



Republic of the Philippines
DEPARTMENT OF EDUCATION
Region X – Northern Mindanao
DIVISION OF MISAMIS ORIENTAL
A. Velez St., Cagayan de Oro City



DIVISION MEMORANDUM
No. 469, s. 2016

TO: **Public Schools District Supervisors**
Districts In-Charge
Secondary School Heads
Elementary School Heads
This Division

FROM: **CHERRY MAE L. LIMBACO, Ph.D., CESO V**
Schools Division Superintendent

RE: **Corrigendum and Addendum to Division Memoranda**
Nos. 384 and 445, s. 2016 (Division Science Quest 2016)

DATE: **October 14, 2016**

1. Per Division memoranda nos. 384 and 445, s. 2016, re: Division Science Quest 2016, this office hereby disseminates the following correction and additional information to the conduct of the forthcoming **Division Science Quest 2016** on October 21, 2016 at Vicente N. Chavez Memorial Central School, Villanueva, Misamis Oriental.
2. The scheduled date will be moved to **November 18, 2016** at same venue.
3. Researchers of Science Investigatory Projects enumerated hereunder are advised to submit three (3) printed copies of their study not later than October 28, 2016 to Mr. Celieto B. Magsayo, Curriculum Implementation Division (CID), Misamis Oriental Division Office, Velez Street, Cagayan de Oro City. Printed copies should only bear the name/s of the proponent/s, **NOT THE NAME OF THE SCHOOL**.
 - 3.1. Life Science – Individual:
 - 3.1.1. Mosquito Repellent Candle from *Lansium Parasiticum*
 - 3.1.2. Malunggay (*Moringa Oleifera*) Leaf Stalk Extract as Plant Nutrients Enhancer
 - 3.1.3. A Study on The Cultivation of Red Ganoderma Mushroom (*Ganoderma Lucidum*) In Industrialized Urban Areas

- 3.1.4. The Effect of Banana (*Mush Paradisiaca*) Peeling Extract and Fish Amino Acid as Fertilizer
- 3.1.5. A Comparative Evaluation of Coconut Water as Root Setting Medium for *Rhizopora Stylosa* Hypocotyl Propagation
- 3.2. Life Science – Team:
 - 3.2.1. The Mahogany Twigs and Seeds extract with Calamansi Juice as Mosquito Larvicide
 - 3.2.2. The Efficacy of Sardines' (*Sardinia Pilchardus*) Internal Organs and Gills as Organic Fertilizer of Pechay (*Brassicca Rapa*)
 - 3.2.3. Effects of Acacia Bark Extracts on Termites
 - 3.2.4. Leftover Soft Drinks as Soil Fertility Enhancer for (*Zea Mays*) Plant
 - 3.2.5. The Effects of Alugbati and Malunggay Stalk Extract to the Retardation of Mango Ripening
- 3.3. Physical Science – Individual:
 - 3.3.1. Generating Electricity Footwear Using Piezoelectric Transducer
 - 3.3.2. Water-Based Simplified Electric Insulator
 - 3.3.3. Soft Vegetable and Fruit Slicer
 - 3.3.4. Utilizing Footsteps to Generate Electrical Energy
 - 3.3.5. Assessment of Near Shore Coastal Water of Tagoloan, Misamis Oriental, Philippines
- 3.4. Physical Science – Team:
 - 3.4.1. Conversion of Raindrops' Kinetic Energy to Electrical Energy using a Panel Board stack with Piezo Electric Discs
 - 3.4.2. Tufted Sea Moss (*Cladophora Rupestris*) as Alternative Weather Detector
 - 3.4.3. Assessment of Illuminance and Thermal Comfort in Medina NCHS
 - 3.4.4. Feasibility of Scrap Paper and Alugbati (*Basella Alba*) as Biodegradable Seedling Pot
 - 3.4.5. Measuring Electromagnetic Radiation Power Density and Identifying Radiation Hotspots from Selected Cellular Base Stations
- 3.5 It is reiterated that in the interest of fair play, during oral presentations, proponents SHOULD NOT WEAR UNIFORM and/or any indicator/s that will identify them to a school. Presenters will only be given five (5) minutes to present their study to the three judges and each judge will have five (5) minutes to ask questions. A total of 20 minutes will be allotted for each presentation.
4. Listed below are the persons in- charge of the different contests:
 - 4.1. Science Quizmasters:
 - Grade 3 – Ms. Gemma J. Bagnol
 - Grade 4 – Ms. Divina P. Bagnol
 - Grade 5 – Mr. Jenny E. Padero
 - Grade 6 – Mr. Reynaldo V. Magan
 - Focal Person for Elementary – Ms. Josefina P. Plantas

