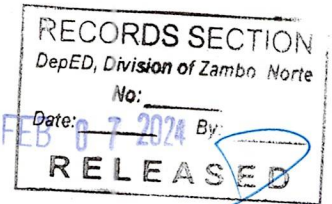




Republic of the Philippines
Department of Education

REGION IX
SCHOOLS DIVISION OF ZAMBOANGA DEL NORTE



February 6, 2024

Division Memorandum

No. 85, Series 2023

**SUBMISSION OF SCIENCE MODULES, DAILY LESSON PLANS (DLPs),
LESSONS IN POWER POINTS, INSTRUCTIONAL PORTABLE ACADEMIC
DIGEST (IPADs) AND QUESTIONS FOR TEST ITEM BANK**

TO: All Public Schools District Supervisors
All Principal In-Charge of the Districts
All Elementary and Secondary School Heads
All Elementary and Secondary Science Teachers
Other Concerned Personnel

1. In order to streamline the activity we have in the division, districts, school levels, and to avoid filing-up of one task with the end-of-the-school year on June 14, 2024 (**paragraph 2, DepEd Order No. 022, s. 2023,**) reports (which will probably commence on June 17, 2024), the following task and schedule are hereby suggested for Quarters 1 to 4. Namely:

- a. Science Writers with backlogs
in Regular/Special Modules - February 12, 2024
- b. Science DLP writers with backlogs
for Regular/Special - February 16, 2024
- c. Science Lessons in Power Point - February 19, 2024
- d. Science IPADs - February 23, 2024
- e. Science Questions for consolidation
In the division test item bank - February 26, 2024

2. In cases, wherein writers find difficulty accomplishing their tasks, it is hereby suggested that they should find or tap friends or colleagues to help them accomplish the task.

3. Teachers who were tapped by their respective grade level team leaders or chairpersons or by their district supervisors or science focal persons or coordinators in their clusters, districts, shall find time to coordinate or refer to the expertise of the Division Quality Assurance Team on Content, Language and illustration.


4. All concerned individuals who are and will be taking part of the above endeavors are advised to refer to the attached district assignment on the development of IPADs as issued relative to **Division Memorandum No. 032, s. 2023 as "Annex A"**



Republic of the Philippines
Department of Education

REGION IX
SCHOOLS DIVISION OF ZAMBOANGA DEL NORTE

5. IPAD template is also provided for reference and guidance as **“Annex B”** and **“Annex C”** as sample of Question for consolidation in the Science Item Bank.
6. Travel and incidental expenses relative to the above-stated activity will be charged against MOOE, LGU, fund (if any), or SEF. These expenses will still be subjected to the usual accounting, auditing rules and regulations.
7. Education Program Supervisor (EPS), PSDSs, PICDs, School Heads, TWGs, writers and illustrators who will be taking part of writing/submission of Modules, DLPs, Test Item writing and IPADs during **Saturdays, Sundays** or during **Holidays** are entitled to **Compensatory Time-Off (CTO) or Service Credit/s** whichever is applicable.
8. Immediate dissemination of this memorandum is enjoined.

ROY C. TUBALLA EMD, JD, CESO VI
Schools Division Superintendent 

“Annex A”

**District Assignment on the
Development of ZN (IPAD)
(Instructional Portable
Academic Digest)**

District Assignment on ZN IPAD Development in all Learning Areas

Cluster 1	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarter	Grade Level	Quarter
1	Polanco 1	161	105	1	1		
2	Polanco 2	123	55	1	2		
3	S. Osmena 1	158	93	1	3	9	4
4	S. Osmena 2	96	28	1	4		
5	Mutia	96	53	2	1		
6	La libertad	67	33	2	2		
7	Sibutad	124	87	2	3	12	2
8	Rizal	112	55			8	3
9	Pinan	160	84	3	1	12	1



District Assignment on ZN IPAD Development in all Learning Areas

Cluster	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarter	Grade Level	Quarter
2							
10	Katipunan 1	172	124	3	2	10	1
11	Katipunan 2	165	99	3	3	Kinder	4
12	Roxas 1	161	91	3	4		
13	Roxas 2	141	43	4	1		
14	Manukan 1	169	131	4	2	12	3
15	Manukan 2	114	64	4	3		

District Assignment on ZN IPAD Development in all Learning Areas

Cluster	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarter	Grade Level	Quarter
3							
16	Ponot	212	109	4	4		
17	Sindangan North	172	86	5	1	Kinder	1
18	Sindangan South	230	59	5	2	Kinder	2
19	Sindangan Central	276	231	5	3	11	1
20	Siayan	341	106	5	4	Kinder	3

Assignment on ZN IPAD Development in all Learning Areas

Cluster 4	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarte r	Grade Level	Quarter
21	Bacungan	211	125	6	1	11	4
22	Godod	151	61	6	2	12	4
23	Salug 1	121	89	6	3	10	3
24	Salug 2	108	57	7	2		
25	Liloy 1	198	180	7	1	10	4
26	Liloy 2	136	N/A	6	4		

