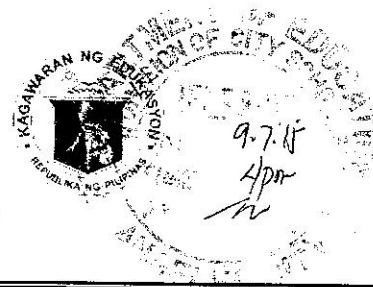


Department of Education
Region III
DIVISION OF CITY SCHOOLS
Angeles City

Jesus Street, Pulungbulu, Angeles City
Tel. No. : (045) 322- 4702 / Fax No.: (045) 887- 6099



September 7, 2015


DIVISION MEMORANDUM

No. 290 s. 2015

TO: Heads of Public Secondary Schools
Heads of Public Elementary Schools

DIVISION SCIENCE AND MATH FESTIVAL

1. This is to announce that the 2015 Division Science and Math Festival shall be held at the Bonifacio V. Romero Memorial High School and Epza Resettlement Elementary School, Epza Resettlement Angeles City on September 25, 2015.
2. The Theme for Science Fair this year is "Environmental Protection and Conservation of the Ecosystem".
3. The activity aims to :
 - 3.1 To provide learning experiences that will increase the learner's 21st century skills in Mathematics and Science.
 - 3.2 To realize the importance of the subjects through games and other recreational activities.
 - 3.3 To awaken greater interest and discover learners who can represent the division in the regional and national competitions.
4. Participants in these Division Activities are the Students and Teachers who won in the School level Science and Math Fair.
5. The following enclosures are attached:
 - 5.1 Contest Guidelines and Criteria for judging of different Science Contest
 - 5.2 Working Committee and Assignment of Contest administrators in Science
 - 5.3 Contest Guidelines ,Contest administrators and Working Committee in Math
6. Teacher-Coaches and Science & Math District coordinators for Elementary and School Coordinators for Secondary are authorized to attend this activity on official business.
7. Wide and prompt dissemination of the content of this memorandum is requested to ensure full participation of all concerned.


LEILANI S. CUNANAN, CESO VI
OIC- Schools Division Superintendent

ASSIGNMENT OF CONTEST ADMINISTRATORS

A. SCIENCE

LEVEL	CONTEST CATEGORY	CONTEST ADMINISTRATOR	SCHOOL
ELEMENTARY (Pupils)	1. SCIENCE QUIZ		
	Grade 4	Ms. Reliza D. alfonso	Malabanias Integrated School
	Grade 5	Ms. Lorna D. Lacsina	Epza Resettlement Elementary School
	Grade 6	Mr. Enrique M. Pallasigue	GRLIS
	1. SIP	Mr. Bryan S. Samio	Cut Cut Elementary School
	2. Odyssey of the mind	Ms. Jasmin Hernandez	AES
	3. Science Art Contest	Mr. Menendro Timbol	CLEMENDES
	Grade 4		
	Grade 5		
	Grade 6		
	4. Robot- Tech	Mr. Reggie Bondoc	SRES
SECONDARY (Students)	1. SCIENCE QUIZ		
	Grade 7	Ms. Regina Bondoc	RLMHS
	Grade 8	Ms. Floreann A. Basco	GRLIS
	Grade 9	Ms. Tricia Superio	Malabanias Integrated School
	Grade 10	Ms. Analiza Coricor	ACNHS
	2. SIP	Ms. Nerissa N. Valdez	FGNMHS
	3. Essay Writing	Ms. Juliet Santos	BVRHS
	4. Poster Making	Ms. Editha Hipolito	ACNTS
	5. Robot- Tech	Mr. Reggie Bondoc	SRES
SCHOOL	AVP OF BEST TEACHING PRACTICES	Ms. Kerima Estrella Mr. Arnie Guevarra	CMRICTHS ACSHS
TEACHERS (Elem & HS)	1. SIM	Ms. Aileen Sison	NV15IS
	Grade 4-6		
	Grade 7-10		
	2. INNOVATION OF IM's	Ms. Anna Cristina Gonzales	SDIS
	3. IMPROVISATION OF IM's	Ms. Rosanna Torres	SBHS

