Welcome to the National Math Club! Thank you for volunteering your time to be a club leader. Your work matters; participating in a math club helps students of all math backgrounds unlock their full potential and discover their love of math. This Club Leader Guide will help acquaint you with the National Math Club and explain your role as a club leader in this program.

What are my resources? MATHCOUNTS provides all the club meeting plans you’ll need to host club meetings throughout the year. Instructions and any necessary student copies can be viewed and downloaded from the Club Leaders Resources page of the website. With this guide, you received a box of the National Math Club pencils, a game board for a new 2021-2022 National Math Club game, dice and a poster to help you get started!

Log in at www.mathcounts.org. Click the button at the top right of the homepage, then follow the instructions to log in. Don’t forget to check the reCAPTCHA box at the bottom.

Go to in the top right corner of the page, and click Dashboard in the drop-down menu.

Scroll down to the Club Leaders section of the Dashboard. Click the blue Club Leaders Resources button on the right side.

On the Club Leaders Resources page, you’ll find links to games, explorations & problem sets, as well as information about Gold & Silver Level and the Club App.

Any questions? info@mathcounts.org

703-299-1006
Meeting plans are organized into three types of activities: **games, explorations & problem sets**. Instructions for each activity are on the Club Leaders Resources page at [www.mathcounts.org/clubleaders](http://www.mathcounts.org/clubleaders).

We have designed every activity so each can be (1) **scaled** to work with groups of any size, (2) played with **simple materials** like paper clips and cards and (3) **differentiated** for students at various levels of math skill development.

**GAMES**
Fun and competitive use of math skills & problem solving

- **SALUTE**
  Practice algebra through a “heads-up” style card game.

**EXPLORATIONS**
Collaborative, hands-on & non-traditional math activities

- **PROOFIGAMI**
  Use origami to create a physical proof of the Pythagorean Theorem.

**PROBLEM SETS**
Topic-focused problems & holiday-themed worksheets

- **TALK LIKE A PIRATE DAY**
  Follow a map to discover math “treasure” around the school.
<table>
<thead>
<tr>
<th>Month</th>
<th>#</th>
<th>Suggested Activity</th>
<th>Math Topic</th>
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<td>[Game] Lightning War</td>
<td>Arithmetic/Mental Math</td>
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<td>2</td>
<td>[Game] The Multiplication Game</td>
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<td>[Exploration] A-maze-ing Fractions</td>
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<td>[Exploration] Talk Like a Pirate Day (9/19)</td>
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<td>[Exploration] Connect the Dots</td>
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<td><strong>You’ve had more than 5 club meetings—apply for Silver Level!</strong></td>
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<td>[Exploration] Halloween (10/31)</td>
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<td>[Exploration] Let’s Make a Deal</td>
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<td>[Exploration] Function Battleship</td>
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<td>[Game] Math BINGO</td>
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<td>February</td>
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<td>[Game] Choose your Gold Level Project</td>
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<td>[Game] Continue your Gold Level Project</td>
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<td><strong>Finish your project and apply for Gold Level!</strong></td>
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<td>March</td>
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<td>[Exploration] Representing Patterns Numerically</td>
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<td>May</td>
<td>26</td>
<td>[Exploration] Statistics &amp; Data</td>
<td>Statistics &amp; Data</td>
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<td>27</td>
<td>[Exploration] Re-visit your club’s favorite(s) and celebrate!</td>
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<td><strong>June 1 is the final deadline to apply for Gold &amp; Silver Level!</strong></td>
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NEW ACTIVITIES THIS YEAR

Hey Bud, How’s It Growing?
Each player is growing a plant that must flower before their opponent’s plant to win! In this game, students will use the concept of slope and points of intersection on the coordinate grid.

Pascal’s Triangle
A deep dive into Pascal’s Triangle. Students will explore its structure, its many patterns and how it can be used to solve all kinds of math problems!

Statistics & Data
This problem set will challenge students to solve a variety of statistics and data problems using multiple problem solving strategies.
WHAT IS SILVER LEVEL STATUS?
Silver Level Status is awarded to clubs that convene at least five times for virtual or in-person meetings.