Grade 7 – Dr. Lucia L. Sabayanan
Grade 8 – Dr. Pio R. Bagares
Grade 9 – Mr. Glenn M. Yana
Grade 10 – Ms. Elden Margie B. Gayao
Grade 11 – Ms. Dahlia F. Fabillar
Focal Person for Secondary – Ms. Merlie F. Balingit

4.2. Sci-Dama In-charge
Grades 3 & 4 – Ms. Asteria B. Yucada
Grades 5 & 6 – Ms. Edem Shellah T. Galagnara
Grade 7 – Ms. Jackie-Lou B. Calopez
Grade 8 – Ms. Mary Ann M. Arangcon
Grade 9 – Ms. Mr. Jerry P. Ramo
Grade 10 – Ms. Jovelyn C. Abonitalla
Focal Person – Dr. Nelson B. Absin

4.3. Science Investigatory Project Judges
3.3.1 Life Science – Individual and Team
Ms. Pura G. Villar
Ms. Jeana S. Macalood
Mr. Ricardo D. Bongcas
3.3.2 Physical Science – Individual and Team
Dr. Edna B. Nabua
Dr. Marie Emerald A. Cabigas
Dr. Catherine Anne B. Orasan
Focal Person: Ms. Aida N. Pacana

5. Traveling and other expenses of the above-named officials are chargeable to school downloaded funds/MOOE or local funds/SEF subject to usual accounting and auditing rules and regulations.

6. Contestants for Science Quiz must bring with them tagboard ($\frac{1}{4}$ size of the whole sheet for writing), chalk and eraser during the contest. Contestants for Sci-Dama may bring calculator/scientific calculator during the game.

7. Mechanics and other information of the three contests enumerated in Memorandum No. 384, s. 2016 are herein attached as enclosures.

8. Immediate and wide dissemination of this memorandum is desired.

Division Science Quiz Mechanics

1. There will only be one pupil/student-contestant per school district per grade (for Grades 3, 4, 5, 6, 7, 8, 9, 10 and 11).
2. Questions will be taken from K to 12 Curriculum Guides, except for Grade 6, which will be taken from the Philippine Elementary Learning Competencies (PELC).
3. English will be used as the official language in the conduct of the quiz, including Grade 3.
4. All contestants will answer the same set of questions in writing. Before a question is read, the contestants must raise their chalks.
5. Questions will be read twice by the Quizmaster.
6. After the second (2nd) reading, the Quizmaster shall say "GO". Automatically, the ten (10) second time - limit will begin with the word "GO" by the Quizmaster. (Should the question require computation, contestants may start writing down notes on the second (2nd) time the question is read. After the second (2nd) reading, the Quizmaster shall say "GO" and the time - limit will be extended to twenty (20) seconds.)
7. After the time limit and the bell/buzzer sounds, the contestants must stop writing and raise their tagboards.
8. The Quizmaster shall read and verify the contestants' answer.
9. There are four (4) rounds in each competition namely: Easy, Average, Difficult and Clincher. The Clincher round takes place only if there is a tie.
10. In the Easy Round, ten (10) questions will be asked; in the Average Round, five (5) questions; in the Difficult Round, five (5) questions, and in the Clincher Round, as many questions as needed.
11. Points are assigned for each question answered correctly:

Easy question	1 point
Average question	2 points
Difficult question	3 points
Clincher question	5 points
12. After the fifth (5th) question in the Difficult Round, the total number of points of each contestant are tabulated.
13. The contestant who gets the highest number of points is automatically declared the Champion; and the second (2nd) highest --- the Runner - up.
14. Should there be a tie among the contestants getting the highest score or the second (2nd) highest score, the contest continues to the Clincher Round to determine the Champion or the Runner - up as the case may be.
15. The total number of points of the tied contestants will revert back to zero (0).
16. In the Clincher Round, as many questions will be asked. Each question is assigned five (5) points. The contestant who first (1st) gets five (5) points will be declared the Winner.
17. The contestant and/or registered coach is/are the only person/s authorized to make a protest.
18. All protest should be referred to the Quizmaster before he/she reads the next question.
19. The Quizmaster, who is considered also as the Judge shall be in complete control of the contest. His/Her decision shall be final in all protests.

Division Sci-Dama Mechanics

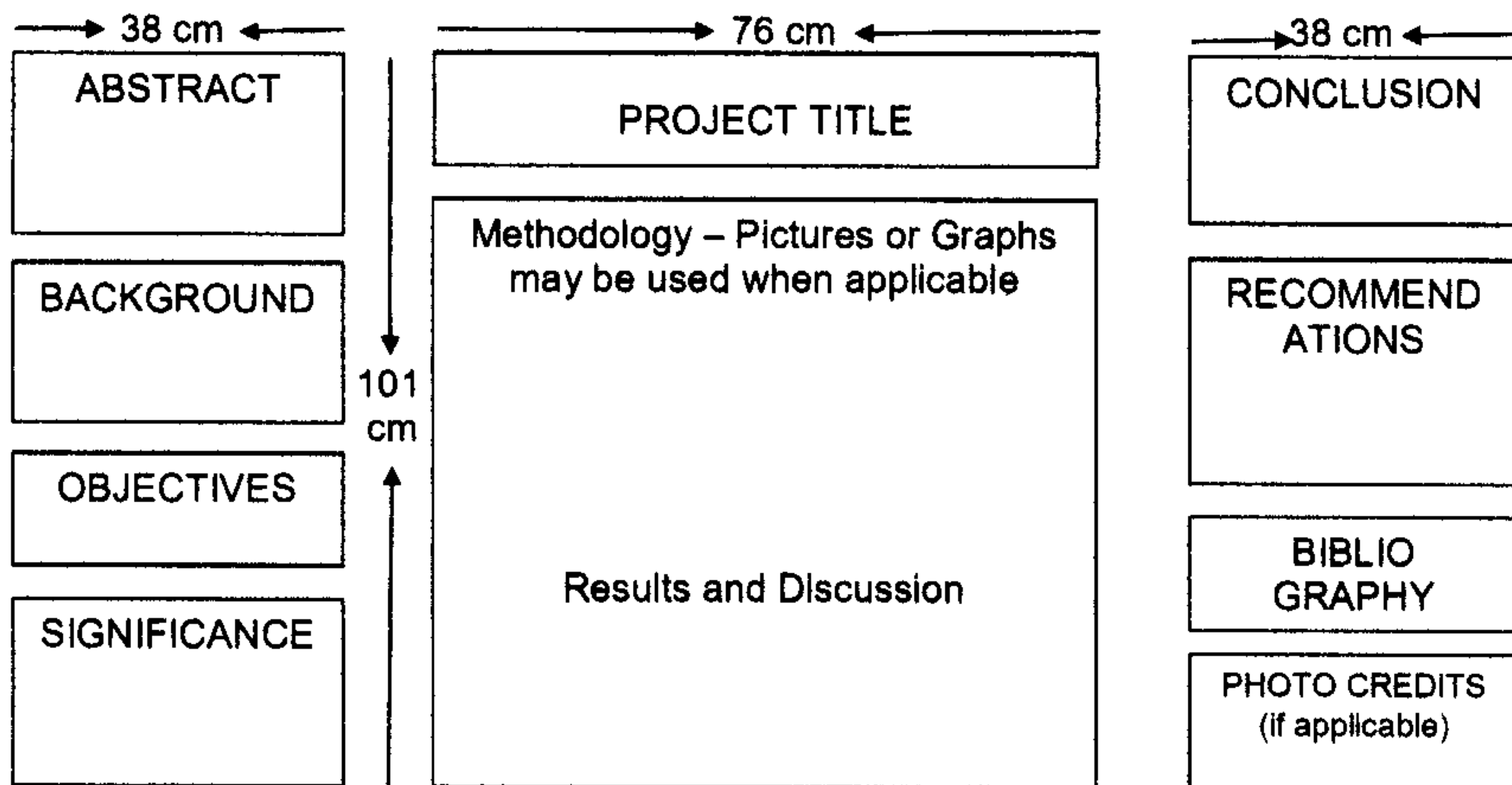
1. There will only be one contestant per school district (one for Grades 3 and 4; one for Grades 5 and 6, and one each for Grades 7, 8, 9, & 10).
2. Contestants must bring their own sci-dama board and its corresponding playing chips.
3. Teacher-coach will also serve as the arbiter, but he/she should not officiate in a match if one of the players is his/her pupil/student-contestant.
4. Damath boards are used in this game (using the four fundamental operations). Different chips are used in each of the six categories.
5. The player with the lower points/score, wins (pilde gana).
6. Knock-out system is observed in this game. However, the final match will be decided in two out three games and the winner of the deciding game will be declared as the champion.
7. The contestant and/or registered coach is/are the only person/s authorized to make a protest.
8. All protest should be referred to the person in-charge immediately, before the next game will be called.
9. The person in-charge shall be in complete control of the contest. His/Her decision shall be final in all questions/ protests.