COMMITTEE	CHAIRMAN/COORDINATOR
1. CONTEST- over all	Lolita B. Bautista
2. CONTEST VENUES	Lutgarda De Jesus
3. MEDALS , CERTIFICATES & PLAQUES	Arnel Guevarra
4. JUDGES/USHERETTE	Regina Bondoc and Lutgarda De Jesus
5. FOOD	Reliza D. Alfonso
6. PROGRAM INVITATION & TARPULIN	Nerissa N. Valdez and Rossana Torres
7. DOCUMENTATION	Editha Hipolito and Enrique Pallasigue
8. REGISTRATION	Kerima Estrella and Analiza Coricor
9. Collating / tallying of results	Menandro Timbol and Jennifer Praza

CONTEST GUIDELINES, CONTEST ADMINISTRATORS AND WORKING COMMITTEE IN MATH

ACTIVITY	School in-Charge	No. of Participants	General Guidelines	Note:
MATH QUIZ				All questions and items will be prepared by Mrs. A. B. Gueco
Elementary Level	MIS	3 pupils per grade level (per District)	20 Questions to be answered within 1 hour	
Secondary Level	CMRICTHS SBHS	1 student per grade level per School	Last 3 items must be answered with complete solutions	
MATH TRAIL				
Elementary Level	NV15IS	3 pupils (1 G4, 1 G5, 1 G6) per District		
Secondary Level	RLLMHS ACSHS	4 students (1 per Grade Level) per School		
SUDOKU				
Elementary Level	GRL LIS	3 pupils per grade level (per District)	G1 & G2 - 3 x 3 G3 & G4 - 4 x 4 G5 & G6 - 5 x 5 G7 - G10 - 6 x 6	
Secondary Level	ACNTS ACNHS	1 student per grade level per School		
Program Invitations Certificates Tokens	BVRHS FGNMHS			

Guidelines and Criteria for Different Science Contest

I. Audio Video Presentation (AVP) of Best Teaching Practices in Science (one(1) AVP per school)

1. Each school in the elementary and secondary should submit one (1) entry of an audio video presentation (AVP).
2. Video presentation should follow the concept of presenting the school's best practices in teaching science.
3. Duration of the video must be 5-7 minutes only. Deduction of 1 point per second will be applied in the quality of production when the presentation exceeds to 5 minutes.
4. The use of additional plug-ins installed software is allowed.
5. AVP entries should be in DVD, MP4, WMV, AVI or FLV format.
6. Videos should be an original work of the student-teacher participants and shall not infringe on any copyrights or any rights of any third parties.
7. Video presentation will be judged based on the criteria below:
 - a. **Content- 15 %**
 - Concept – how closely the video covers the specified components of the specific topic or concept
 - Creativity- the overall originality of the video; use of original ideas, illustrations, and style
 - b. **Quality of Production – 30 %**
 - Visual Aesthetics – the appearance of the video
 - Cinematography- quality of the audio, lighting, camera steadiness
 - Adherence to time limit
 - c. **Technical Skill – 30 %**
 - Camera operation
 - Video and Audio Editing
 - d. **Final Product – 25 %**
 - Cohesiveness
 - Overall Creativity
 - Overall Accuracy of Information
 - Overall Video Quality

