

Republic of the Philippines Department of Education Region I SCHOOLS DIVISION OF ILOCOS SUR Bantay, Ilocos Sur



November 20, 2019

Division Advisory No. <u>355</u>, s.2019

2020 NATIONAL SCIENCE AND MATHEMATICS POWER QUIZ AND RESEARCH CONGRESS

OIC-ASDS To:

> **Chief Education Supervisors Education Program Supervisors Public Schools District Supervisors**

Public & Private Elementary School Heads Public & Private Secondary School Heads

All Others Concerned

- 1. This Advisory is issued in reference to the letter from the President/CEO of Science-Math Brain Power Philippines Corp. dated October 23, 2019 regarding the 2020 National Science and Mathematics Power Quiz and Research Congress at University of the Philippines Diliman campus on January 17-19, 2020.
- 2. Attached is a copy of the letter for your reference.
- 3. For information and guidance.

DIVISION OF ILOCOS SUR

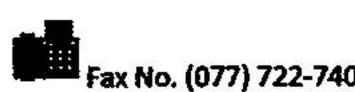
JORGE M. REINANTE, CSEE, CEO VI, CESO V Schools Division Superintendent

To be indicated in the perpetual index under the following subjects:

SCIENCE

MATHEMATICS









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www.sci-mathbrainpower.com 🔼

October 23, 2019

JORGE M. REINANTE

Schools Division Superintendent **Ilocos Sur**

Dear Sir:

Warm greetings!

Science-Math Brain Power Philippines will hold the 2020 National Science and Mathematics Power Quiz and Research Congress, an annual competitive event that aims to promote excellence in science and mathematics subjects in our country. The event will be held on January 17–19, 2020 inside the University of the Philippines Diliman campus.

In line with this, we would like to request your help in disseminating this invitation through an advisory to your constituent schools.

These are the contest categories:

Science Investigatory Project (SIP)	Elementary and Secondary	Physical Science (Individual and Team) Biological Science (Individual and Team)
	Elementary	Science Brain Power Quiz Earth & Environment Power Quiz
Science Power Quiz	Secondary	General Science Brain Power Quiz National Meteorology and Astronomy Quiz National Geology and Hydrology Quiz
	Elementary	Mathematics Brain Power Quiz Mathematics Compute-Fast Relay
Mathematics Power Quiz	Secondary	General Mathematics Brain Power Quiz Algebra and Geometry Quiz Brain Power Statistics Quiz Mathematics Compute-Fast Relay



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The competition is open for all students from Grade 4 to 12. There will be a registration fee of three thousand pesos (Php 3,000).

Online registration will start on **November 4, 2019**.

Interested participants may contact us through our phone number (047) 251 3799 or our e-mail address admin@sci-mathbrainpower.com. You may also reach us on Facebook: Science-Math Brain Power Philippines.

Attached herewith are the contest guidelines and schedule of activities for your perusal.

We are looking forward to seeing the best of your students compete in this event. We hope for your favorable response. Thank you very much!

Very truly yours,

ENGR. FREDERICK A. EDUVANE

President/CEO

Science-Math Brain Power Philippines Corp.



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2020 NATIONAL SCIENCE AND MATHEMATICS POWER QUIZ AND RESEARCH CONGRESS

General Contest Guidelines

- Bona fide students from Grades 4–6 in the elementary level, and from Grades 7–12 in the secondary level can compete in the different contest categories. It is suggested that the participating schools come up with a system of selecting their school representatives. Valid school ID or principal's endorsement of the contestants shall be presented during the contest registration.
- Only registered participants are allowed to join in the contests. A contestant is only allowed
 to compete in at most two (2) contests, considering that most contests will be held
 simultaneously. Participants must not select two contests with conflicting schedules.
- 3. A reasonable amount of Php 3,000 for the contest registration fee shall be collected from each participant to defray the expenses on food, venue, honoraria for judges and speakers, compensation for additional technical staff, awards, prizes, materials and others. Food will be provided to the participants for Day 1 (PM snacks), Day 2 (AM snacks, lunch, and PM snacks), and Day 3 (AM snacks).

