

DIVISION MEMORANDUM

September 18, 2015

No. 129s. 202015

2015 Division Math and Science Festival

To: Public Schools District Supervisors
Elementary and Secondary School Heads
Teachers

1. The DepEd-Benguet will conduct Division Math and Science Festival for the school year 2015-2016 will be held at Alejo M. Pacalso Memorial National High School, Bua, Itogon Benguet on October 21-23, 2015 with the theme; **Environmental Protection and Conservation of the Ecosystem.**
2. This is an annual academic competition to promote Mathematics Science and Technology consciousness among the youth and identify the most creative/innovative and best researchers who will represent the division to the Regional Math and Science Festival. **The schools are encouraged to promote Science and Technology Investigatory Project and Mathematics Investigations that will address the environmental protection and conservation of the ecosystem.**
3. Arrival of Participants and registration will be at Alejo M. Pacalso MNHS on October 21, 2014 at 1:30 PM. Coordination meeting of Management will be held same venue at 3:00 PM and working committee meeting will at the Division Office on October 20, 2014 at 1:30 PM
4. Participants to the said festival are the first place winners for each district in all competing events. **See attached list of the activities.**
5. Elementary and Secondary school are encouraged to submit Science Investigatory Projects and Mathematical Investigation. Project writ-up must be in three copies, short folders, to be submitted at the division office on or before October 14, 2014. Including the list of participants per district
6. Working committees and guidelines for the conduct of the festival are attached as enclosure to this memorandum.
7. Registration fee for the festival is two hundred fifty pesos (Php. 250.00) shall be collected per participant for miscellaneous expenses. Payments through check must be in the name of Alejo M. Pacalso Mem. National High School.
8. Travel, registration fee and other expenses of participants shall be charged against PTA or local funds subject to the usual accounting and auditing rules and regulations.
9. Immediate dissemination of this memorandum is desired.


FEDERICO P. MARTIN, Ed.D., CESO VI

OIC Office of the Schools Division Superintendent

Subject Area	Easy	Average	Difficult	Clincher/Do or Die
Math	15 sec	30 sec	60 sec	To be announced by the Quiz Master
Science	10 sec	15 sec	30 sec	

Math Quiz: The Individual Category will be written form while Team (Elementary & Secondary) category will be done written oral (Same with MTAP)

- f. There shall be Easy, Average and Difficult rounds of five (5) questions per category in Science, while in Math ten (10) easy questions and five (5) questions each for average and difficult category. Each correct answer for easy round is given two (2) points, average round three (3) points and difficult round five (5) points. In case of tie/s, clinchers/do or die questions will be given until the tie is broken. Each contestant will be given answer sheets to write their answers.
- g. The quiz master will read the questions twice. After the second reading, the quiz master will say "GO" and the time to start writing their answer will begin. The buzzer sounds after the given time limit and the contestants will raise their answers for recording and verification by the proctors and board of judges.
- h. If the proctor cannot determine the validity of the answer, the Board of Judges will decide on the matter. The decision of the board of judges is final.
- i. The duly registered coach of the contestant is only the authorized person to make protest. All protest should be referred to the board of judges before the quiz master reads the next question. No protests will be entertained after the quiz master has read the next question.
- j. There shall be separate participants for the individual and team category for math quiz (Elementary and Secondary).
- k. Any violation of the aforementioned rules shall cause the disqualification of the contestant/s concerned.
- l. All participating coaches (Elementary & Secondary) shall submit one (1) questions Easy, Average and Difficult to be submitted on or before October 2, 2015

Math Investigation (Cluster 1 and 2, Individual and Team Categories)