II. SCIENCE QUIZ (Grades 4,5 and 6 (Elementary) Grades 7,8,9,10 (Secondary))

1. Participants to the Science Quiz are Districts' 1st, 2nd and 3rd place winners in Grades 4, 5 and 6 for Elementary and School Level winners in Grades 7,8,9 and 10 for Secondary
2. The Division Finals of the contest shall be conducted in a Quiz Show Format.
3. There shall be four (4) rounds for all categories: Easy, Average, Difficult, and Clincher. There shall be ten (10) easy questions, five (5) average questions, and three (3) difficult questions. All contestants shall answer all questions in the 3 rounds. Each correct answer in every round will be given corresponding points, to wit: Easy 1 point; Average 3 points; Difficult 5 points
4. Each contestant shall be provided with answering materials. (chalk and show-me-board)
5. Each question must be answered within the time allocated. Ten (10) seconds for identification part, and thirty (30) seconds for questions that require solving. Quizmaster shall read each question twice and the time shall start only after the quizmaster says "GO".
6. The contestant must write his/her final answer on the Show Me Board. If a contestant wishes to change his/her answer, the former answer should be erased and the final answer written.
7. All answers must be spelled correctly. If the answer is a proper noun, capitalization of the first letter of the word is also a basis in declaring an answer correct.

8. Questions shall indicate the number of significant figures for numerical answers. Use of calculator is not allowed.
9. After the time limit has expired, each contestant must show his/her answer by raising the show-me-board before the quizmaster reads the correct answer. The proctors shall read and acknowledge whether the answer of each contestant is correct or not.
10. If there is a query on the correctness of the answer, the validity of the answer will be determined by the Board of Judges. The decision of the Board of Judges is final. Solutions may be checked by the Board of Judges if needed.
11. The total score of a contestant after three rounds shall be his/her score. The contestant with the highest score after the three (3) rounds shall be declared as the first place winner, the second highest-second place winner, the third highest-the third place winner, and so on.
12. In case of a tie, the Clincher Round shall be played. It will be a knockout system between or among the contestants with equal scores until a winner emerges. The first one who can answer correctly will be declared the winner.
13. The duly registered contestant is the only person authorized to file a protest. All protests shall be referred to the Board of Judges before the quizmaster reads the next question. No protest shall be entertained by the Board of Judges when the quizmaster started reading the next question.
14. Any DepED personnel related by affinity or consanguinity (up to the third degree) to any contestant shall be disqualified in any of the committees involved in the planning and preparation of questions for the quiz nor can they act as coach of any contestant.
15. Any violation of the aforementioned rules shall cause the disqualification of the contestant concerned.

III. ODYSSEY OF THE MIND (Hands On-Minds On Activity) Grade VI

1. The contest is a hands-on minds-on activity where each contestant will have to answer questions, perform a science activity by following specific directions that require cognitive and psycho-motor skills and fluency in oral communication of science ideas and concepts
2. Each contestant will have to go through 5 learning stations (LS) starting from Learning Station 1 (LS1) to LS5.
3. Each LS has a learning packet, directions to follow IN PRINT.
4. Individual LS is manned by a member of the Board of Judges who acts as the evaluator of the learning outcome.
5. Performance in each LS is under time pressure. Communication skills, speed, accuracy and correctness of activity results called for are being assessed.
6. The hands-on minds-on activities will focus on any of the following content standards/topics:
 - Living Things and Their Environment Force, Motion and Energy
 - Matter Earth and Space
7. A Performance Rubric will be used to rate the performance of each contestant in every learning station
8. Awarding of the top three (3) winners will be after the event.

IV. ESSAY WRITING CONTEST (Secondary Level)

1. The Essay Writing Contest is open to students from grades 7 to 10 who won in the school level competition. There must be only one entry per school.

2. Essay Writing Contest will be conducted on-the-spot at the division contest level based on a given topic/theme to be announced by the contest administrator.
3. The Division Champion automatically becomes the division entry to the regional contest level.
4. Essay must be 500 to 800 words, and legibly written in double space in an intermediate writing pad (long). Every article, definite and infinite is considered one word. No abbreviation is allowed, spell out. Less or more than 800 words not qualified.
5. The essay must be an original concept of the author and must not have been published in any way or form.
6. Essay submitted for the contest will become the property of the organizing agencies and can be published and/or used for its advocacy initiatives without additional compensation to the author, they will be however, properly acknowledged.
7. Decision of the judges is final and irrevocable.
8. Entries for the contest will be judged based on the following criteria.
 - a. **Substance – 40%**
 - Ideas and Content
 - Clear focus with details
 - Adherence to the theme/topic
 - b. **Logic – 30%**
 - Organization and Coherence
 - Sentence fluency (constructed for flow)
 - c. **Style and Presentation – 30%**
 - Creativity (original and fresh)
 - Word choice (precise, creating visual image)
 - Youth voice (compelling and engaging)

