



Republic of the Philippines
Department of Education
REGION III
SCHOOLS DIVISION OFFICE OF BATAAN

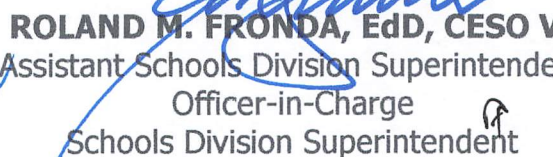
DIVISION ADVISORY

No. 086, s. 2021

AUG 05 2021

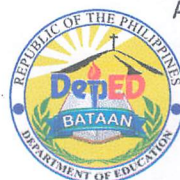
To: Assistant Schools Division Superintendent
Division Chiefs, CID & SGOD
Education Program Supervisors
Public Schools District Supervisors
Elementary and Secondary School Heads, Public and Private
All Others Concerned

This Office informs all interested schools to participate on the competition to be conducted by UPLB Mathematical Sciences Society (UPLB MASS) entitled 33rd Mathematical Sciences Week with theme "Good Game, Well Played: Exploring the Mathematical Principles Behind Basic Game Design and Implementation on 16th and 23rd of October, 2021. For other details, please refer to the attachment.


ROLAND M. FRONDA, EdD, CESO VI
Assistant Schools Division Superintendent
Officer-in-Charge
Schools Division Superintendent

In compliance with DepEd Order No. 8 s. 2013, this Division Advisory is issued not for endorsement per D.O. 28 s. 2001 only for the information of DepEd Officials, personnel as well as the concerned public.


Ci10
August 3, 2021



"We Mould Heroes"

Address: Bataan Provincial Capitol Compound, Balanga City 2100 Bataan | Telephone / Fax: (047) 237-2102
Email Address: bataan@deped.gov.ph | Website: www.depedbataan.com | Facebook Page: www.facebook.com/DepEdBataan



CSC PRIME-HRM BRONZE AWARD
CSC Resolution No. 2001100

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Figure 9

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THE UNIVERSITY OF CHICAGO

2000

to produce more than the equivalent of about 200,000 gal of fuel oil per year. The other plant, located at the same place, has been producing about 100,000 gal per year. In 1960, 82,000 L of oil stored at the plant was reported as being available for distribution to the local market. The facility installed two storage tanks, each 70 ft in diameter and 100 ft high, having a capacity of 1,000,000 gal. The total production of oil from the plant during 1960 was estimated to be 2,500,000 gal.



UNIVERSITY OF THE PHILIPPINES LOS BAÑOS MATHEMATICAL SCIENCES SOCIETY

2F Francisco O. Santos Hall, University of the Philippines Los Baños, College Laguna 4031

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23 July 2021

Dr. Nicolas T. Capulong
*Regional Director, Region
Department of Education*

To: All Schools Division Superintendents

For information.

Advisory
No. 092, s. 2021

002116

Date:

JUL 27 2021

MAY B. ECLAR, PhD, CESO III
Regional Director

RE: Endorsement of the 33rd National Invitational Mathematical Challenge (MATHEMATCH)

Dear Dr. Capulong:

Greetings of peace!

We are the **UPLB Mathematical Sciences Society (UPLB MASS)**, a duly recognized organization of the University of the Philippines Los Baños. In our 47 years of existence, we have been committed in promoting deeper appreciation and wider application of mathematical sciences through involvement with our university constituents and the Filipino masses.

In line with this objective, we will be holding our **33rd Mathematical Sciences Week** with the theme **"Good Game, Well Played: Exploring the Mathematical Principles Behind Basic Game Design and Implementation"** this coming **16th to 23rd of October 2021**. The following are the activities and competitions for the said event:

1. **33rd National Invitational Mathematical Challenge (MATHEMATCH)**
 - An online quiz contest for high school students.
2. **Webinar**
 - An online seminar mainly focused on discussing concepts related to this year's theme.
3. **Online Art Competition**
 - An art competition for college students (UPLB students only) that will serve as an avenue for them to showcase their creativity through integrating the underlying mathematical science concepts on this year's theme.
4. **Infographics Making Competition**
 - A competition for high school students that aims to test their creativity and skills in presenting data using appropriate tools and techniques.
5. **Puzzle of the Day and Puzzle of the Week**
 - Challenging puzzles that will be posted during the week-long celebration to encourage people to think and solve.