Notes on Registration Fee:

- Early registrants can avail of the early bird promo of 10% discount. This promo will be available only until December 13, 2019.
- Participants who registered and paid online ten (10) days prior to the contest date will receive a free SMPBB t-shirt. Due to limited availability of sizes, t-shirts will be given on a first-come, first-served basis.
- 4. For every ten (10) student participants per school, one (1) coach/adviser's registration will be free of charge. If the school does not meet this requirement, the coach/adviser shall pay the full registration fee. Regional Supervisors in Science and Mathematics who wish to attend will be treated as guests free of registration.
- 5. Personal accommodations are EXCLUSIVE from the registration fee.



Participants will answer a paper-and-pencil test within one hour. Refer to the following table of specifications for the tests:

SCIENCE		MATHEMATICS	
Elementary	Secondary	Elementary	Secondary
50 items	30 items (15 easy, 10 average, 5 difficult)	18 items (10 easy, 5 average, 3 difficult)	18 items (10 easy, 5 average, 3 difficult)
Multiple-choice	Multiple-choice (easy) Supply-type and problem solving (average & difficult)	Problem solving	Problem solving
50 points	50 points	50 points	50 points

- A maximum of five (5) contestants per grade level per school can compete in each quiz category.
- Participants will write their answers on the test paper. They may do use the extra pages questionnaires as scratch paper for computations. All papers will be collected after the test.
- Winners who will meet the standards of the different contest categories will each be awarded with a medallion and a Certificate of Merit. Participants who do not meet the standards will each receive a Certificate of Recognition. The coach/adviser will also receive a Certificate of Recognition. Trophies and Certificates of Merits will be awarded to three (3) schools with the highest overall standings.
- 10. All participants and guests must abide by the house rules within the premises and the duration of the event. Student and coaches/advisers must abide by the contest rules and regulations. Punctuality will be strictly observed during the competition.
- 11. The decision of the judges is final and irrevocable.
- 12. The organizer reserves the right to make changes in the schedule, contest mechanics, venue, et cetera if deemed necessary, particularly in circumstances beyond their control.



2020 NATIONAL SCIENCE AND MATHEMATICS POWER QUIZ AND RESEARCH CONGRESS

Specific Contest Guidelines

SCIENCE QUIZ (ELEMENTARY LEVEL)

- Science Brain Power (SBP) Quiz
 - The SBP Quiz is open to students from **Grades 4–6**.
 - The test coverage is based on the content standards and competencies from the DepEd K-12 Science curriculum.
- Earth & Environment (EEP) Quiz
 - The EEP Quiz is open to students from **Grades 4–6**.
 - The test coverage is based on the content standards and competencies from the DepEd K-12 Science curriculum, particularly on the topics in Earth Science. The test also includes contemporary topics on environmental issues and protection.

SCIENCE QUIZ (SECONDARY LEVEL)

- General Science Brain Power (GSBP) Quiz
 - The GSBP Quiz is open to students from **Grades 7–12**.
 - The test coverage is based on the content standards and competencies from the DepEd K-12 Science curriculum.
- National Meteorology and Astronomy (NMA) Quiz
 - The NMA Quiz is open to students from **Grades 7–10**.
 - The test coverage consists of fundamental topics in Meteorology and Astronomy.
- National Geology and Hydrology (NGH) Quiz
 - The NGH Quiz is open to students from **Grades 7–10**.
 - The test coverage consists of fundamental topics in Geology and Hydrology.



MATHEMATICS QUIZ (ELEMENTARY LEVEL)

- Mathematics Brain Power (MBP) Quiz
 - The MBP Quiz is open to students from Grades 4–6.
 - The test coverage is based on the content standards and competencies from the K-12 Mathematics curriculum.

