



### TEAMS

PICO (*PRONOUNCED, PEE-KO*)

This is the acronym we use for the team coach and contact person. It stands for the Person In Charge of the Olympiad. The name and the email address of the PICO must be included on the registration form and all correspondence with MOEMS®.

#### TEAM COMPOSITION

Individual students are not eligible for Mathematical Olympiads enrollment. MOEMS® is a team event.

**School Teams:** All students come from one school only.

**Home School Teams:** Students attend a Home-School Association affiliated with a single school district.

**District Teams:** Students may come from different schools within the same district. Teams that are composed of students from several schools in the same district, or Gifted and Talented Programs from the same district fall into this category. **Approval by our office is required. Call 516.781.2400 for authorization.**

**Institute Team:** Olympiad Contests and practice sessions are run by a private organization. No student may be on an Institute Team if he/she attends a school that fields a MOEMS® School Team, even if that student is not a member of the School Team. **Approval by our office is required. Call 516.781.2400 for authorization.**

#### DIVISIONS

To participate, each student must be enrolled in the member school, institute, or district. Students who have completed eighth grade may not participate. A team with any 7th or 8th grade student must be in Division M. A team with any 4th or 5th grade student should routinely be in Division E, but 4th and 5th graders may be placed on a Division M team if appropriate. 6th grade students may be placed on either a Division E or Division M team. No team may be split between two divisions; however, a school may put any of its 6th grade students on both a Division E and Division M team, if both divisions are available at that school.

#### TEAM SIZE

The maximum number of students on any team is 35; however, a school may enroll more than one team, upon payment of the annual entry fee for each additional team. Although there is no set minimum number of team members, a team's score is determined by the cumulative scores of the top 10 students after the 5<sup>th</sup> Olympiad.

#### REGISTERING STUDENTS

On the MOEMS® secure website, from the tab "My Team" click "Student List." Enter the name, grade and gender of each student (even if all the students are in the same grade, each student must have a grade entered). Entering the names in alphabetical order is strongly suggested, but not mandatory. Team members that join after this list has been submitted should have their names placed at the end of the list on the next available blank lines. Note: **Once the team members are registered, the secure website offers options to display the student list sorted by first name, last name, as well as by ID number.**

Certain information that may have been entered incorrectly, may be edited by the PICO; for example, spelling of names, grade or gender. However, student names should not be deleted by the PICO. If a student leaves, the box ABS should be checked for the remaining Olympiads, or call the MOEMS® office (516.781.2400) or email [office@moems.org](mailto:office@moems.org) to have it removed. This correspondence is especially crucial when there are no additional lines left on the student roster to add a student.

### CONTESTS

#### START UP MATERIALS

The following documents are available at the MOEMS® secure website after the PICO logs in with a Team ID and password:

- Fifty (50) practice problems with detailed solutions from the previous two years. These are included to help students and new PICOs understand what to expect on the upcoming contests
- The Online Scoring System, where students' names, grades, and genders are entered by the PICO before any student scores may be entered.
- The **Organization and Procedures** (this document), which is our rulebook. Printing out a copy for easy access is suggested.
- **What Every Mathlete Should Know**, which lists and defines terms that could be used in our Olympiad Contests.
- **Message to Parents**, which helps build parental support. It is suggested that the PICO reproduce enough copies to send home with each student.

#### DATES, TIME AND PLACE

Five Olympiads, each consisting of five questions, and limited to 30 minutes are held monthly from November through March. MOEMS® sets the date for each Olympiad, and asks that it is adhered to except in unusual circumstances such as local school closing, special field trip, excessive absence, etc. In such cases, every attempt should be made to hold the contest on a day as close as possible to, but **after** the scheduled date.

### **For School/District/Home-School Teams**

- All students must take the contest at the same time and in the same location.
- There are no make-ups or early administration for any reason for students who cannot be present on the announced date.
- Although there is a certain amount of flexibility in the date we list as the "Contest Date," it should be given within one week of that date, and under no circumstances, earlier than that "Contest Date." The worst case scenario would be that it is given before the announced date of the subsequent contest.

### **For Institute Teams**

- All students must take the contest at the same time and in the same location.
- The earliest date for administration is the Saturday after the announced "Contest Date."
- There are no make-ups or early administration for any reason for students who cannot be present on the announced date.