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In this regard, we would like to ask your good office for the **endorsement** of the **33rd National Invitational Mathematical Challenge (MATHEMATCH)**. It would be a great opportunity if our event could reach more schools through your help. For your perusal, attached are more details regarding our organization and event. We are hoping for your favorable response on this matter.

Thank you very much!

Sincerely yours,

ERIKA EUNICE D. DUMAGO

Vice President for Scholastics Division

ERIC ROY L. FAVENIR

President

Recommending Approval:

PROF. MIYAH D. QUELISTE

Senior Adviser



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ORGANIZATIONAL BACKGROUND

The UPLB Mathematical Sciences Society, established in 1973, has been one of the duly recognized academic organizations in the University of the Philippines Los Baños. It is comprised of BS Applied Mathematics, BS Computer Science, BS Mathematics, BS Mathematics and Science Teaching Major in Math, and BS Statistics students who are committed to upholding the goal of the society: to contribute to the development of the Filipino nation by cultivating deeper appreciation and wider application of mathematical sciences, by fostering academic excellence towards social relevance, and by being involved with the rest of the university constituency and Filipino masses.

CONTACT INFORMATION

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(Scholastics Division Secretary)

+63 906 348 8088 Eric Roy L. Favenir
(President)

EVENT INFORMATION

Event Name: 33rd Mathematical Sciences Week

Date: October 16, 2021 - October 23, 2021

SCHEDULE OF ACTIVITIES

DATE	EVENT
October 16, 2021 (Saturday) 1:00PM - 4:00PM	33rd National Invitational Mathematical Challenge (MATHEMATCH) Elimination Round
October 17, 2021 (Sunday) 1:00PM - 4:00PM	Webinar
October 18, 2021 (Monday) 10:00AM	Posting of Puzzle of the Day Posting of Puzzle of the Week



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1:00PM	Posting of Infographics Making Competition Entries
8:00PM	Announcement of Puzzle of the Day Winners
October 19, 2021 (Tuesday) 10:00AM	Posting of Puzzle of the Day
1:00PM	Posting of Online Art Competition Entries
8:00PM	Announcement of Puzzle of the Day Winners
October 20, 2021 (Wednesday) 10:00AM	Posting of Puzzle of the Day
1:00PM	Announcement of MATHEMATCH Finalists
8:00PM	Announcement of Puzzle of the Day Winners
October 21, 2021 (Thursday) 10:00AM	Posting of Puzzle of the Day
8:00PM	Announcement of Puzzle of the Day Winners
October 22, 2021 (Friday) 10:00AM	Posting of Puzzle of the Day
8:00PM	Announcement of Puzzle of the Day and Puzzle of the Week Winners
October 23, 2021 (Saturday) 1:00PM - 5:00PM	33rd National Invitational Mathematical Challenge (MATHEMATCH) Final Round
7:00PM	Announcement of Contest Winners



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CONTEST AND EVENT DETAILS

1) 33RD NATIONAL INVITATIONAL MATHEMATICAL CHALLENGE (MATHEMATCH)

GENERAL INFORMATION

The UPLB Mathematical Sciences Society annually hosts the Southern Tagalog Invitational Mathematical Challenge, better known as MATHEMATCH. With the goal of promoting deeper appreciation and wider application of mathematical sciences, on the competition's 33rd iteration, the Society is extending this competition nationwide.

I. ELIGIBILITY

- A. This competition is open to all junior high and senior high school students nationwide. Each school may be represented by a maximum of 4 students only.
- B. There is no entry or registration fee for this competition.
- C. Participation in this competition means adhering to the contest guidelines set by the UPLB Mathematical Sciences Society.

II. INTEGRITY

- A. It should be the responsibility of everyone concerned, including but not limited to the UPLB Mathematical Sciences Society members, event partners, judges, participating schools, and household members of contestants to protect and maintain the integrity of this competition.
- B. Joining this competition means that the contestants will only submit answers that are the result of their individual efforts and are not arrived at using any computing device, application, or software, consulting anyone, and using physical or online references. It shall also mean that they are aware of the appropriate consequences that will be faced by anyone who is proven to have violated the rules of the competition.

