



September 22, 2014

**DIVISION MEMORANDUM**  
No. 469, s. 2014

**2014 DIVISION SCIENCE FAIR AND COMPETITION - SECONDARY LEVEL**

**TO :** Assistant Superintendents  
Division Supervisors/Coordinators  
Secondary School Heads  
Heads, Private Secondary Schools

1. This Office announces the conduct of “**2014 Division Science Fair and Competition – Secondary Level**”, with the theme: ***Environmental Protection and Conservation of Ecosystem: Key Solution to Climate Change***” on October 17-18, 2014, at Consolacion National High School, Consolacion, Cebu.
2. The participants to this competition are the First place winners of the Municipal level Science Fair and Competition.
3. Relative to this, all public and private secondary schools are enjoined to participate in this undertaking.
4. A registration fee of **Fifty Pesos (PhP 50. 00)** shall be collected from each participant and coach, to defray expenses for the said activity, which shall be chargeable against local School Funds. Travelling expenses, materials and other related materials to be used for the contest and per diem incurred in connection with the activities shall be charged against **local school/SEF/PTA Funds**.
5. Attached in the enclosures are the Working Committees, Criteria for the Different contests and the Oratorical piece.
6. This Memorandum serves as Travel Authority of all participants.
7. Immediate and wide dissemination of this Memorandum is desired.

**ARDEN D. MONISIT, Ed. D.**  
Schools Division Superintendent

Telephone Numbers:

Schools Division Superintendent: (032) 255-6405  
Asst. Schools Division Superintendent: (032) 414-7457  
Accounting Section: (032) 254-2632  
Disbursing Section: (032) 255-4401

Website : [www.depedcebuprovince.com](http://www.depedcebuprovince.com)  
E-mail Add: [depedcebuprovince@yahoo.com](mailto:depedcebuprovince@yahoo.com)

## Working Committees for Division Science Fair 2014

Theme: ***“ENVIRONMENTAL PROTECTION AND CONSERVATION OF ECOSYSTEM: KEY SOLUTION TO CLIMATE CHANGE”***

**Events:** Quiz Bowl (Orals), Quiz Bee (Written), Essay Writing, Oratorical Contest, Poster Making Contest and Slogan-Making Contest

### Quiz Bowl (Orals) Grade 7

1. Peñaloza, Benjamén Jr. – Sta. Fe NHS – Chairman
2. Publico, Beatriz – Calagasan NHS
3. Davide, Daryl – Colawin NHS
4. Erazo, Joel – Tongkil NHS
5. Sayson, Althanena – Argao NHS

### Quiz Bowl (Orals) Grade 8

1. Bartua, Rico – B & M Panares MNHS – Chairman
2. Sollano, Agnes – Compostela NHS
3. Mier, Rubilyn – Sibonga NHS
4. Albios, Lorenzo – Talaga NHS

### Quiz Bowl (Orals) Third Year

1. Cauagdan, Marjorie – San Remegio NHS – Chairman
2. Ambrad, Crispina – Calape NHS
3. Bulotano, Lydia – Kawit NHS
4. Escarda, Zosima – Bantayan NHS
5. Concepcion, Marylen – B & M Panares MNHS
6. Manubag, Ryan – Minglanilla Science HS

### Quiz Bowl (Orals) Fourth Year

1. Malig-on, Alvin Gerald – Sangat NHS – Chairman
2. Buton, Ronilo – Catmon NHS
3. Abella, Roldan – SK Luis P. Cañete NHS
4. Quiamco, Estrellita – Consolacion NHS
5. Semblante, Aer – Jugan NHS

### **Quiz Bee (Written) Grade 7**

1. Undalok, Anselma – Sibonga NHS – Chairman
2. Belarmino, Clarissa – Badian NHS
3. Zafra, Elsa – Madridejos NHS
4. Ramirez, Jesusa – San Remegio NHS
5. Sasil, Myraflor – St. Augustine Academy Inc.
6. Singuit, Rowena - Salamanca NHS
7. Vergara, Gina – Ronda NHS