Assignment on ZN IPAD Development in all Learning Areas

Cluster	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarter	Grade Level	Quarter
5							
27	Kalawit	173	107	7	3		
28	Tampilisan	187	103	7	4	10	2
29	Labason	284	174	8	1		
30	Gutalac 1	149	111	8	2		
31	Gutalac 2	115	33	2	4		

Assignment on ZN IPAD Development in all Learning Areas

Cluster	District	No. of Elem. Teachers	No. of Sec. Teachers	Grade Level	Quarter	Grade Level	Quarter
6							
32	Baliguian	141	48	8	4		
33	Siocon	293	168	9	1	11	2
34	Sirawai	163	102	9	2	11	3
35	Sibuco	260	90	9	3		



Schools Division of Zamboanga del Norte

znipad

Instructional Portable Academic Digest

6

“Annex B”

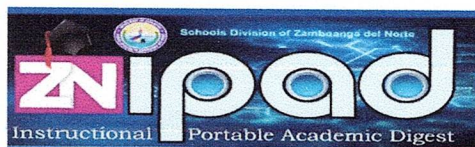
REGULAR SCIENCE

Quarter 1, Week 3, Days 1-5

Describe the appearance and uses of homogeneous and heterogeneous mixtures (S6MT-Ia-c-1)



FOR DepEdZN USE ONLY
NOT FOR SALE



Name of Student								Score:
Type of Activity	<input type="checkbox"/> Concept Notes <input type="checkbox"/> Laboratory	<input type="checkbox"/> Individual <input type="checkbox"/> Pair/Group	<input type="checkbox"/> Formative <input type="checkbox"/> Summative	<input type="checkbox"/> Others _____				
Subject & Grade Level	Science Grade 6	Quarter	1	Week	3	Day	4	Dd/mm/year
Topic	Appearance and uses of homogeneous and heterogeneous mixtures							
Learning Competency	Describe the appearance and uses of homogeneous and heterogeneous mixtures (S6MT-Ia-c-1)							
Learning Objective	Describe the appearance and uses of homogeneous and heterogeneous mixtures liquids soy sauce, vinegar, milk and calamansi							
Reminder: This IPAD can be the quiz, formative and summative bases of learners' performance. It can be compiled for their group and individual portfolios.								

Let's Know It! (Concept)

When you combine two or more materials, you did form a mixture. The mixture may be of the same or new appearance. Mixtures can either be homogeneous (uniform in appearance) or heterogenous (non-uniform in appearance).

Uses of some homogeneous mixtures are: 1. Soy sauce is for seasoning; 2. wine for parties and beverage; 3. Vinegar is for cooking Filipino dish; 4. Steel is for construction purposes; 5. Air is for breathing; 6. Blood is for replenishment of blood loose.

On the other hand, heterogenous mixtures are used for construction such as hollow blocks. Halo-halo is another example of non-uniform mixture. It is common in Filipino occasions as dessert.

Let's Find out! (Engage)

Have you ever tried combining soy sauce and vinegar? Can you describe its appearance and uses? How about calamansi and vinegar? How about calamansi and milk? Can you describe them too?

Let's Do It! (Explore)

Today, we are going to explore the possibilities of combining soy sauce, vinegar or calamansi, and milk.

Activity 1
Do Materials Change Its Appearance and Still Useful After Combining Them?

What to use?

- | | |
|--------------------------------------|----------------------------------|
| 4 plastic Teaspoons | 1 glass bottle |
| 4 plastic cups | Water jar for washing cups |
| 1 medicine dropper or drinking straw | 1 roll scotch tape for labelling |
| 1 stirrer or popsicle stick | |

What to do?

- Put 1 plastic tablespoon of soy sauce in a cup. Observe the soy sauce. Write your observation in Table 1.

Table 1. Some observable properties of soy sauce and vinegar or calamansi before and after mixing.

Material	Property	Observations	
		Before Mixing	After Mixing
Soy Sauce	Color		
	Odor		
	Taste		
	Phase		
Vinegar or calamansi	Color		
	Odor		
	Taste		
	Phase		

2. Put 1 plastic tablespoon of vinegar or calamansi in a cup. Observe the vinegar or calamansi. Write your observation in Table 1.

3. Using a dropper, add one drop of soy sauce at a time to vinegar. Observe for changes in the appearance of the resulting mixture after every drop, until you have added all soy sauce to the vinegar.
 - a. Describe the appearance of the resulting mixture as soy sauce is added to vinegar.

 - b. Can you tell if soy sauce and vinegar are still present in the mixture?

