



Republic of the Philippines
DEPARTMENT OF EDUCATION
Region X - Northern Mindanao
DIVISION OF LANA O DEL NORTE
Pigcarangan, Tubod, Lanao del Norte



Division Memorandum

No. 138 s. 2018

To: Secondary School Principals
Science Teachers Concerned
This Division

From: **ROY ANGELO E. GAZO**
Schools Division Superintendent

Subject: **DIVISION TRAINING ON CONTENT KNOWLEDGE FOR GRADE 9 & GRADE 10**

Date: March 27, 2018

1. In line with the mandates of the Department of Education to strengthen instructions in all learning areas, the Curriculum Implementation Division (CID) particularly the Science Department will conduct a DIVISION TRAINING ON CONTENT KNOWLEDGE FOR GRADE 9 & 10 on April 12 – 13, 2018 at Bebeth's Casserole, Baroy, Lanao del Norte.
2. The training aims to:
 - a. enhance the science teachers' mastery on the content knowledge for Grade 9 & 10 competencies;
 - b. improve the science teachers' delivery of instruction on the competencies which are difficult to teach; and
 - c. minimize the skipping of topics and activities due to lack of content knowledge on the competencies from the curriculum guide.
3. The number of participant/s to this training are listed in Enclosure No.2.
4. Travel expenses of the participants shall be charged against local funds subject to the usual accounting and auditing policies, rules and regulations.
5. Immediate dissemination of and compliance of this Memorandum is enjoined.

DIVISION TRAINING ON CONTENT KNOWLEDGE FOR GRADE 9 & GRADE 10

**Training Matrix
Bebeth's Casserole
April 12 – 13, 2017**

Time	Day 1	Day 2
7:30 – 8:30	Arrival & Registration	Management of Learning
8:30 – 9:00	Opening Program Lanao Norte National Comprehensive High School Leveling of Expectation	
9:00 – 10:00	Session 1 <ul style="list-style-type: none"> Describe the location of genes in Chromosomes Explain the different patterns on non-Mendelian inheritance 	Session 7 Infer the characteristics of stars based on the characteristics of the sun
10:00 -11:00	Session 2 Explain how protein is made using information from DNA	Session 8 <ul style="list-style-type: none"> Describe the internal structure of the Earth Describe the possible causes of plate movement
11:00 – 12:00	Session 3 Explain how mutation may cause changes in the structure and function of a protein	Session 9 Show which constellations may be observed at different time of the year using models
12:00 - 1:00	LUNCH BREAK	LUNCH BREAK
1:00 – 2:00	Session 4 Explain how the structure of the carbon atom affects the type of bonds it forms	Session 10 Explain how electrical energy is generated, transmitted and distributed
2:00 – 3:00	Session 5 Demonstrate an understanding of how gases behave based on the motion and relative distances between gas particles	Session 11 Infer that the total momentum before and after collision is equal
3:00 – 4:00	Session 6 Recognize the major categories of biomolecules such as carbohydrates, lipids, proteins and nucleic acids	Session 12 Apply ray diagramming techniques in describing the characteristics and positions of images formed by lenses
4:00 – 5:00		CLOSING PROGRAM

Secretariat: Reynaldo Lahoylahoy & Charlyn Aying

Documentation: Betsabe Ramil

Enclosure 2 Div. Memo No. ____s.2018

Number of Participant/s per School

School	Grade 9	Grade 10	TOTAL
1.Sultan Ali Dimaporo Memorial Integrated School		1	1
2. Sultan Naga Dimaporo Integrated School		1	1
3. Bansarvil National High School		1	1
4. Kapatagan National High School	1	1	2
5.Placida Mequiabas National High School		1	1
6. Panoloon National High School		1	1
7.Taguitic Integrated School		1	1
8. Carusa Integrated School		1	1
9. Salvador National High School	1	1	2
10. Lala National High School	1	1	2
11. Lala Proper Integrated School		1	1
12.Lanao Norte National Comprehensive High School	1	1	2
13.Diosdado Yap Sr. National High School		1	1
14. Teofila Quibranza National High School		1	1
15.Lanao Norte Provincial Science & Technology HS		1	1
16.Arsenio Quibranza National High School		1	1
17.Rufo de la Cruz Integrated School		1	1
18.Dalama Integrated School		1	1
19.Geronima Cabrera National High School		1	2
20.Diego H. Patigayon National High School		1	1
21.Maigo National High School	1	1	2
22.Liangan National High School		1	1
23.Binuni- Demologan National High School		1	1
24.Marcela Mabanta Memorial National High School		1	1
25.Pagayawan Integrated School		1	1
26.Sultan Dimasangcay Mananggolo Integrated School		1	1
27.Linamon National High School		1	1
28.Matungao National High School		1	1
29. Nunungan National High School		1	1
30. Poonapiagao National High School		1	1
31.Tagoloan National High School		1	1
32. Pantao Ragat Agro Industrial High School		1	1
33.Magsaysay National High School		1	1
34. Baloi National High School		1	1
35.Pantar National High School		1	1
36.Munai National High School		1	1
37. Sergio Cerujales National High School		1	1
38. Andres Bersales Sr. National High School		1	1
39. Kalinaw Kalilintad Integrated Peace School		1	1