### **Quiz Bee (Written) Grade 8**

1. Caminade, Jessan – Argao NHS - Chairman
2. Rumaguera, Luciana – Alcoy NHS
3. Cantillas, Jade – Minglanilla Science HS
4. Taraya, Gerald – Alcoy NHS
5. Sollano, Arvin – Cabangahan NHS
6. Sarvida, Sheila – Mandilikit NHS

### **Quiz Bee (Written) Third Year**

1. Opalla, Catherine – Lamac NHS- Chairman
2. Flores, Jennefer – ColawinNHS
3. Enad, Florencia – Montaneza NHS
4. Masong, Fatima Joy – San Remegio NHS
5. Kiamco, Mary Daudette – Looc Norte NHS
6. Combis, Carlito – Tabunan NHS
7. Alfeche, Christy – Lamac NHS
8. Ang, Mark Loven – Pinamungahan NHS

### **Quiz Bee (Written) Fourth Year**

1. Ababa, Floresa – Buanoy NHS – Chairman
2. Umbay, Renante – Pinamungahan NHS
3. Cinco, Christina – Carmen NHS
4. Apostol, Juliet Ann – Tubod NHS
5. Ogabang, Lourdes Marissa – B & M Panares MNHS
6. Cobol, Mary-An - Moalboal NHS

### **Essay Writing Contest**

1. Fernandez, Telesfora – Santander NHS –Chairman
2. Doroon, Fidela – Oslob NHS
3. Ambagay, Charisma – Dalaguete NHS
4. Acog, Ailen – Tugbongan NHS
5. Albano, Martinietta – Tuburan NHS
6. Cutab, Diosdada – Lanipga NHS
7. Baylosis , Jazael – Alcoy NHS
8. Serencio, Juditha – Willy B, Wenceslao MNHS
9. Andrade, Jennifer -Mantalongon NHS

### **Oratorical Contest**

1. Ares, Jhun Matthew – Chairman
2. Lopez, Carmencita – Camp 7 NHS
3. Salonoy, Juliet – Tabunan NHS
4. Mabras, Ma. Shiela – Cordova NHS
5. Canada, Ma, Dominga – Jugan NHS
6. Rom, Sherlie – Lyceum de San Sebastian – Compostela

### **Poster-Making Contest**

1. Galleto, Delia – Cordova NHS- Chairman
2. Estipona, Rogene – Aloguinsan NHS
3. Talaboc, Melna – Luciano B. Rama Sr. MNHS
4. Zoilo, Jessica – Compostela NHS
5. Siacor, Mary Ann – Garing NHS
6. Caburatan, Hannah Jay – Pulpogan NHS

### **Slogan – Writing Contest**

1. Lorenzana, Merlinda – Compostela NHS – Chairman
2. Engbino, Rumell – Vito NHS (Minglanilla)
3. Cayamanda, Roderick –Compostela Science & Technology HS
4. Gungob, Antonio – Consolacion NHS (EC)
5. Requizo, Elizabeth – Tuburan NHS
6. Ditan, Francisca – Bitoon NHS

## **Investigatory Project**

1. Abasolo, Cerelo - Magsico NHS – Chairman
2. Mirafuentes, Jonie Mar - Balungag NHS
3. Macahilo, Misael Evan - Pitalo NHS
4. Quijano, Philame - Balud NHS

## **SIM (Teacher Category Only)**

### **Grade 7**

1. Rellanos, Venus - Tayud NHS
2. Projella, Charlene - Daanbantayan NHS

### **Grade 8**

1. Lariosa, Erna Sue - Lantawan IS
2. Mernaído, Mary Jane - Balud NHS

### **Grade 9**

1. Alfanta, Charta - Sibonga NHS
2. Gonzales, Kim - Bitoon NVHS

### **Fourth Year**

1. Reynes, Rosemari Wen - Balud NHS
2. Bellarmino, Roy Alexis - Badian NHS

**RELLANOS, VENUS M.** – Over-all Chairman  
*SCAAP President*

**MANAYON, RONIL D.**  
*Division Science Coordinator*

**SCIENCE FAIR 2014 CELEBRATION**

**DIVISION LEVEL**

**(CRITERIA FOR JUDGING)**

**I. Investigatory Projects:**

**Scientific 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 contributions/practical value

**Creativity, 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 findings ways/means to undertake the project

**Thoroughness ..... 15 %**

- a. familiarity with specific literature in the relative field
- b. awareness of other approaches or theories
- c. appropriateness of methodology