## PREPARATION

Approximately one week before the announced date of each Olympiad Contest, an email is sent to the PICO advising that the Olympiad is available for downloading at the secure area of the website. The PICO should then do the following:

- **Pages 1–2 (Olympiad Problems and Student Answer Sheet):** Print out enough copies for all participants. This should be done as two single sided pages to allow the students the blank sides to be used as scrap paper.
- **Pages 3–4 (Answers and Solutions):** Print out one copy for the PICO for scoring an Olympiad.
- **Disposition:** Place all materials in a secure location until the day of the contest. Open it only at the contest in the presence of the student participants to assure your students of the security of the MOEMS® events.
- Following the contest, the PICO may wish to distribute copies of the questions to other teachers for classroom use only. One advantage is that this can build support for the program among your colleagues.
- The PICO may also wish to distribute copies of the solutions along with a **copy** of their actual contest to all team members after the Olympiad. By doing so, students will have materials from which to study, and parents may see what their children were asked to do.
- **IMPORTANT! These are copyrighted materials. Under no circumstances, may the actual contests or individual problems and/or solutions be published in any form, including on the internet or "secure" websites.**

With the increase of mathletes for whom English is not their first language, the following procedures become more important.

- The PICO is authorized to create a written foreign language version of each contest for any non-English reader. This translation should be attached to the original contest for storage. No additional time may be allocated for students using this accommodation.
- Students are able to use an English to foreign "word-to-word" dictionary, or an electronic version of that dictionary. No additional time may be allocated for students using this accommodation.

## MATERIALS PERMITTED FOR CONTEST

The contest paper is the only place that students should show their scrap work. No additional scrap paper should be given to students. **If you reproduced the contest as a single sided document (2 pages), as mentioned earlier, advise students that they may use the backs of those pages as scrap also.**

No other materials or tools are permitted. These include, but are not limited to, graph paper, rulers, protractors, calculators, or other electronic devices, including telephones.

## ADMINISTRATION & PROCTORING CONTESTS

A proctor (usually, the PICO) must actively observe and monitor the students at all times. No one may help any student in any way during the contest. After distributing the Olympiad face down and once the proctor is sure all pens/pencils are down, students should be instructed to turn over their papers and follow along as the proctor reads aloud all five questions. Once the questions have been read, the proctor should give the students the signal to begin, reminding them that have exactly 30 minutes to complete the contest.

**A reminder for the more seasoned veteran PICOs...**as of November 2016, the distribution of the five individual questions separately, has no longer been an option. Students must receive all five questions as a single set, and given 30 minutes to complete all five questions, budgeting their time as they see fit.

## SCORING AN OLYMPIAD

Consider all scores confidential. After all the papers have been collected, use the Answers and Solutions sheet to check student answers. Student answers must match our key exactly to be credited. If a student feels another answer should be given credit, there is an appeals process in place (See "Appeals" later in this document).

At the bottom of the students' answer boxes is a box to record the number of correct answers he/she scored for that contest.

## REPORTING SCORES

To enter student scores for a particular Olympiad click on "My Results" and then choose the appropriate Olympiad. Record all results next to each preprinted student name as follows (the computer program will automatically enter the score for each student):

- **Correct Answer:** click the appropriate box under the problems answered correctly by the student
- **Incorrect Answer:** leave the appropriate boxes blank
- **Did Not Participate:** click the ABS box. Also, click this box for any students no longer on your team. Note: clicking "ABS" will override all other checkmarks for that student on that Olympiad.

Corrections to scoring may be made online at any time up until March 31. Printing out a copy of the scores for each Olympiad has the advantage of convenience when reviewing any student's record, especially if our records differ from yours. It also serves as a cover sheet for the packet of contest papers you should be holding onto for the remainder of the year.

**Important – The final results for all contests must be entered online by March 31. The Online Scoring System will close on that date. Score changes or additions will have to be entered manually by someone in the MOEMS® office, and awards will be processed based solely on the results submitted up until March 31.**

**Simply stated, completed award packages for those teams will not be sent out until after June 1st. There will be no exceptions to this rule.**

## RECORD KEEPING

It is strongly suggested that PICO's **keep all original answer sheets until all awards have been received.** Return to your students copies of answer sheets along with the questions. Having the original answer sheets serves several purposes. It allows regrading after an appeal a much simpler process than trying to get the students to return their results. It facilitates score corrections (if necessary) after all your results have been finalized on the website. And finally, in the rare, unfortunate situation of a student changing an answer after a contest has been returned, verification is close at hand.

