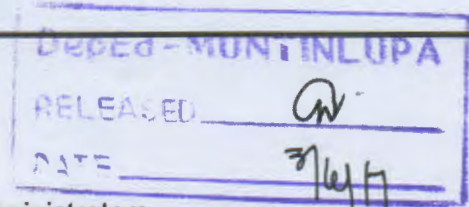




Republic of the Philippines
Department of Education
National Capital Region

SCHOOLS DIVISION OFFICE CITY OF MUNTINLUPA



DIVISION MEMORANDUM

To : Private and Public Secondary Schools Principals/Administrators
Science Department Heads/Coordinators
Teachers & Trainers/ Coaches

Date : February 24, 2017


Subject : Young Inventors Competition 2017
(Theme: Supporting Industries through Relevant and Institutional Research
and Development)

This Office in partnership with the Rotary Club of Muntinlupa North announces the conduct of the Young Inventors Competition 2017 on March 14, 2017 at Carousel of Festival Mall, Muntinlupa City with the theme: "Supporting Industries through Relevant and Institutional Research and Development"

1. This activity aims to:
 - a. promote student's talents and scientific discoveries among learners
 - b. recognize the excellence, creativity and ingenuity of research to the scientific community
 - c. enhance student's and trainer's scientific, technological and environmental literacy through healthy competitions
 - d. promote camaraderie among contestants.
2. Attached are the details of the Young Inventors Competition 2017 guidelines, for the information and guidance of all concerned.

Attachment	Description /Title
No. 1	Objectives and Guidelines
No. 2	Contest Mechanics and Criteria for Judging
No. 3	Registration Form
No. 4	Committees- In- Charge of the Different Contests

4. Submission of Science Research Project Entries will be on March 8, 2017 8:00 AM – 12:00 NN at the Schools Division Office, Centennial Avenue, Tunasan, Muntinlupa City, Attn.: CID Chief and eventually subjected for evaluation by the Scientific Review Committee (SRC).
5. Immediate and wide dissemination of the Memorandum is earnestly desired.


MAURO C. DE GULAN, Ed. D.
Schools Division Superintendent

Attachment No. 1

**Young Inventors Competition 2017: Supporting Industries through Relevant-
and Institutional Research and Development**


OBJECTIVES

The research competition aspires to provide young learners to promote their talents and scientific discoveries to their fellow peers, teachers and scientific community. It aims to inform high school teachers, researchers, engineers, scientific and industrial communities what Muntinlupa students can achieve through science and technology and what they can do in the future. A healthy discourse and scientific professionalism between students and professionals will be maintained, as well as appreciation of science and technology and its role towards human advancement.

A. STUDENT ELIGIBILITY GUIDELINES

- Any science research project from the five (5) categories – Life Science, Applied Science, Environmental Science, Food Security, Information Technology and Robotics (Freestyle) – of bonafide high school students (of any year level from Grade 10 to 12) from both public and private schools studying in Muntinlupa is qualified for the pre-evaluation.
- Only the pre-selected entries from the pre-evaluation are qualified to enter the competition. The research project can be the work of a single or a maximum of three (3) students coming from the same school.
- A school may send a maximum of four (4) research entries per category.
- Continuous Research Project Entries are considered.
- Any project based on the student's prior research, could be considered as a continuing project as long as it is a substantial progress from its previous project (e.g testing new variable, new objective or focus of experimentation).
- Projects are not allowed as continuing projects (and are not allowed to join the competition) if the project is proven as an exact or near copy of the previous work/s (e.g. same methodology, same hypothesis). Change in the project such as the change in hypothesis target (such as change in test materials, location sites) or change in sample size or number of replicates will not be considered as substantial change.
- Continuing projects must mention years or which year the project is in the title (ex. "Year Two of An Ongoing Study", if the project is in its second year of experimentation).
- Continuing projects may be judged only on experimentation/ data collection performed over 12 continuous months - presentation beginning no earlier than January 2016 ending on January 2017. Thus prior project's written materials (raw data, methodology etc.) or visual depiction, research summary, research paper and PowerPoint presentation are not allowed in the Exhibit.
- Continuing Projects if qualified in the exhibit and project presentation will be tagged and labeled accordingly.
- Longitudinal projects are allowed to show in the exhibit, Research Summary, Research paper, and PowerPoint Presentations, a summary of prior year's data (collective past conclusionary data) and its comparison to the current data sets and the overall methodology.

B. GENERAL GUIDELINES

- A student is only qualified for only one (1) research entry.
 - A research entry is only qualified to one (1) category.
 - All research entries will be subjected to pre-evaluation, however only three (3) entries per category will be chosen to be awarded 1st, 2nd and 3rd place.
 - Participants must be accompanied by one coach/adviser per school. The authors themselves must present their projects.
 - In case the research team is in time conflict with another research competition, the team may send at least one (1) of their members to represent their research projects. The members
- 

present in the contest is considered as one whole team. However, individual projects cannot be in two contest at the same time, so the author may choose which contest will be prioritized.