V. **SCI -ART CONTEST (From each Grade Level 4,5 and 6)**

1. The participants in the division level are the 1st, 2nd and 3rd place winners who won in the district level from Grades III, IV, V, and VI.
2. The contest will revolve around the theme which will be announced by the contest administrator during the contest proper.
3. The materials which will be used for visual artistry will be provided by the administrator during the contest proper. The required base paper to be used during the contest, however, is an illustration board (size: ¼).
4. The allotted time for the contest is one and a half (1½) hours, after which all entries shall be submitted to the contest administrator. Contestants may decide to submit his/her sci-art earlier without waiting for the lapse of one and half (1½) hours. Late submission shall be deducted 1% from the total for every extension of five (5) minutes. A fraction of five (5) minutes shall already be considered five (5) minutes for purposes of the deduction.
5. Each sci-art shall be identified by a number that corresponds to the number and identity of the contestant in the registration form for the judging process.
6. Decision of the Board or Judges is Final.
7. Judging shall be based on the following criteria:
 - a. **Originality and creativity** **40%**
 - b. **Relevance to the theme** **40%**
 - c. **Over-all impact** **20%**
 - TOTAL** **100%**

VI. ON THE SPOT POSTER-MAKING CONTEST (Secondary Level)

1. Only one (1) contestant per school shall participate in the contest.
2. The poster should revolve around the theme which will be announced by the contest administrator during the contest proper.
3. The contestant shall bring their own materials, illustration board of 20" x 30" and pastel color shall be used. Borrowing of materials from other contestants shall not be allowed.
4. The allotted time for the contest is two (2) hours after which all entries shall be submitted to the contest administrator.
5. Each poster shall be identified by a number that corresponds to the number and identity of the contestant in the registration form for the judging process.
6. Judging shall be based on the following criteria:
 - a. **Originality and creativity** 40%
 - b. **Relevance to the theme** 40%
 - c. **Over-all impact** 20%
 - TOTAL** 100%

VII. A. ROBOT-TECH CONTEST (Elementary)

1. Participant are Elementary pupil from any grade Level who are the 1st, 2nd and 3rd place District winner in Robot- Tech Contest.
2. Material used: LEGOS
3. CRITERIA FOR JUDGING
 - a. **Creative Design** 30 points
 - Creative Appearance
 - Interactive Behavior
 - b. **Technical Design** 30 points
 - Good Engineering
 - Stable Structure
 - c. **Presentation** 30 points
 - Successful/ Stable Demo Clear
 - Concept in presentation
 - Over-all Appearance
 - d. **Justification** 10 points

B. ROBOT-TECH CONTEST (Secondary Level)

(Category- Sumobot, Fire Fighting Robot, Autonomous, Innovative, Humanoids Challenge)

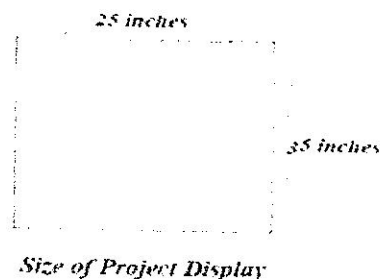
1. Participant is secondary student from any grade level who is the School winner in Robot- Tech Contest.
2. Material used: LEGOS
3. CRITERIA FOR JUDGING
 - a. **Creative Design** 30 points
 - Creative Appearance
 - Interactive Behavior
 - b. **Technical Design** 30 points
 - Good Engineering
 - Stable Structure
 - c. **Presentation** 30 points