III. TECHNICAL REQUIREMENTS

- A. Since the competition will be entirely held online, contestants are required to prepare the necessary technical tools needed to effectively participate in the competition. The following are the required technical requirements:
 1. An active email address for important correspondence.
 2. A reliable internet connection during the competition.
 3. A computer, laptop, or tablet with an installed Zoom application.
 4. A Zoom (basic or free) account.
- B. It should be the responsibility of the participants to regularly check their emails for more details and instructions about the competition. The organization will not be at fault in case a participant fails to



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attend to the contest requirements due to their own failure to read competition updates sent through email.

- C. The participants are highly encouraged to prepare a back-up internet connection source in case of internet connection problems and power interruptions. Devices that will be used during the competition shall be fully charged before the start of competition to minimize technical problems during the contest proper.
- D. The use of laptops or any device with enough screen size for visibility purposes is also highly recommended. The organization will not be responsible for overlooked or misinterpreted contest problems due to screen visibility.
- E. The UPLB Mathematical Sciences Society recognizes that not everyone has access to stable and reliable internet connection and have sufficient electronic gadgets at home. Unfortunately, the organization cannot accommodate these limitations. Through combined efforts, the competition will be pushed through after making the necessary adjustments to ensure the safety of all the individuals involved while still maintaining the integrity of this competition. We hope for everyone's kind understanding.

IV. REGISTRATION AND DEADLINES

- A. Interested participants should register through the provided *Google Form link* to secure their slots for the competition. The registration period shall start on **September 13, 2021 10:00 AM** and will end on **October 1, 2021 11:59 PM**. Only a maximum of **60 participants** will be accommodated, following a first come, first served basis. A registration confirmation will be sent via email.
- B. Upon registration, participants must submit a copy of their *School ID* and *Proof of Enrollment* for A.Y. 2021-2022. Furthermore, each participant is required to sign the *Integrity Form* which shall signify that the participants will abide by the rules in maintaining the integrity of the competition amidst it being conducted online.
- C. Additional instructions will be regularly provided to the qualified participants *via* email and/or Facebook updates.
- D. The UPLB Mathematical Sciences Society reserves the right to extend the registration period. In case of such adjustments, announcements will be made through the organization's official Facebook Page (facebook.com/uplbmass1973) and the official page of MATHEMATCH (facebook.com/MATHEMATCH).

V. CONTEST MECHANICS

A. GENERAL MECHANICS

- 1. The competition will cover topics in **Algebra, Arithmetic, Calculus, Geometry, Logic, Statistics, and Trigonometry**. Well-screened contest questions will be verified by UPLB Mathematics professors who will also serve as judges in the final round.



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2. The **preliminary round** will be conducted *via Zoom* on **October 16, 2021**. This will be in the form of a synchronous individual exam.
 3. The **Top Fifteen (15) contestants** who will garner the highest scores in the preliminary round will advance to the **final round**. Finalists will be contacted through email on or before **October 20, 2021**. The names of the finalists will also be published on the official Facebook page of MATHEMATCH and UPLB MASS.
 4. The Final Round is scheduled on **October 23, 2021 via Zoom**. It will also be available for screening *via Facebook Live* on the organization's official Facebook page.
 5. The **Top 3 contestants** who will garner the highest points will be declared the winners of the competition.
 6. The UPLB Mathematical Sciences Society reserves the right to disqualify any participant who will not follow the contest guidelines. The organization also reserves the right to change and amend the competition rules given that there is enough time to disseminate the information.
- B. PRELIMINARY ROUND MECHANICS**
1. The preliminary round will be in the form of a closed-door, individual, synchronous, written exam which will be held *via Zoom* on October 16, 2021 from 1:00 PM to 4:00 PM.
 2. The exam will be composed of short-answer questions only. Answers will be submitted through *Google Forms*.
 3. The Top 15 contestants garnering the highest scores will advance to the final round.
- C. FINAL ROUND MECHANICS**
1. The final round will be a live quiz contest which will be held *via Zoom* on October 23, 2021 1:00 PM onwards. To maintain order in the competition proper, only the participants, judges, and UPLB MASS members will be allowed to enter the Zoom. Other interested viewers may watch the competition *via Facebook Live* on the organization's official Facebook Page.
 2. The final round will be divided into 3 rounds - Easy, Average, and Difficult.
 - a. Easy Round
 - Ten (10) questions will be asked.
 - Each contestant will be given thirty (30) seconds to answer each question.
 - A correct answer garners 5 points. Wrong answers and no answers will garner no points.
 - b. Average Round
 - Seven (7) questions will be asked.
 - Each contestant will be given sixty (60) seconds to answer each question.
 - A correct answer garners 7 points. Wrong answers will result in a deduction of 3 points. No answers will garner no points.
 - c. Difficult Round
 - Five (5) questions will be asked.