MATHEMATICS QUIZ (SECONDARY LEVEL)

- General Mathematics Brain Power (GMBP) Quiz
 - The MBP Quiz is open to students from Grades 7–12.
 - The test coverage is based on the content standards and competencies from the K-12 Mathematics curriculum.
- 2. Algebra and Geometry (AlGeo) Quiz
 - The AlGeo Quiz is open to students from Grades 7–12.
 - The test coverage is based on the content standards and competencies from the K-12 Mathematics curriculum, particularly on the topics in Algebra and Geometry
- 3. Brain Power Statistics (BPStat) Quiz
 - The BPStat Quiz is open to students from Grades 7–12.
 - The test coverage is based on the content standards and competencies from the K-12 Mathematics curriculum, particularly on the topics in Statistics.

MATHEMATICS COMPUTE-FAST RELAY (MC-FR)

- The MC-FR is open to students from Grades 5–10. A group of three (3) participants for each grade level per school can compete in this category.
- In this category, participants will solve a series of math problems given in consecutive stations. The first participant to finish all stations will be declared the winner. The competition will be contained within one and a half hour.
- All three members of a team must be in their school uniform or PE uniform. They must always wear their school IDs during the contest. Only ink pens may be used in solving the problems.



- Some stations might require the use of different measuring instruments and scientific calculators. Participants much bring their own materials. Borrowing of materials among teams will be grounds for disqualification.
- Using mobile phones and other electronic gadgets will be strictly prohibited and will be grounds for disqualification.
- The competition has 5 checkpoints. Each checkpoint contains information necessary to answer a problem. Each team must get this information from each station. Initially, the teams will be assigned to proceed to a designated checkpoint. After this, the teams can freely proceed to any checkpoint to gather information.
- The teams must read the instructions in each station carefully. After gathering information from 5 checkpoints, the team must proceed to the problem-solving area and obtain the questions and answer sheets from the proctor.
- The teams will be allowed to proceed to the next station only after solving the given problem in the current station.
- The teams must not leave marks, erase, or alter the materials placed in each station. Any team that violates this rule will be automatically disqualified.
- 10. If a situation arises that is not covered by the mechanics, the members of the contest committee will convene and decide. This decision will be deemed final.

SCIENCE INVESTIGATORY PROJECT (SIP) CONGRESS

- In this event, the participants will be the students who participated in their respective Division-level Science Competitions for Individual and Team categories in both Biological and Physical Sciences. The event will be divided into Elementary and Secondary levels.
- Proof or certification of participation from the previous competition will be presented during registration.

Notes on SIP Congress Registration:

Online registration will be accepted starting November 4, 2019 until January 8, 2020.



- The Science Investigatory Projects must be new. Participants are not allowed to submit projects from previous years or continuations of previous projects.
- 4. Each project must be accompanied by a research adviser.
- For the Team category, the teams will be composed of three to five (3–5) members.
 Members include the leader, researchers and technical staff.
- 6. Participants must submit a soft copy of the abstract and the full version of the research paper on or before January 8, 2020 to admin@sci-mathbrainpower.com. They are also required to bring three (3) hard copies during registration. Late or non-submission of papers will invalidate the entry.
- 7. Papers must follow the prescribed APA format for scientific publications:
 - Typeface: 12pt Times New Roman
 - Paragraph: Double-spaced, aligned left
 - Page: A4-sized white paper, one-inch margin on all sides
 - References: Proper in-text citations and complete bibliography
- 8. **Abstract.** The abstract will be presented orally within five minutes. Additional 10 minutes will be provided for the questions and clarifications from the Board of Judges. The abstract must include the following:
 - Purpose of the experiment
 - Methodology
 - Findings
 - Conclusion
- 9. **Research Paper.** The full research paper must include the following:
 - Title page
 - Abstract
 - Introduction (including the problem statement and conceptual framework)
 - Brief Review of Related Literature
 - Methodology (including the design, locale, respondents, and tools used)
 - Findings and discussion
 - Conclusion
 - Recommendation
 - Bibliography



10. **Exhibit.** The exhibit will be put up in the designated area on the first day of the event. The project display must visually summarize and present the information from the science investigatory project. It must be made of an illustration board in portrait orientation, not more than 5 ft x 4 ft in size. Figure 1 shows the specifications for the display.