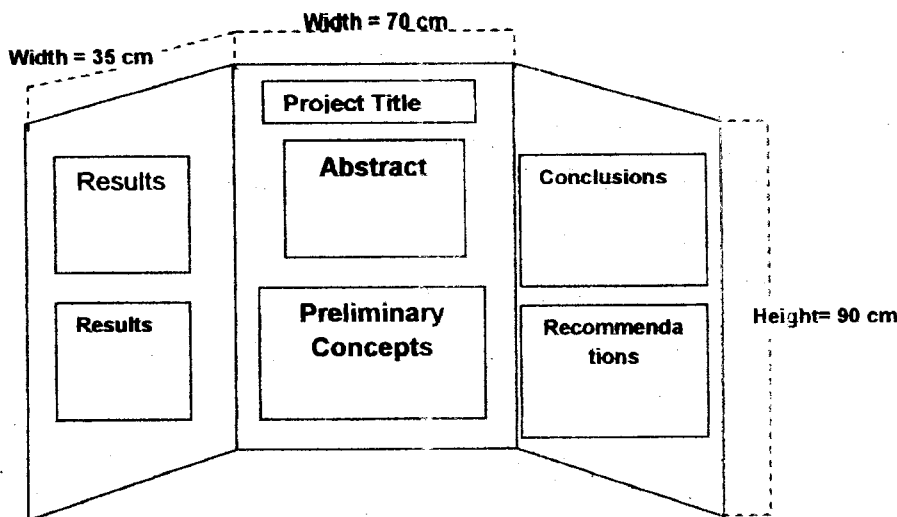
Is an open contest to all secondary schools regular (Cluster 1) and science classes (Cluster 2), individual and team categories. Math research in Elementary and Secondary entered under the physical science entry will be forwarded to division office as entry to the said contest.

Submit write-up in 3 copies (Team and Individual)

The team category will composed of 2 to 3 members with one adviser and separate participants for the team category.

Exhibit: Mathematical Investigation

Size of Project



Contested Activities

Activities	Elementary	Secondary
Quiz		
Math	3 participants (1 for Individual and 2 for the team 1 st and 2 nd placers per district)	3 participants (1 for Individual and 2 for the team) 1 st and 2 nd placers per district
Science	Grade 3-6 (1 st and 2 nd placers per grade level)	Grade 7-10, (1 st and 2 nd placers per grade level)
Damath		
	Whole No. (Grade 3 - 4) 1 Participant per district	Grade 7-10 (Integers, Fractions, Radicals and Polynomials Damath) 1 st placer only
	Fraction Damath (Grade 5-6) 1 Participant per district	
Sci-Dama		
	Water Patrol (Grade 3-4) 1 Participant per district	Grade 7-10, (Electro, Sci-Notation, THI, Thermo Dynamics) Sci-dama
	Power Patrol (Grade 5-6) 1 Participant per district	
Math Research/MI	None	Open for all schools Cluster 1: Regular Classes Cluster 2: Science Classes
Science Investigatory Project/SIP	Open for all schools Team (Life and Physical as one) Individual (Life and Physical as one)	Open for all schools Cluster 1 : Physical Science Team and Individual, Life Science Team and Individual Cluster 2: Physical Science Team and Individual Life Science Team and Individual Note: Cluster 1 & 2 combined
Teacher Category		
1. Action Research		
Math	Top 3 winners regardless of grade level	Top 3 winners regardless of grade/year level
Science	One per grade level	One per grade/year level
2. SIM		
Math	Top 3 winners regardless of grade level	Top 3 winners regardless of grade/year level
Science	One per grade level	One per grade/year level
3. Club Adviser - Elementary	One (1) Science and One (1) Math Club Adviser per district	One (1) Science and One (1) Math Club Adviser per district
Mathematics	documents to be submitted on or before October 21, 2015 at the division office	documents to be submitted on or before October 21, 2015 at the division office
Science		
Club Adviser - Secondary		
Mathematics		
Science		

Note:

All SIM and Researches (MI, SIP & Action Research) shall be submitted in the 3 copies and list of participants on or before October 14, 2015.

Guidelines on the following contested activities:

↓ **Math and Science Quiz (Oral/Quiz Bee Type)**

- Participants to the Math and Science quiz are the district champions & 1st Runner up in the Elementary and Secondary.
- The Division Science and Math quiz shall be conducted in a quiz show format wherein all contestants are seated facing the stage or board while math quiz individual category shall be in written.
- The Math Quiz will be composed of Easy (to be solved mentally), Average and Difficult questions to be answered with a written solution in papers to be distributed during the event.
- "Clincher" or "Do or Die" questions will be given in case of ties.
- Science Quiz will be composed of Easy, Average (in multiple choice type) but not for the Difficult and Clincher questions.

Criterion on Mathematics Investigation (Write-up)

A) Use of Notation (2pts)

Achievement Level	Descriptor
0	The student does not use appropriate notation and terminology
1	The student uses some appropriate notation and terminology
2	The student uses appropriate notation and terminology in a consistent manner and does so through the work.

B) Communication (3 pts)

Achievement Level	Descriptor
0	The student neither provides explanations nor uses appropriate forms of representation.
1	The students attempt to provide explanations or use some appropriate forms of representations.
2	The student provides adequate explanations or arguments, and communicates them using appropriate forms of representation.
3	The student provides complete, coherent explanations or arguments, and communicates them clearly using appropriate forms of representation.