**Research Skill ..... 15 %**

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

**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 materials
- d. over-all personality
  - self – confidence
  - enthusiasm

**II. Science Quiz Bowl: Oral**

- One (1) team of three (3) members for each year level.
- The following number of items/questions for the different categories/ level of difficulty with their equivalent point/s:

<b>CATEGORY</b>	<b>NO. OF ITEMS</b>	<b>EQUIVALENT POINT/S</b>
a. EASY	10	1
b. AVERAGE	10	2
c. DIFFICULT	10	3

- In case of a tie, a CLINCHER round shall apply with three (3) points per item until a lone winner for the First place is declared.
- Coverage is First and Second grading period.

**III. Science Quiz : Written**

- One (1) participant from each year level.
- Forty-item (40) tests for one (1) hour period.
- Coverage is First and Second grading period.

**IV. Poster-Making Contest:**

- Time allotment is two (2) hours.
- Contestants are required to bring 1 whole sheet white cartolina, pentel pen (black), My Gel or Pilot pen, pencil, ruler, and "Cray-Pas".
- One (1) inch margin on all sides prepared in advance using pentel pen.
- In tracing only My Gel or Pilot pen shall be used and not "colored pens".
- The whole area inside the margin shall be filled-up completely with "Cray-Pas" including spaces or areas intended to be white or transparent.
- There shall be no text/s, word or phrase included in the poster.

a. Relevance to the theme .....	30 %
b. Creativity/ style .....	30 %
c. Technical skill .....	20 %
d. Neatness & correctness .....	10 %
e. Visual impact .....	10 %

**V. Slogan- Making Contest:**

- Time allotment is one (1) hour.
- Contestants are required to bring one-half (½) length-wise white cartolina, pentel pen (black), pencil, and "Cray-Pas".
- One (1) inch margin on all sides prepared in advance using pentel pen.
- In tracing only My Gel or Pilot pen shall be used and not "colored pens".
- Free-hand drawing shall apply. No curves and related materials shall be used.
- Maximum of seven (7) words including punctuations and hyphens.
- It should start with an action verb and not gerunds.
- Correct grammar shall likewise be observed.

a. Relevance to the theme .....	30 %
b. Creativity/ style .....	30 %
c. Technical skill .....	20 %
d. Neatness & correctness .....	10 %
e. Visual impact .....	10 %

**VI. Essay Writing Contest:**

- Time allotment is one (1) hour.
- Contestants are required to bring one-whole sheet/s yellow paper and back portion shall **NOT** be utilized.
- Minimum of 250 and a maximum of 300 words including punctuations.

a. Relevance to the theme .....	30 %
b. Organization, coherence, & emphasis .....	50 %
c. Neatness .....	20 %

**VII. Oratorical Contest:**

- Oratorical piece provided in the enclosure shall be used.
- Delivery shall not exceed seven (7) minutes.

a. Delivery .....	50 %
(pronunciation, facial & vocal expression, volume & quality of voice)	
b. Mastery of piece .....	25 %
c. Stage presence .....	15 %
d. Audience impact .....	10 %

**RULES:**

1. Official participants of the Division Level Science Fair and Quiz are the First place winners in the Municipal Level. For Municipalities with only one secondary school, automatically all first place winners will compete in the Division Level. In case of tie during Municipal Level, the committee is given the option not to break the tie except in multiple ties.
2. Participants in the different competitions must be officially registered by the committee concerned.
3. A registration fee of Fifty pesos (Php 50.00) shall be collected from each participant including coaches.
4. The top three winners in the different competitions will be given awards by the Award Committee during the Division Level Competition.
5. The decision of the Board of Judges is final and irrevocable.
6. The 1<sup>st</sup> place winners in all competitions will participate in the Regional Science Fair & Quiz Contest.

Prepared by: **RONIL D. MANAYON**  
*Division Science Coordinator*



## **ENVIRONMENTAL PROTECTION & CONSERVATION OF ECOSYSTEM: KEY SOLUTION TO CLIMATE CHANGE**

Global warming! Green house gases! National disasters! Heat-waves! Floods! Droughts! Typhoons! These are important key words used by scientists, engineers and world leaders in discussing climate change.