- Successful/ Stable Demo Clear
 - Concept in presentation
 - Over-all Appearance
- d. Justification

10 points

VIII. SCIENCE INVESTIGATORY PROJECTS (Life/Physical Science- Team and Individual, Grades 5 -6)

- Participants in the Research Congress are Grades V/VI, District 1st, 2nd and 3rd place winners, Individual and Team (2 pupils).
- Science research/investigatory projects should be new (not repetition of years back projects) or continuation of the previous year's project. Each project should have one Research Adviser.
- Paper presenters (District Winners) are required to submit to the Abstract of the Research and Five (5) hard copies of the full version of the research paper (in double-spaced short- sized bond paper) on or before September 21,2015, until 3pm ,to Dr. Estrabillo at the Division Office. Late submission will invalidate the entry. A PowerPoint presentation shall be used.
- Abstract on A4size bond paper, Times New Roman font type, font size 12 and double-spaced. The presentation of the Abstract shall be Oral and lasts for 5 - 7 minutes, 10-15 minutes for interrogation from the Board of Judges and 3 minutes for the wrap-up-synthesis .
 - The Abstract should have a maximum of 250 words and includes the following
 - Purpose of the experiment
 - Procedure
 - Data Conclusion
 - The Abstract may NOT include the following:
 - Acknowledgement
 - Work of procedures done by the mentor
- The full version of the paper shall use the "author, date "in text-referencing format and shall have the following format: Title, Abstract (with key words), Introduction (including statement of the problem, conceptual framework), Brief Review of Literature, Methodology (Design, Locale, Respondents, and StatisticalTools), Findings and Discussions, Conclusions and Recommendations. References (if any).
- Tarpaulin for exhibit should be put up in the Division's designated booth. The size of the tarpaulin for exhibit should be 25 inches (width) x 35 inches (length). It should contain the following:
 - Project title
 - Abstract
 - Statement of the Problem
 - Methodology
 - Findings
 - Results and Discussion
 - Conclusions and Recommendations
 - References (if any)
 - Photo credits, if applicable
- The Board of Judges reserve the privilege to modify the criteria /or establish ground rules which they deem appropriate in the conduct of the Research Congress.



CRITERIA FOR JUDGING THE SCIENCE INVESTIGATORY PROJECT

A. Science Thought and Engineering Goals 30%

1. Scientific Thought
 - a. Brief and clear statement of the problem
 - b. Well defined procedure
2. Engineering Goals
 - a. Clear and relevant objective/s
 - b. Economically feasible solutions
3. Potential Contribution/ practical value

B. Creative, Resourcefulness and Inventiveness 30%

- a. Creative ability in presenting the problem/in the approach to solve the problem
- b. Innovative design / new idea shown
- c. Intelligence and imagination in finding ways / means to undertake the project

C. Thoroughness 15%

- a. Familiarity with scientific literature in the relative field
- b. Awareness of other approaches or theories
- c. Appropriateness of methodology

D. Research Skill 15%

- a. Use of laboratory equipment/ innovative resources
- b. Appropriate, orderly and effective presentation of data

E. Oral Presentation Skills 10%

- a. Clear and thorough discussion of the project
- b. Clarity and conciseness of explanation pertaining to important aspects of the research proposal
- c. presentation aided by AV material
- d. over all personality

IX. 2015 DIVISION SCIENCE INVESTIGATORY PROJECTS IMPLEMENTING GUIDELINES (SECONDARY LEVEL)

1. Science research/investigatory projects should be new (not repetition of years back projects) or continuation of the previous year's project and conform with international rules published by the Intel International Rules for Pre College Science Research: Guidelines for Science and Engineering Fairs (see <http://www.societyforscience.org/isef/rulesandguidelines>). Each project should have one Research Adviser.