C) Patterns (5 pts)

Achievement Level	Descriptor
0	The student does not attempt to use a mathematical strategy.
1	The student uses a mathematical strategy to produce data.
2	The student organizes the data gathered.
3	The student attempts to analyze data to enable the formulation of a general statement.
4	The student successfully analyzes the correct data to enable the formulation of general statement.
5	The student tests the validity of the general statement by considering further examples.

D) Generalization (5 pts)

Achievement Level	Descriptor
0	The student does not produce any general statement consistent with the patterns and/or structures generated.
1	The student attempts to produce a general statement that is consistent with the patterns and/ or structures generated.
2	The student attempts to produce a general statement that is consistent with the patterns and /or structures generated.
3	The student expresses the correct general statement in appropriate mathematical terminology.
4	The student correctly states the scope or limitations of the general statement.
5	The student give a correct, formal proof of the general statement.

E) Use of Technology (3 pts)

Achievement Level	Descriptor
0	The student uses a calculator or computer for only routine calculations.
1	The student attempts to use a calculator or computer in a manner that could enhance the development of the task.
2	The student makes limited use of a calculator or computer in a manner that enhances the development of the task.
3	The student makes full and resourceful use of a calculator or computer in a manner that significantly enhances the development of the task.

F) Use of Work (2pts)

Achievement Level	Descriptor
0	The student has shown a poor quality of work.
1	The student has shown a satisfactory quality of work.
2	The student has shown an outstanding quality of work.

Oral Defense (3pts)

Display (2pts)

Reminders: President, Vice-President, Secretary and Treasurer of the Math and Science officers should report morning of October 8, 2014 and all officers and committees should be present during the meeting at Tublay School Home Industries – Main on October 8, 2014 at 3:00 PM.

Action Research

Action Research (DepEd Format)

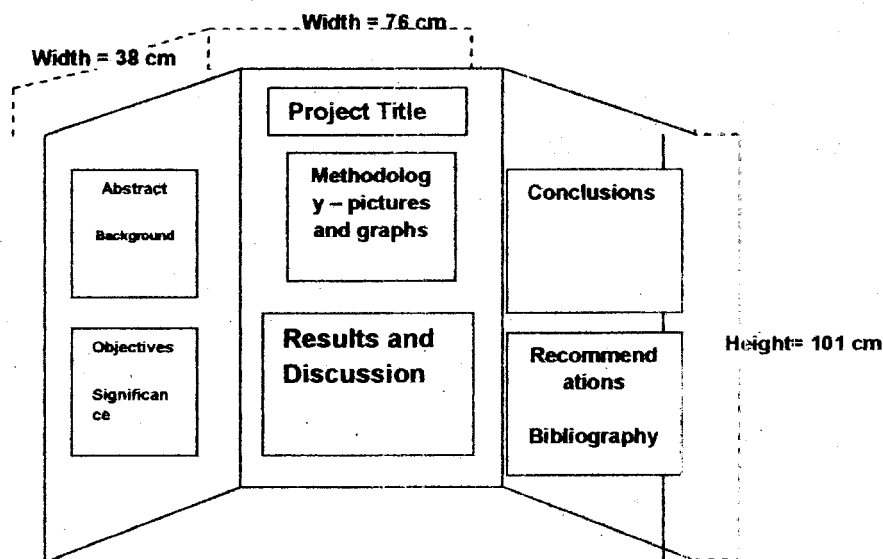
- I. Situation
- II. Problem
- III. Generation of Alternative Solutions
- IV. Plan of Action
 - a. Objective
 - b. Time frame
 - c. Target subject
 - d. Activities to be Undertaken
- V. Presentation and Interpretation of Results
- VI. Conclusion and Recommendation
- VII. Reflections
- VIII. Bibliography, Appendix and other attachments

Target Subjects	Teachers Involved	Actions	Expected Result

- e. Evaluation Criteria
- f. Research Design

Note: Write-ups for Action researches and Strategic Intervention Materials (SIM) for Math and Science will be submitted in 3 copies on or before September 29, 2014.

**The Exhibit: Science Investigatory Project
Size of Project**



The project display using sets of any paper or board summarizes the research project and must focus on the proponent's work for this year's study, and if applicable, with only minimal reference to previous research.