## APPEALS & THE APPEALS PROCESS

Appeals may be granted only for alternate acceptable answers utilizing valid interpretations based on compliance with What Every Mathlete Should Know. Appeals are not granted for a reading or a copying error by the student, or if any condition of the problem is ignored.

Only a PICO may make a formal request for an appeal. Several parents insist upon calling or e-mailing our office, so it is incumbent upon you (the PICO) to explain that it would be impossible to respond to them individually.

Here is how an appeal works...

- (1) We receive one or more requests for an appeal to a specific question and its answer;
- (2) We generate an email to our Appeals Committee (11 – 13 members, depending upon the Division), and ask that each member submits an "approval" or "denial" of the appeal, normally within 48 hours;
- (3) ***If the appeal is approved:*** As soon as a majority of those members "approve" the appeal request, an e-mail will be sent to all PICO's of that division;
- (4) When approved, PICO's will be instructed to give credit for the newly accepted answer, as well as for the original answer (unless it was mathematically incorrect), and to correct the records submitted on our secure website;
- (5) ***If the appeal is denied:*** Only those PICO's who raised the appeal will be notified immediately;
- (6) The next available newsletter will have a more complete discussion of the reasons for the acceptance or denial of the appeal.

As a PICO, you should have kept a copy of the original paper with the students' answers, so that the correction of grades may be facilitated. It is also suggested that you keep those answer sheets for the entire year in a secure place.

Given this procedure, please understand that the entire process can take up to 5 or 6 business days after the first appeal is received. We take our mission to provide creative and intellectually-stimulating problem solving experiences very seriously, and will continue to hear your concerns.

# AWARDS

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All end-of-year awards are determined from the online scores entered by our PICO's. The following awards are shipped approximately two weeks after the conclusion of Olympiad 5. We will make every attempt to get your awards to you before the end of your academic year and before May 31. Only School Teams and Home-School Teams are considered for Team Awards; District Teams and Institute teams are not permitted to be granted Team Awards due to the make-up of those teams.

### ***Individual Awards***

- A Certificate of Participation for each student who took part in MOEMS®
- An embroidered Olympiad Iron-On Patch for each student whose cumulative score ranks in the top 50 % of their division
- A "Gold Pin" or a "Silver Pin" for each student whose cumulative score is in the top 2% or 3-10% of their division, respectively
- One trophy for the highest individual scorer for each team. ***In the event of a tie, additional trophies may be purchased by the PICO***
- A boxed Medallion (the George Lenchner Award) for any student scoring a perfect 25 on his/her cumulative score
- ***Note: "Honorable Mention" trophies are available for purchase for students who the PICO might want to acknowledge***

### **Team Awards**

A Team's Score is computed by taking the sum of the ten highest scores on each team. With the exception of the "Highest Team Achievement" plaque, certificates will not arrive in schools until sometime in June.

- For Each Division: A plaque for "Highest Team Achievement" for a team score in the top 10% of all participating teams
- For Each Division: A "High Achievement" certificate for a team score in the next 10% (11% – 20%) of all participating teams
- For Division E: A "Grade 4 Meritorious Certificate" for each of the top 20% of teams with no grade 5 or 6 student
- For Division E: A "Grade 5 Meritorious Certificate" for each of the top 20% of teams with no grade 6 student
- For Division M: A "Grade 6 Meritorious Certificate" for each of the top 20% of teams with no grade 7 or 8 student
- For Division E: A "Grade 7 Meritorious Certificate" for each of the top 20% of teams with no grade 8 student

### HONOR ROLL

Following the season, MOEMS® publishes an Honor Roll to commemorate the top scoring teams and students. The honor roll can be viewed and printed on line or can be purchased in a stapled booklet format. The honor roll contains a section for each of the team awards listed above as well as sections for students scoring 25 or 24 points.

- HIGHEST TEAM ACHIEVEMENT (for each division the top 10% of all participating teams)
- HIGH TEAM ACHIEVEMENT (for each division the second 10% of all participating teams)
- MERITORIOUS ACHIEVEMENT (for each division the top 20% of all participating teams whose members were in the lower grades for their division)
- STUDENTS WITH A PERFECT SCORE (for each division)
- STUDENTS WITH ONE LESS THAN A PERFECT SCORE (for each division)