- Author/s of a research entry if proven upon with sufficient evidence- committed research misconduct will be automatically disqualified.
- The organizer reserves the right to change mechanics as maybe deemed necessary. Rest assure that any change in mechanics will be always just and fair for all the participants. Participants will be notified regarding this matter.
- The decision of the judges is final and irrevocable. No appeal will be entertained after the announcement of winners.
- Top 3 winners will be awarded with Cash and Certificate of Recognition (1st, 2nd and 3rd placers). Certificate of Merit will be given to the Trainers/ Advisers

Note : The size of the tarpaulin must be 3 x 4 sq. meters and in a portrait orientation.

Submit the SIP using the format (4 copies/entry) on or before March 8, 2017 for SRC (Screening Review Committee).

D. TYPES OF COMPETITIONS

- **Science Research Project**
 1. **Life Science**
 2. **Applied Science**
 3. **Environmental Science**
 4. **Information Technology**
 5. **Food Security**
- **Robotics - Freestyle**
- **The On-The-Spot Improvisation of Materials Contest for Teachers**, one team for each school is composed of three (3) Secondary Science Teachers.



Young Inventors Competition 2017: Supporting Industries through Relevant and Institutional Research and Development

CONTEST MECHANICS AND CRITERIA FOR JUDGING

I. SCIENCE RESEARCH PROJECT

1. Originality, Creativity and Resourcefulness	20%
<ul style="list-style-type: none">• Innovative design and idea shown• Intelligence and imagination in finding ways/ means to undertake the project	
2. Scientific Thought	30%
<ul style="list-style-type: none">• Potential contributions and practical value• Economically feasible solutions• Clear objectives /statements of the problems	
3. Thoroughness	20%
<ul style="list-style-type: none">• Familiarity with scientific literature in the relative field• Awareness of other approaches or theories• Appropriateness of methodology	
4. Research Skill	20%
<ul style="list-style-type: none">• Use of laboratory equipment/innovative resources• Orderly and effective presentation of data	
5. Presentation and Writing Skill	10%
<ul style="list-style-type: none">• Clear and thorough discussion of the project• Clarity and consciences of explanation important aspects of research• Over –all personality (Self-confidence & Enthusiasm)	
TOTAL	100 %

The SRP Format (for both SRC and Tarpaulin Display)

- I. Title Page
- II. Abstract
- III. Introduction
 - A. Background of the Study
 - B. Statement of the Problem/ Objectives
 - C. Hypotheses
 - D. Significance of the Study
 - E. Review of Related Literature
- IV. Methodology
- V. Results
- VI. Discussion
- VII. Conclusions and Recommendation
- VIII. Bibliography



CONTEST MECHANICS AND CRITERIA FOR JUDGING

II. ROBOTICS - FREESTYLE

Rules for Freestyle

1. Goal

The goal of the competition is that the competitors should show a robot they have built. The robot is judged based on the following categories: Hardware, intelligence, aesthetics, presentation, use and innovation. The robot with the most points win. It is of course also allowed to compete with a solution consisting of several robots.

2. The robot

There are no restrictions of the robot, except for that the individual/ team has to have developed a significant part of either the hardware and/or the software themselves.

3. Presentation

All competing individual / teams has the possibility to hold a short presentation on a stage in front of all visitors and competitors. The presentation may be a maximum of 5-10 minutes long.

4. Scoring

The individual/team will be judged based on several criteria. The maximum score for each criteria is 5 points. If the team has some parts not constructed by themselves (such as using a complete robot kit) it will not score as many points in the appropriate category. The details of the categories are explained below:

1. **Hardware** is judged based on the advanced level of the hardware. If the robot for example is hard to construct or contains advanced solutions and components this gives more points. Smart exploit of simple hardware and unusual but brilliant solutions also give more points.
2. **Intelligence** is judged based on how advanced the software is. If the robot can perform something advanced, it scores high points. Interaction between robot and human and also between robot and robot also gives many points.
3. **Aesthetics** is judged based on how good-looking the robot is. A robot which looks nice and clean scores higher point than a robot made out of tape and cables.
4. **Presentation** is judged based on how well the individual/team manages to present the functions of the robot. The category is judged both based on activity during the official presentation.
5. **Innovation** is judged based on how innovative the robot concept is. Both hardware and software is taken into account. The robot must be a good example of new thinking or creativity to score high points in this category.
6. **Usefulness** is judged based on how useful the robot is. If the robot can for example helps humans with things such as daily tasks, it scores high point in this category.