Required to be displayed: Science Investigatory Project: a) Abstract b) Background c) Objectives d) significance e) Schematic diagram of the research methodology f) Data g) Results and discussion h) Conclusions i) Recommendations (Include illustrations and graphs)

Note: proponent should not include his/her face in the project's procedure/illustration in the display.

Required to be presented by the Project Proponent to the BOJs during the exhibit:

- Copy of the required forms
- Copy of the research write-up
- Logbook or project data book or student journal complete with dates of entry, number of pages and all other details (refer also at ISEF students handbook)

129.2015

Enclosure to Division Memorandum No. 078 s. 2014 (2014 Math & Science Festival)

SEARCH FOR MATH & SCIENCE CLUB ADVISER

Objective of the Search is to identify and give recognition to public elementary and secondary teachers which have been effective and outstanding raising the quality of education particularly in Mathematics and Science.

GENERAL GUIDELINES

1. The search is open to all public elementary and secondary Math & Science teachers.
2. Documents to be assessed are those done for CY 2013-2015 only.
3. Selection shall be done in the district. The first three (3) winners shall be given certificates of recognition in the district level. Only the first place winner in every district shall be the entry to the Division level.
4. The timetable for the search is as follows:
 - a. Submission of documents and Evaluation of teachers to determine District Winners
- October 5- 9, 2015
 - b. Awarding of District Winners
- October 12, 2015
 - c. Submission of District Winners to the Division Office – October 21-23, 2015
 - d. Evaluation of documents
- October 26-30, 2015
 - e. Validation of documents by the Division Search Committee
- November 2-27, 2015
 - f. Awarding of Division Winners
5. The Search Committee shall be composed of the following:
 - A) District Level

District Supervisor/Coordinating Principal	Chairman
Elementary/Secondary School Heads	Members
 - B) Division Level

Schools Division Superintendent	Chairman
Asst. School Division Superintendent	Co Chairman
Education Program Supervisor	Members

CRITERIA FOR OUTSTANDING MATH / SCIENCE CLUB ADVISER

1. INSTRUCTIONAL COMPETENCE & TEACHING EFFECTIVENESS	POINTS 40 Pts	Rating
A. Performance Rating (Average of 3 rating period)	10	
B. Class observation by the SH (Average of 8 recent observations)	10	
C. Instructional Materials Made (Attached Titles and copy/copies)	10	
D. Research/Publications /Project (Attached compilation/Terminal Report)	10	
2. Accomplishment Report for Math/Science Activities	25 Points	
(From January to December 2013, January to December 2014 January to October 2015) <ul style="list-style-type: none"> • Make report with photo label it, the accomplishment made for math or science club for the during of 3 years from January 2013 to October 2015. (include Special features & updated bulletin Board) 		
3. COMMUNITY INVOLVEMENT	10 Points	
<ul style="list-style-type: none"> • List of community activities conducted or involvement and narrative report with photo if possible. (5pts) • Membership to Professional Organization Chairman (W/ accomplishments) - 5 Member (w/ accomplishments) - 3 		
4. PROFESSIONAL	5 Points	
Seminars/ Trainings Attended <ul style="list-style-type: none"> • National - 5 • Regional - 3 • Division - 2 • District - 1 • School - 0.5 		
5. PROFESSIONAL & COMMUNITY AWARDS RECEIVED (for the last 5 years)	5 pts	
<ul style="list-style-type: none"> • National - 5 • Regional - 4 • Division - 3 • District - 2 • School - 1 		
6. POTENTIAL AND CHARACTER	15 pts	
a. Good Human Relations in School & Community - 5 pts <ul style="list-style-type: none"> • Certification from Barangay Captain/ PTCA - 3 • Certification from School Head - 2 		
b. Interview by /Division District Search Committee - 10 pts		
TOTAL	100 Pts.	

Steering Committee**Chairman: Federico P. Martin, Ed.D., CESO VI, Schools Division Superintendent****Co- Chairman: Nestor Bolayo OIC/Ass. Schools Division Superintendent****Rizaliyn A. Guznian, Chief, Curriculum Implementation Division****Members : Wilfred C. Bagsao, ESP-Mathematics**

Mila T. Calinging, Ed.D., EPS-Science

Venue: Noela Fagyan, Ed.D. P-I, Alejo M. Pacalso Mem National High School

Melchor Tican Coordinating Principal of Itogon 1

Martin Napeek, P1 of Pacalso Elementary School

Elena Tanas P 2 of Tuding Elementary School

Note: Committees/Technical Working Group to be followed.