WHAT WILL MY CLUB GET IF IT ATTAINS SILVER LEVEL STATUS?
- Two boxes of MATHCOUNTS Silver Level pencils and a Silver Level Pennant*
- Entry into Silver Level drawing for $200 gift card (20 winning clubs are selected)*
- Certificates for your club members (template emailed to the club leader in PDF form)
- Club included on the Silver Level Clubs List on the MATHCOUNTS website

*Pennant, pencils and entry into drawing guaranteed only if application is received by April 1, 2022.

HOW DO I SUBMIT MY APPLICATION?
You can either apply online at www.mathcounts.org/silver2022, email your completed Silver Level Application to info@mathcounts.org or mail it to MATHCOUNTS, The National Math Club – Silver Level, 1420 King Street, Alexandria, VA 22314. Faxed applications will not be accepted.

DO THE SAME STUDENTS HAVE TO ATTEND ALL FIVE MEETINGS?
No. As long as the required minimum number of four students attend each meeting, the students can be different at each meeting.
WHEN IS THE APPLICATION DUE?
For your club to be eligible to receive all prizes, as well as entry into the Silver Level Drawing, the MATHCOUNTS national office must receive your application by April 1, 2022. No applications will be accepted after June 1, 2022, and prizes cannot be guaranteed after April 1, 2022.

HOW LONG DOES IT TAKE MATHCOUNTS TO PROCESS A SILVER LEVEL APPLICATION?
It takes 1-5 business days for MATHCOUNTS to process a Silver Level Application once it is received. If you do not receive an email from MATHCOUNTS about the status of your application within a week of submitting it, please email info@mathcounts.org to make sure your application was received.

DO I NEED TO COMPLETE ALL OF THE CLUB ACTIVITIES TO ACHIEVE SILVER LEVEL STATUS?
No. Your club is not required to complete all or any specific number of the games, explorations and problem sets provided on the Club Leaders Resources page.

CAN MY CLUB APPLY FOR GOLD LEVEL WITHOUT FIRST ACHIEVING SILVER LEVEL STATUS?
Yes. You must meet the Silver Level requirements of a minimum of five club meetings, in person or virtual, in addition to completing the Gold Level Project. However, you may attest to this on the Gold Level Application when submitting your Gold Level Project evidence and application together.

WHEN WILL THE DRAWING WINNERS BE ANNOUNCED?
Drawing winners will be announced on the MATHCOUNTS website by April 29, 2022.
By signing, I, the club leader, attest that my club met virtually or in person five or more times.

Club Leader Signature: ____________________________

Date: ____________________________

AWARDS DEADLINE

*Received by Friday, April 1, 2022
Eligible for all Silver Level awards and prizes, as well as entry into the Silver Level drawing.

Silver Level awards cannot be guaranteed for applications received after April 1, 2022. No Silver Level applications will be accepted after June 1, 2022.

HERE’S HOW TO SUBMIT YOUR APPLICATION

Email as scanned PDF or JPG attachment to info@mathcounts.org
Mail to MATHCOUNTS Foundation
The National Math Club - Silver Level
1420 King Street, Alexandria, VA 22314

Faxed applications will not be accepted.

By signing, I, the club leader, attest that my club met virtually or in person five or more times.

Club Leader Signature: ____________________________

Date: ____________________________

Record below the number of students who attended each meeting and the date each club meeting was held.

Club Meeting #1
Date: ____________________________  # of students attended: ____________________

Club Meeting #2
Date: ____________________________  # of students attended: ____________________

Club Meeting #3
Date: ____________________________  # of students attended: ____________________

Club Meeting #4
Date: ____________________________  # of students attended: ____________________

Club Meeting #5
Date: ____________________________  # of students attended: ____________________
Gold Level FAQ

WHAT IS GOLD LEVEL STATUS?
Gold Level is the highest honor in the National Math Club. To achieve recognition, your math club must complete a Gold Level Project. Your club can choose to complete any one of the 3 options for the 2021-2022 Gold Level Project.

