Education Research of the</u> <u>2025 BERE Grants</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>Vicente Joco</u>	PAYEE
Address <u>Bato</u>	
WITNESS	
Name/Signature _____	
Address _____	

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>April 4, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount Of <u>three hundred pesos (P 300.00)</u>	
in payment for <u>transportation expenses from Residence to Mayagway</u> (Payments for substance, services, <u>NHS to disseminate the research finding results in the</u> rental of transportation should show inclusive dates, <u>conduct of Periodic Table Buffship action research</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>Charlie Lajo</u>	PAYEE
Address <u>Bato</u>	
WITNESS	
Name/Signature _____	
Address _____	

General Form No. 2  
Revised January 1992

REIMBURSEMENT EXPENSE RECEIPT	
Date: <u>April 4, 2025</u>	No. _____
RECEIVED from <u>JANEGRACE T. DESORERO</u>	
(Name) <u>Education Program Specialist II - ALS</u> (Official Designation)	
the amount Of <u>three hundred pesos (P 300.00)</u>	
in payment for <u>transportation expenses from Mayagway NHS</u> (Payments for substance, services, <u>to residence to disseminate the research finding results</u> rental of transportation should show inclusive dates, <u>on the conduct of Periodic Table Buffship action research</u> purpose distance, inclusive points of travel, etc)	
Name/Signature <u>Garry Ebro</u>	PAYEE
Address <u>Mayagway, San Andres</u>	
WITNESS	
Name/Signature _____	
Address _____	

BATTLEDOR		Rizal Avenue, San Jose, Virac, 4800 Virac (Capitol), Catanduanes, Philippines	
SERAFIN A. ABUNDO JR. - Prop.		VAT Reg TIN 142-514-437-0000	
<b>SALES INVOICE</b>		<b>Nº 004971</b>	
Sold To:	Janengce Tesacero	Date:	2/5/25
TIN:		Terms:	
Address:	Berto, Catanduanes	OSCA/PWD ID No.:	
Business Style:		Cardholder's	
		Signature:	

QTY.	UNIT	ARTICLES	UNIT PRICE	AMOUNT
1	set	Epson Ink c03	1,200	1,200
1	pc.	lives a gb	700	700
5	ream	Coupon bond, short	200	1,000
2	pack	Yellow	150	300
1	pack	laminating Film	300	300
12	pc.	Fektel	10	120
6	pc.	Bullpen (F. Ink)	50	300
1	box	Sticky note	150	150
2	pc.	Handbook	50	100
1	box	Glue	100	100
1	roll	Double Sided Tape	220	220
1	pc.	Eraser	60	60
2	pack	Sticker Paper	250	500
2	ream	Coupon Bond, A4	200	400

	Total Sales (VAT Inclusive)	
	Less: VAT	
VATable Sales	Amount Net of VAT	
VAT-Exempt Sales	Less: SC/PWD Discount	
Zero Rated Sales	Amount Due	
VAT Amount	Add: VAT	
	<b>TOTAL AMOUNT DUE</b>	<b>6,500.00</b>

20 Bblts (2x) 4001-5000  
 BIR Authority to Print No. 069AU/2021/0000005565  
 Date Issued 10-12-2021, Valid until 12-12-2026  
 TRI-STAR PRESS & GEN. MOISE  
 TIN: 157-612-275-000 V

Cashier/Authorized Representative

Printer's Accreditation No. 069MP/2019/0000000001  
 Date Issued 01-25-2019

**THIS SALES INVOICE SHALL BE VALID FOR FIVE (5) YEARS FROM THE DATE OF ATTP**



In settlement of the following:	
Invoice No.	Amount
	200
Total Sales	
Less: SCPWD Discount	
Total Due	
Less: Withholding Tax	
Payment Due	200
Form of Payment	
Cash <input type="checkbox"/>	Check <input checked="" type="checkbox"/>

**ATTY. GENELLE MAE A. MADRIGAL**  
Bgy. 59 Puro Legazpi City, Albay 4500  
Non-Vat Reg Tin: 311-796-978-00000

SERVICE INVOICE  
**OFFICIAL RECEIPT**

No. 0346  
DATE 01-24-2025

Received from JANEGRACE TESOREPO with TIN \_\_\_\_\_  
and address at CATANDUANES engaged in the  
business of \_\_\_\_\_, the sum of  
two hundred pesos pesos  
(P 200) in partial/full payment for notarization.

Sr. Citizen TIN \_\_\_\_\_  
OSCA/PWD ID No. \_\_\_\_\_ Signature \_\_\_\_\_  
By: [Signature] Cashier/Authorized Representative

Printed Accreditation No. 067MP2021000000023  
Date Issued APRIL 05, 2021