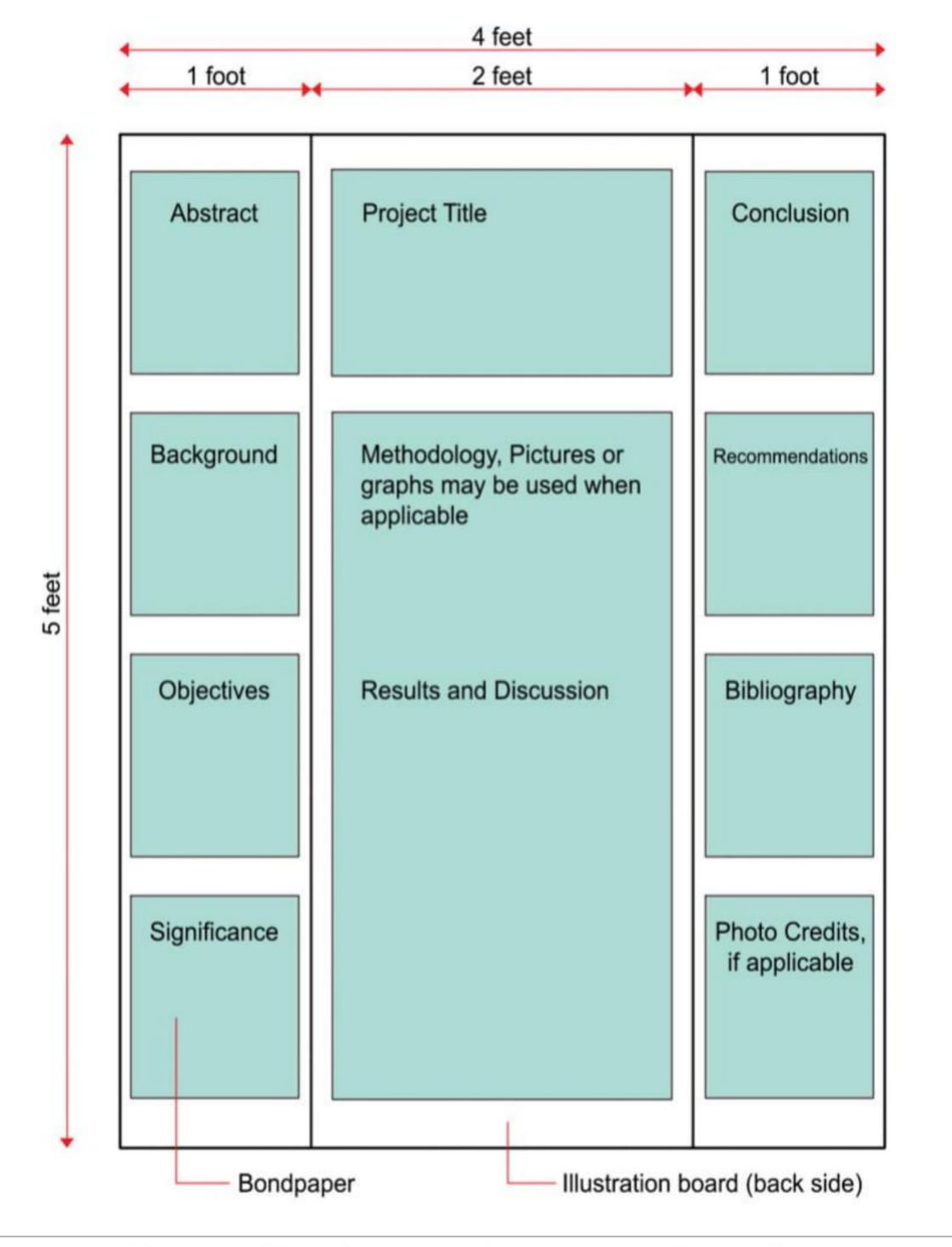


Figure 1. Size, format and contents of the exhibit.