SCIENCE INVESTIGATORY PROJECT
Life/Physical Science
Individual/Team Category

RATING SHEET

CRITERIA	POINTS
<p>1. CREATIVITY, RESOURCEFULNESS & INVENTIVENESS</p> <p>a) Creative ability in presenting the problem; in the approach to solve the problem; in the analysis and presentation of data; and in the use of equipment</p> <p>b) Innovative design/new idea shown</p> <p>c) Intelligence and imagination in finding ways/means to undertake the project</p>	30%
<p>2. SCIENTIFIC THOUGHT AND ENGINEERING SKILLS</p> <p>a) Scientific Thought</p> <ul style="list-style-type: none"> - Clear and unambiguous statement of the problem - Well-defined objectives and procedures - Clearly recognized/delineated variables - Adequate data to support conclusions <p>b) Engineering Skills</p> <ul style="list-style-type: none"> - Clear and relevant objectives - Significant improvement over previous alternatives <p>c) Potential Contributions/Practical Value</p>	30%
<p>3. THOROUGHNESS</p> <p>a) Familiarity with scientific literature in the studied field</p> <p>b) Awareness of other approaches or theories</p> <p>c) Appropriateness of methodology</p>	15%
<p>4. RESEARCH SKILLS</p> <p>a) Use of laboratory equipment/innovative resources</p> <p>b) Appropriate, orderly and effective presentation of data</p> <p>c) Clear and thorough discussion of the project</p>	15%
<p>5. PRESENTATION SKILLS</p> <p>a) EXHIBIT (5%)</p> <ul style="list-style-type: none"> - Clear, orderly and effective presentation of the project - Presentation of results - Conformity with the required physical specifications <p>b) ORAL PRESENTATION (5%)</p> <ul style="list-style-type: none"> - Clear and thorough discussions of the project - Clarity and conciseness of explanation pertaining to important aspects of the project - Presentation aided by AV-materials - Over-all Personality <ul style="list-style-type: none"> ➤ Self-confidence ➤ enthusiasm 	10%
TOTAL SCORE	

SCIENCE INVESTIGATORY PROJECT DISPLAY FORMAT



NOTE: Use SETS OF ANY PAPER OR BOARD. NO TARPAULIN is allowed!