2. The competition will start at the school level advancing to the division, regional, national then to the international level. The participation of schools in Science and Technology Fair shall be categorized into **two (2)** types only, **Life Science** and **Physical Science**.

Life Science		Physical Science	
Individual Project	Team Project	Individual Project	Team Project

*For project category ideas please visit www.societyforscience.org/isef/students/project_categories Students from all high schools offering Special Science Curriculum are required to join the said competition.

3. Team Projects in both Biological Science and Physical Science categories may compose of two (2) or three (3) researchers from **Grades 7 to 10** and one (1) leader shall be designated.

4. The research plan and scientific research paper must follow the format based on the ISEF Rules. The project proponents should review and download the 2014 ISEF Rules and Guidelines and all the required forms at

<http://www.societyforscience.org/page.aspx?pid=282>. They should visit Intel ISEF Rules Wizard (<http://apps.societyforscience.org/isef/students/wizard/index.asp>) to be guided in their planned project. In addition, all research projects beginning at the school level must undergo peer, teacher and expert evaluation.

5. The **first** and **second place winners** in the two categories at the Division level shall be officially endorsed by the Division Office to the Regional Office, together with the four (4) copies of write ups of their Investigatory Projects with complete required forms (see Checklist of Forms). Likewise, tarpaulin for exhibit should be put up in the division's designated booth upon submission of entries. *Shall there be no tarpaulin for exhibit; copies of investigatory projects that will be submitted will not be accepted.*

6. Projects that are to be found **plagiarized** and with **incomplete required forms** during the screening and evaluation are automatically disapproved.

7. Manuscripts should be in soft bound packaging with clear/transparent hard plastic cover on top and cardboard or half of folder at the back cover. Title page should be in white bond paper. CD of the soft copy of the write up should be placed at the back cover by constructing a thin pocket. One CD per copy of the write up.

8. The size of the tarpaulin for exhibit should be 25 inches (width) x 35 inches (length). It should contain the following:

- a. Project title j. Bibliography
- b. Official abstract k. Photo credits, if applicable
- c. Background i. Recommendations
- d. Objectives
- e. Significance
- f. Schematic diagram of the research methodology
- g. Results and Discussion
- h. Conclusion
- i. Recommendations

Name of the school, researchers and adviser and their pictures should not be placed in the tarpaulin.

9. Investigatory Projects approved by the Division Scientific Review Committee are the official participants to the Regional Science and Technology Fair in December 2015 at the DepEd Regional Office.

10. The four (4) projects that will be adjudged as First Place in the two categories: Life Science – Individual & Team and Physical Science – Individual & Team in the Science Congress will be the division official entries to the Regional Scientific Review of Investigatory Projects.

11. The following are forms and manuscript to be submitted in all levels of competition and the sequence:

- A. Abstract (Maximum of 250 words)
- B. *The abstract should include the following:*
 - a. Purpose of the experiment
 - b. Procedure
 - c. Data conclusion
- C. The abstract may NOT include the following:
 - a. Acknowledgement
 - b. Work of procedures done by the mentor
- D. **RESEARCH PAPER** (Include the Title Page, Abstract, Main Body, and References)
- E. **PROJECT EVALUATION FORM**
- F. **PHOTOCOPY OF THE LOG BOOK**

12. Project of proponents should have been screened at the school level.

13. The Division Science Supervisor and the invited experts in research shall be members of the BOJs who shall determine the school/division winners of the different categories and fair divisions.

14. Winners at the school level should be officially endorsed to the Division for the division level. Likewise, the division level winners should be officially endorsed to the region.

Thorough review of the research paper of the students starting from the school level (by the research adviser), division level (by the division science fair coordinator) must be done before submitting to regional level to ensure the quality and completeness of the said paper.