 - c. What evidence can you cite that soy sauce and vinegar are still present in the resulting mixture? _____
 - d. Briefly, describe the possible use of soy sauce and vinegar mixture. _____
 - e. Describe the type of mixture (homogeneous or heterogenous) produce when milk and vinegar combine? _____

Table 2. Some observable properties of milk and vinegar before and after mixing.

Material	Property	Observations	
		Before Mixing	After Mixing
milk	Color		
	Odor		
	Taste		
	Phase		
Vinegar or calamansi	Color		
	Odor		
	Taste		
	Phase		

1. Put 1 plastic tablespoon of milk in cup. Observe the milk. Write your observation in Table 2.

2. Using a dropper, add one drop of milk at a time to vinegar or calamansi. Observe for changes in the appearance of the resulting mixture after every drop, until you have added all the milk to the vinegar.
 - a. Describe the appearance of the resulting mixture as milk is added to vinegar.

- b. Can you tell if milk and vinegar are still present in the mixture? _____

- c. What evidence can you cite that milk and vinegar or calamansi are still present in the resulting mixture? _____
- d. Briefly, describe the possible use of milk and vinegar mixture. _____

- e. Describe the type of mixture (homogeneous or heterogenous) produce when milk and vinegar combine? _____

3. Report the results.

Let's Do More! (Evaluate)

Multiple Choice Test.

Direction: Choose the letter which **BEST** fit your answer. Then, encircle the letter.

1. Calamansi juice is used as one of the sources of vitamin C. When calamansi juice is added with vinegar, its resulting mixture is of one color. What kind of mixture is being described?
- A. The mixture is known as Calamansi juice.
 - B. The mixture is known as Calamansi-vinegar juice.
 - C. The mixture of Calamansi and vinegar is known as heterogenous.
 - D. The mixture of Calamansi and vinegar is known as homogeneous.
2. Which of the statements below, **BEST describe** the appearance of soy sauce as more drops are added to the calamansi juice or vinegar?
- A. The appearance of soy sauce on the mixture is still liquid and light dark in color.
 - B. The appearance of soy sauce does not affect calamansi juice.
 - C. The appearance of soy sauce becomes dominant as more drops are added to calamansi juice.
 - D. The appearance of soy sauce change into semi-solid as more drops are added into the calamansi juice.

References:

K to 12 Grade 6 Learners Materials
K to 12 Grade 6 Teacher Guide
UP-NISMED EQuALLS materials for Science Grades 5 & 6

DEVELOPMENT TEAM

Writer: Vesigen E. Magallanes
Illustrator: Jackylou P. Rubin
Evaluator: Mickrel Nomo Duller



Republic of the Philippines
Department of Education
REGION IX
SCHOOLS DIVISION OF ZAMBOANGA DEL NORTE

“Annex C”

SAMPLE FORMAT FOR ITEMS IN THE TEST BANK

Instruction to the writer:

1. Use the format below and make a power point.
2. One power point one competency.
3. Create a file name indicating Regular Science or Special Science, Grade level, Quarter number, Week number and Day number.

Example No 1: Regular Science G4 Q1W1D1

Example No 2: Special Science G4 Q1W1D1

4. Create a slide deck.
5. Specify the learning objective as unpacked by the Division Science Core Team in each of the slides.
6. Make two parallel items in each of the learning objective.
7. The School Science Team will quality assure the test items prior to submission to the district science team.
8. The District Science Team will review the instructional materials **(IMs)** and make corrections.
9. Final copy shall be submitted to the Education Program Supervisor in science.
10. The EPS in science together with the Division Science Core Team will review the IMs and then upload to the LR for their scrutiny.



Republic of the Philippines
Department of Education

REGION IX
SCHOOLS DIVISION OF ZAMBOANGA DEL NORTE

Model A
8SS6ES-IVa-1

Writer:

Competency: Describe the changes on the Earth's surface as a result of earthquakes and Volcanic eruptions

Learning Objective: Describe the changes on the Earth's surface as a result of earthquakes.

Question: An earthquake is the shaking of the earth's crust caused by the sudden release of energy in the rocks underground. Which of the following **DOES NOT** describe as one of the changes on the earth's surface as a result of earthquake?

- A. Tsunami
- B. Landslide
- C. Drying of crops
- D. Building destruction

Answer: C. Drying crops

Model B
5S6FE-IIIa-c-1

Writer:

Competency: Infer how friction and gravity affect movements of different objects

Learning Objective: Infer how friction affect movements of different objects

Question: The ball rolled on the grassy surface of the park and suddenly stopped. What can be inferred from the given situation? Does friction affect the motion of the ball?

- A. Friction slows down the rolling of the ball and prevents the ball to move farther.
- B. Friction opposes the direction of the ball to change its direction.
- C. Friction decreases the time of the ball to take farther distance.
- D. Friction affects the ability of the ball to take more rolling.

Answer: Friction slows down the rolling of the ball and prevents the ball to move farther.