Anyone who knows how to use the Google search engine will get a handful of information about climate and climate change. We can research about the different factors, like clouds, forest fires, volcanic eruptions, oceans and people that have influenced Earth's climate. Yes, you heard me right. We humans are included in the factors that complicate the Earth's climate system. Living things both produce and consume greenhouse gases because human activities use huge quantities of fuels that release carbon dioxide, currently far more greenhouse gases are produced than consumed, contributing to global warming.

Exitus acta probat! The Latin maxim which means, the result validates the deeds. The outcome of the long-standing clash between the whims of human development and natural weather cycle can be seen, heard or felt anywhere in the world. Yes, we really need to admit that we have a problem, and that is climate change!

Climate change is happening on a global scale, but the ecological impact is often local and divergent.

According to the WWF or the World Wide Fund for Nature climate change, in the Philippines causes an increase in mean annual, maximum and minimum temperatures by 0.14 °C. There is also an increase occurrence of landslides and floods. An average 20 cyclones cross the Philippine Area of Responsibility with about 8-9 making land fall each year. A decrease of rice yield associated with increase of temperature. These and many more are concrete and tangible evidences of the effect of climate change in our country.

The recent devastation inflicted by Super Typhoon Yolanda is a grim example of how climate change can have huge economic, political and social costs to the Philippines. It was on November 2013, Typhoon Yolanda wreaked havoc in Eastern Visayas and left almost 4 million people homeless and damaged close to P89.6 billion worth of properties and infrastructures. Thousands of families in the affected areas have yet to get back on their feet and recover their livelihood amidst a worsening environmental situation.

With the enormity of the problem, we may ask, what can a person, a community or even a nation do on their own to slow and reverse climate change?

Courtesy of:

**JHUN MATTHEW B. ARES**  
Carmen National High School  
Carmen, Cebu

Proofread by:

**FLORISA A. BUOT**  
**MA. CONCEPCION M. MACAN**  
Cordova National High School

Many and varied solutions to climate change have been proposed, including individual frugality, energy conservation measures, renewable energy and carbon sequestration.

Everyone is challenged to eliminate the burning of coal, oil and eventually, natural gas. This challenge might be very overwhelming because most of the products we use are derived from fossil fuels. So we need to find alternatives to these products when possible, like plant derived plastics, biodiesel and wind power.

We can also make a difference by driving less, insulating houses better, buying organic food, eating less meat or buying fuel efficient appliances and vehicles.

We need to manage overpopulation. It is clear that more humans mean more green house gas emissions. Although it remains unclear how many people the planet can comfortably sustain, but it is clear that per capita energy consumption must go down if climate change is to be controlled.

Purchasing energy-efficient gadgets can also save both energy and money. Swapping old incandescent light bulbs for more efficient replacements, such as compact fluorescents would save billions of kilowatt-hours.

Stop cutting down trees! Improve agricultural practices along with paper recycling and forest management, balancing the amount of wood taken out with the amount of new trees growing, could quickly eliminate the significant chunk of emissions.

Climate change will not be solved right away in our lifetime, or that of the next few generations. Thus, it is necessary for the National government to make guidelines for action in incorporating measures to reduce disaster and climate change risks into sector-specific policy of land use planning. By these guidelines, local governments formulate comprehensive land use plans and zoning ordinances that regulate allocation and use of land so that exposure and vulnerability to natural hazards of its population, infrastructure, economic activities and the environment can be minimized or even prevented.

For now, let us continue our love and concern for mother earth. Let us make decisions to turn our will and our lives over to the care of our environment as we have understood its components and systems. Let us make a list of all species we had harmed, and be willing to make amends to them all. Let us be ready to become conscious part of our natural environment and make sacrifices for the greater whole.

Let us always remember, that environmental protection and conservation of ecosystem, the key solution to climate change.

Courtesy of:

**JHUN MATTHEW B. ARES**  
Carmen National High School  
Carmen, Cebu

Proofread by:

**FLORISA A. BUOT**  
**MA. CONCEPCION M. MACAN**  
Cordova National High School