Note: ADDITIONAL INFORMATION ABOUT SCIENCE AND TECHNOLOGY FAIR FOR INFORMATION AND GUIDANCE visit Project: SCIRE (www.facebook.com)

X. INNOVATION OF INSTRUCTIONAL AIDS (Teacher Category, Individual)

1. The innovation MUST be ORIGINAL and will be presented in a Congress before a Panel of Reactors/Judges. Presentation of its usage shall last for 10 minutes, 10-15 minutes for questions/ inquiries/ validation from the Panel of Judges, and 5 minutes for the wrap-up synthesis by the Presenter.
2. A model of the innovative Instructional Material shall be submitted to the EPS, Science on or before September 21, 2015 for review of the panel of reactor.
3. The innovative instructional aid MUST show the following:
 - a. Instructional benefits of the innovation. Positive outcomes and difficulties of what learners might encounter when material is used in instruction
 - b. New text-based activity implemented using the material
 - c. Learners can be well- engaged with the material
 - d. Material has linkage with current science concepts and principles
 - e. Clarity of innovation thru language used for learners' level of understanding
 - f. Should ties directly to learning outcomes and learning experiences of students
 - g. Clear articulation to learners the purpose of the innovative IM
 - h. Can be replicated, published and shared to other teachers
3. Criteria to be used in the Congress shall be defined by the Board of Reactors/Judges

XI. IMPROVISATION OF SCIENCE EQUIPMENT (Teacher Category-Individual)

1. The improvised science equipment shall be presented in a Congress before a Panel of Reactors/Judges. Presentation of the functionality and usage shall last for 10 minutes, 10-15 minutes for questions and remarks from the Panel of Reactors, and 5 minutes for the wrap-up synthesis of the Presenters.
2. The write-up of the improvisation shall be submitted in three (3) copies to the contest administrator for the pre-evaluation of the equipment by the Panel of Reactors/Judges.
3. The improvised science equipment MUST show the following:
 - a. Available local resources are used to perform experiments
 - b. Cheaper products to simulate experiments (Production Cost)
 - c. Scientific principles involved/ Concepts underlying the device
 - d. Important life skill/s to be developed in the learners
 - e. Quality of the science equipment
 - f. Can be replicated and shared to other teachers
4. Criteria to be used in the Congress shall be defined by the Board of Reactors/Judges

XII. SCIENCE INTERVENTION MATERIALS (SIM) Teacher Category

1. For Elementary, 1st, 2nd, 3rd place in the District level (Grades 3, 4, 5 and 6) are contenders for the Division Competition.
2. Secondary schools may have at least one (1) entry per Grade Level
3. The criteria to be used for judging are the following:

CRITERIA FOR SCIENCE INTERVENTION MATERIALS (SIM)

AREA	POINTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Subtasking	15														
• Competency-based	5														
• Bloom's Taxonomy followed	6														
• SMAR-C	4														
2 Congruence	15														
• Activities in line with content and Skills	5														
• Assessment in line with content and skills	10														
3 Usability/Functionality	15														
• Language	3														
• Title card	2														
• Guide card	4														
• Activity card	14														
• Assessment card	3														
• Enrichment card	3														
• Reference card	3														
• Answer card	2														
• Packaging	8														
4 Replicability	25														
• Validated before classroom use	5														
• Dev Mat Based on least Learned LC	5														
• Mat Used improved mastery level	10														
• Handy & easy to copy	3														
• Cost	2														

Note: Points for the 3 items under replicability may be asked during the congress/actual judging

XIII. SCIENCE ACTION RESEARCH (Teacher Category)

- Follow the Policy Guidelines on research stipulated on Memorandum no. _____
1. Participants are District Winners (Elementary) and School winners (Secondary). The research is classroom or school-based which results shall have been utilized to improved students/teacher/school performance.
 2. Paper presenters (division winners) are required to submit to the EPS in Science the abstract of the research and three (3) hard copies of the research paper.
 3. The researcher will follow the Policy Guidelines in writing the research
 4. Criteria to be followed in the division Congress for action research will be presented on the spot by the Board of Judges
 5. Division of the Board of Judges is final and irrevocable.