WHAT WILL MY CLUB RECEIVE IF IT ATTAINS GOLD LEVEL STATUS?
• Three boxes of MATHCOUNTS Gold Level pencils and a Gold Level Banner (in lieu of Silver Level Pennant)*
• Entry into Gold Level Grand Prize drawing for a $300 gift card and an all-expenses-paid trip for four students and the club leader to attend the 2022 Raytheon Technologies MATHCOUNTS National Competition in Washington, DC (one winning club is selected)*
• Entry into Gold Level drawing for a $300 gift card (four winning clubs are selected)*
• Certificates for your club members (template emailed to club leader in PDF form)
• Club recognition on the Gold Level Clubs List on the MATHCOUNTS website

*Banner, pencils and entry into drawings guaranteed only if club’s Gold Level Application and project evidence is received by April 1, 2022.
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• Certificates for your club members (template emailed to club leader in PDF form)
• Club recognition on the Gold Level Clubs List on the MATHCOUNTS website

* Banner, pencils and entry into drawings guaranteed only if club’s Gold Level Application and project evidence is received by April 1, 2022.

CAN MY CLUB APPLY FOR GOLD LEVEL STATUS WITHOUT FIRST ACHIEVING SILVER LEVEL?
Yes. You must meet the Silver Level requirements of a minimum of five club meetings, in person or virtual, in addition to completing the Gold Level Project. However, you may attest to this on the Gold Level Application when submitting your Gold Level Project evidence and application together.

MY CLUB HAS MORE THAN (OR FEWER THAN) 12 STUDENTS, BUT THERE IS ROOM FOR 12 STUDENT SIGNATURES ON THE GOLD LEVEL APPLICATION. WHAT SHOULD I DO?
Your club is required to have a minimum of 4 students. As long as your form has 4 student signatures, your club’s application will be accepted. If you have more than 12 students, you may attach the additional student signatures to your application.

DO I NEED TO SUBMIT ANYTHING ASIDE FROM THE GOLD LEVEL APPLICATION?
Yes. You must submit evidence that the Gold Level Project was completed. The type of evidence submitted will depend on the final format of your club’s project. Applications without this evidence included will not be considered for Gold Level Status.

WHAT IS CONSIDERED ADEQUATE “EVIDENCE” OF THE COMPLETION OF THE GOLD LEVEL PROJECT?
The type of evidence will depend on the form of the club’s final presentation and the project option selected. This could include a physical or electronic copy of the project. In some instances, a video or photos of the project may be more appropriate. More information can be found at www.mathcounts.org/clubleaders. If you need help determining how to document your club’s project, please email info@mathcounts.org.

Gold Level FAQ
WHEN ARE THE APPLICATION AND PROJECT DUE?
For your club to receive all prizes, as well as entry into the Gold Level drawings, MATHCOUNTS must receive your application and evidence by April 1, 2022. No applications will be accepted after June 1, 2022, and prizes cannot be guaranteed after April 1, 2022.

WHAT IS THE BEST WAY TO SEND MY APPLICATION AND GOLD LEVEL PROJECT EVIDENCE?
The application and evidence of the Gold Level Project should be received by MATHCOUNTS together. Therefore, if you are sending an electronic copy of the project, please include a scanned copy of the application. If you are mailing in a copy of the project, please include your application in that mailing (and keep photocopies of what you mail for your own records).

HOW LONG DOES IT TAKE MATHCOUNTS TO PROCESS A GOLD LEVEL APPLICATION?
It takes up to 10 business days for MATHCOUNTS to process a Gold Level Application once it is received. If you do not hear from MATHCOUNTS about the status of your Gold Level Application within two weeks of submitting it, please email info@mathcounts.org to make sure your application and any accompanying materials were received.
Gold Level Options

Choose from 3 different Gold Level Project options. Find a brief summary below, and get details on each at www.mathcounts.org/clubleaders.

Data Exploration
Club members will choose two of the three investigation options to complete: qualitative, quantitative & comparative. The students will create surveys and hypotheses, conduct their surveys, organize and present their data, and draw conclusions.

Math Video Challenge
Club members will compete in the Math Video Challenge. Students will choose a problem from the 2021-2022 MATHCOUNTS School Handbook and create a video that solves the problem creatively and in a real-world setting.

Service Project
Club members will complete a math-based service project. What you choose to do is flexible and up to the club leader to ultimately decide. Your club could organize and run a school math night, for example. The goal is to incorporate math while giving back.
By signing, I, the club leader, attest that my club had a minimum of five meetings and the club members who signed this application contributed to the Gold Level Project.

Club Leader Signature: ____________________________________________
Date: ___________________