Criteria	SCORING				
	5	4	3	2	1
1. Hardware					
2. Intelligence					
3. Aesthetics					
4. Presentation					
5. Innovation					
6. Usefulness					
Total					



CONTEST MECHANICS AND CRITERIA FOR JUDGING

III. ON-THE-SPOT IMPROVISATION OF MATERIALS (Contest for Secondary Teachers)

1. One team for each school is composed of three (3) science teachers.
2. For two hours, the contestants will construct an improvised science device using only the materials provided by the contest committee and come up with the team write-up following the format below:

I.	Name of the Device	
II.	Rationale	
III.	Materials	
IV.	Descriptive Presentation: A. Work Plan B. Use/s of the Device	

3. Each team will present and defend the improvised device for 5-7 minutes.
4. The team will be judged based on following criteria:
 - a. Appropriateness
 - b. Authenticity
 - c. Interest
 - d. Presentation
 - The decision of the judges is final and irrevocable. No appeal will be entertained after the announcement of winners.
 - Top 3 winners will be awarded with Cash and Certificate of Recognition (1st, 2nd and 3rd placers). Certificate of Merit will be given to the Trainers/ Advisers
 - The 1st place winner will be considered as the Champion.



Attachment 3

2017 Young Inventors and Research Fair
Registration Form

Science Research Project - LIFE SCIENCE (Individual / Team - Maximum of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

Science Research Project - APPLIED SCIENCE (Individual / Team - Maximum of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

Science Research Project - ENVIRONMENTAL SCIENCE (Individual / Team - Max. of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

Science Research Project - Food Security (Individual / Team - Maximum of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

Science Research Project - Information Technology (Individual / Team - Maximum of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

Robotics Freestyle (Individual / Team - Maximum of 3 members)

Title	
Name of Student/s	
Trainer/ Adviser	
Contact No.	

On-The-Spot Improvisation of Materials for Secondary Teachers (Team - Maximum of 3 members)

Name of Teachers	
Grade Level/s	
Trainer/ Adviser	
Contact No.	

Submitted by :

School Science Coordinator

Noted :

Principal

COMMITTEES –IN-CHARGE OF DIFFERENT CONTEST

1. Technical Working Groups (TWG)

Registration	Salome Perez & Adelene Beltran
Reception / Accommodation	Divine P. Gagala & Marjorie Banjawan
Program & Invitations	Almarie Morales & Leody Cerenio
Certificates / Incentives	Kristine DA Barredo & Abigail De Lios
Documentation	Jason B. Albaro & Melanie B. Melegrito
Food & Refreshments	Kristine Bonafe & Arthur Polon

2. For the competitions in the Secondary Level the Board of Judges are as follows :

Competition	In - Charge for the Judges
Science Investigatory Project	Madeline Ann L. Diaz
Robotics	Armida S. Oblinada

3. Assigned Schools for the different Contest:

Science Research Project	Life Science
	Tunasan ES, Sucat ES - Main Muntinlupa ES, Putatan ES
Science Research Project	Applied Science
	Alabang ES, Poblacion ES Bayanan ES- Main, Buli ES
Science Research Project	Environmental Science
	Sucac ES Z3 Cupang ES – Main Sucat ES A Z4 Victoria ES
Science Research Project	Information Technology
	Itaas ES, Soldiers Hills ES Cupang ES, F. De Mesa ES
Science Research Project	Food Security
	Filinvest ES, LIS Bagong Silang ES, Bayanan ES
Robotics	Bayanan ES- Unit 1, MSHS MNHS- NBP Annex MBHS - Main
On-the-Spot Improvisation of Materials for Teachers	
	MNHS – Main PEDHS MNHS – Tunasan MBHS – Sucat Annex



Young Inventors Competition 2017: Supporting Industries through Relevant and Institutional Research and Development

WAIVER

KNOWN ALL MEN BY THESE PRESENTS :

That I/ WE, _____ contestant/s in the Young Inventors Competition 2017 with the entry, entitled _____ category hereby state that I/We are aware of all the rules and regulations set forth in the Contest.

By virtue hereof, I/We shall abide by the decision of the Panel of Judges and hereby waive whatever cause of action which I/We or may hereafter have against the members of the Panel of Judges, the Department of Science and Technology Regional Office (DOST RO), that may arise from or relative to the conduct, results, etc, of the Contest.

IN WITNESS WHEREOF, I/we have here unto set our hands on this _____ day of _____, 2017 at _____.

Contestant/s

*All members must sign

Signed in the presence of:

Witness
Address:

Witness
Address:

SUBSCRIBED AND SWORN TO before me this _____ day of _____ 2017, at _____, Philippines, affiant _____, exhibiting his proof of identify as above stated,

Doc. No.: _____
Page No.: _____
Book No.: _____
Series of 2017

Note: Please submit this form together with the accomplished entry form to the Host DOST Regional Office not later than 5:00 p.m. on the deadline of Submission of Entries.