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- Each contestant will be given ninety (90) seconds to answer each question.
- A correct answer garners 10 points. Wrong answers will result in a deduction of 5 points. No answers will result in a deduction of 3 points.

3. The accumulated points from the Easy, Average, and Difficult Rounds shall determine the winners for this competition.

VI. WINNERS AND PRIZES

- Participants will receive e-certificates for their participation.
- The individual top scorer of the preliminary round will receive a certificate of recognition and PhP 1000 cash.
- The Top 15 finalists will each receive an e-certificate of recognition and PhP 300 cash.
- The final round winners will receive e-certificates of recognition and the corresponding cash prizes:

Place	Prize
1st Place	PhP 10,000 cash
2nd Place	PhP 7,000 cash
3rd Place	PhP 5,000 cash

- The winners of this competition will be announced *via* Facebook Live on the UPLB MASS' Official Facebook Page on October 23, 2021. A separate post for the winners of this competition will also be published on the said page(s).

2) WEBINAR

The UPLB Mathematical Sciences Society conducts a seminar as part of the Mathematical Sciences Week celebration to promote deeper understanding and wider application of concepts related to the theme of the event.

- This webinar is open to all interested individuals nationwide.
- There is no entry or registration fee for this event.
- Interested participants should pre-register through the provided *Google Form link*. The details of the Zoom meeting will be sent through the information they have provided in the pre-registration form. The pre-registration period shall begin on **October 4, 2021 10:00 AM** and will end on **October 15, 2021 11:59PM**.



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- IV. Zoom slots will be limited due to the participant capacity of Zoom meetings. However, other interested participants may also attend the webinar via Facebook Live which will be available in the official page of UPLB MASS (facebook.com/uplbmass1973).
- V. The webinar will be held on **October 17, 2021 at 2:00PM**.
- VI. Participants will be given e-certificates for their participation in the webinar, provided that they will submit 3 screenshots highlighting the topics discussed during the lecture as proof of participation in the event.

3) ONLINE ART COMPETITION

I. ELIGIBILITY

- A. This Online Art Competition is open to all bona fide students enrolled at the University of the Philippines Los Baños.
- B. There is no entry or registration fee for this competition.
- C. Participation in this competition means adhering to the contest guidelines set by the UPLB Mathematical Sciences Society.

II. REGISTRATION REQUIREMENTS AND DEADLINES

- A. Interested participants must register through the provided *Google Form link* to secure their slots for this competition. The registration period shall start on **September 20, 2021 10:00 AM** and will end on **October 1, 2021 11:59 PM**. Only a maximum of **30 participants** will be accommodated, following a first come, first served basis. A registration confirmation will be sent via email.
- B. Upon registration, participants shall submit a copy of their *UPLB ID (or most recent School ID for Freshmen)* and *Proof of Enrollment* for the First Semester of A.Y. 2021-2022.
- C. All entries must be submitted on or before the deadline: **October 8, 2021 11:59 PM** through the provided *Google Form link*. Entries submitted after the deadline may be disqualified.
- D. All entries will be posted in the official Facebook Page of UPLB MASS (facebook.com/uplbmass1973) during the organization's celebration of Mathematical Sciences Week.
- E. The UPLB Mathematical Sciences Society reserves the right to extend the submission deadline. In case of such adjustments, registered participants shall be notified *via email*.

III. DESIGN SPECIFICATIONS

- A. Participants must create an original artwork that explains concepts related to this year's Mathematical Sciences Week theme - ***"Good Game, Well Played: Exploring the Mathematical Principles Behind Basic Game Design and Implementation"***. The artwork should NOT contain any



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copyrighted material, watermarks, and date stamps. Moreover, the artwork should NOT contain foul, offensive, or controversial content.