- 11. Living specimens are prohibited from display. For exhibits involving electrical equipment, the participants must bring and set up their own extension wires.
- 12. Entries will be subjected to preliminary screening. Not more than 50% of the total entries will proceed to the oral defense. The Board of Judges will determine the qualifiers using the partial score obtained from research paper evaluation.



13. The Science Investigatory Projects will be evaluated based on the following criteria:

Scientific Thought and Engineering Goals			
Scientific Thought			
a. Brief and clear statement of the problem			
b.	Well-defined procedure		
Enç	Engineering Goals		
a.	Clear and relevant objectives		
b.	Economically feasible solutions		
c.	Potential contribution to society and practical value		
Cre	eativity, Resourcefulness, and Inventiveness	25%	
a.	Creative ability in the approach to solve the problem		
b.	Innovative design or new idea shown		
c.	Intelligence in finding ways and means to undertake the project		
Thoroughness			
a.	Familiarity with scientific literature in related fields	-	
b.	Awareness of other approaches and theories		
c.	Appropriateness of the methodology		
Research Skills			
a.	Use of laboratory equipment		
b.	Appropriate, orderly, and effective presentations of data	5.0	
Ora	al Presentation Skills	15%	
a.	Clear and thorough discussion of the project		
b.	Clarity and conciseness of explanation pertaining to important aspect		
	of the research proposal		
	b.1. Presentation aided by audiovisual material		
	b.2. Over-all personality		
	b.3. Self-confidence		
	b.4. Enthusiasm		

14. The Board of Judges reserves the right to modify the criteria and establish additional ground rules if they deem necessary and appropriate in the conduct of the Research Congress.



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2020 NATIONAL SCIENCE AND MATHEMATICS POWER QUIZ AND RESEARCH CONGRESS

Schedule of Activities

TIME	ACTIVITY	VENUE

Day 1 Friday, January 17, 2020

8:00–10:00	Registration	
10:00–12:00	Opening Ceremony	GT-Toyota Asian
12:00–13:00	Lunch	
13:00–14:00	Setting Up Displays for Science Investigatory Projects	Center Auditorium
14:00–17:00	Preliminary Assessment of Science Investigatory Projects	

Day 2 Saturday, January 18, 2020

(8:00–17:00)	Oral Defense for Science Investigatory Projects Gr 4-12	UPIS Room 136*
8:00–8:30	Briefing of Contestants for MC-FR	
8:30–10:00	Mathematics Compute-Fast Relay (MC-FR) Gr 5–10	UPIS HS Building
10:00–10:30	AM Snacks	
10:30–11:00	Briefing of Contestants for SBP and GSBP	



11.00 10.00	Elementary Science Brain Power Quiz (SBP) Gr 4–6	UPIS Room 130*
11:00–12:00	General Science Brain Power Quiz (GSBP) Gr 7-12	UPIS Room 131*
12:00–13:00	Lunch	
13:00–13:30	Briefing of Contestants for MBP, NMA, NGH, and BPStat	
	Elementary Mathematics Brain Power Quiz (MBP) Gr 4-6	UPIS Room 130*
13:30–14:30	National Meteorology and Astronomy Quiz (NMA) Gr 7–10	UPIS Room 131*
	National Geology and Hydrology Quiz (NGH) Gr 7-10	UPIS Room 132*
	Brain Power Statistics Quiz (BPStat) Gr 7-10	UPIS Room 132*
14:30–15:00	PM Snacks	
15:00–15:30 Briefing of Contestants for EEP, GMBP, and AlGeo		
	Earth & Environment Power Quiz (EEP) Gr 4–6	UPIS Room 130*
15:30–16:30	General Mathematics Brain Power Quiz (GMBP) Gr 7–12	UPIS Room 131*
	Algebra and Geometry Quiz (AlGeo) Gr 7–12	UPIS Room 132*

Day 3 Sunday, January 18, 2020

	8:00–12:00	Awarding and Closing Ceremony	UPIS Auditorium
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