- B. Only one entry may be submitted per participant.
- C. The artwork can be done traditionally or digitally but NOT a combination of both. Contestants who will opt to do traditional artworks shall submit a scanned copy of their work.
- D. Entries must be submitted in **JPEG format** which **shall not exceed 20 MB in size**.
- E. Entries must have a **title** and a **brief description**. The description must explain the overall concept or idea of the artwork. The description can either be written in English or Filipino and must be composed of a maximum of 5 sentences.

IV. WINNERS AND PRIZES

- A. Participants will receive e-certificates for their participation.
- B. There will be four winners for this competition. The 1st Place, 2nd Place, and 3rd Place Winners shall be chosen based on the following criteria:

Relevance to the Theme	40%
Creativity	30%
Originality	20%
Explanation	10%
TOTAL	100%

- C. The People's Choice Award will be awarded to the entry who will garner the most number of reactions on Facebook. Participants may share and promote their entries; however, they are discouraged to spam their entries with comments or shares to prevent bias during the voting period.
- D. The judges' decision is final and irrevocable.
- E. Winners will receive e-certificates of recognition and the corresponding cash prizes:

Place	Prize
1st Place	PhP 3,000 cash
2nd Place	PhP 2,000 cash
3rd Place	PhP 1,000 cash
People's Choice	PhP 1,000 cash



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- F. The winners of this competition will be announced *via* Facebook Live at the UPLB MASS' Official Facebook Page on October 23, 2021. A separate post containing the winning entries will also be published on the said page.

4) INFOGRAPHICS MAKING COMPETITION

I. ELIGIBILITY

- This Infographics Making Competition is open to all junior high and senior high school students nationwide.
- There is no entry or registration fee for this competition.
- Participation in this competition means adhering to the contest guidelines set by the UPLB Mathematical Sciences Society.

II. REGISTRATION REQUIREMENTS AND DEADLINES

- Interested participants should register through the provided *Google Form link* to secure their slots for this competition. The registration period shall start on **September 15, 2021 10:00 AM** and will end on **September 28, 2021 11:59 PM**. Only a maximum of **30 participants** will be accommodated, following a first come, first served basis. A registration confirmation will be sent via email.
- Upon registration, participants shall submit a copy of their *School ID* and *Proof of Enrollment* for A.Y. 2021-2022.
- All entries must be submitted on or before the deadline: **October 1, 2021 11:59 PM** through the provided *Google Form link*. Entries submitted after the deadline may be disqualified.
- All entries will be posted in the official Facebook Page of UPLB MASS (facebook.com/uplbmass1973) during the organization's celebration of the 33rd Mathematical Sciences Week.
- The UPLB Mathematical Sciences Society reserves the right to extend the submission deadline. In case of such adjustments, registered participants will be notified *via* email.

III. DESIGN SPECIFICATIONS

- Participants must create an infographic that explains any concept or idea related to this year's Mathematical Sciences Week theme - ***"Good Game, Well Played: Exploring the Mathematical Principles Behind Basic Game Design and Implementation"***. The infographic must only contain factual information, properly referenced in **APA format**. Moreover, the infographic should NOT contain foul, offensive, or controversial content.
- Only one entry may be submitted per participant.
- The entries must be written/composed in English.
- The dimensions of the infographic must be **11 x 17 inches** in size and in **portrait orientation**. It must be submitted in **JPEG format** which shall not exceed **20 MB** in size.



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IV. WINNERS AND PRIZES

- A. Participants will receive e-certificates for their participation.
- B. There will be three winners for this competition. The 1st Place, 2nd Place, and 3rd Place Winners shall be chosen based on the following criteria:

Accuracy of Information	30%
Conciseness	20%
Creativity	20%
Relevance to the Theme	20%
Spelling and Grammar	10%
TOTAL	100%

- C. The judges' decision is final and irrevocable.
- D. Winners will receive e-certificates of recognition and the corresponding cash prizes:

Place	Prize
1st Place	PhP 3,000 cash
2nd Place	PhP 2,000 cash
3rd Place	PhP 1,000 cash

- E. The winners of this competition will be announced *via* Facebook Live at the UPLB MASS' Official Facebook Page on October 23, 2021. A separate post containing the winning entries will also be published on the said page.