

Comparison: MOEMS® OnLine and MOEMS® OnPaper

Beginning this year, MOEMS® is offering two testing formats for administering our worldwide contests: MOEMS® OnLine and MOEMS® OnPaper. This should provide testing solutions for the variety of school management situations in use in the US and around the world. Notice that a school can even choose to have both OnLine and OnPaper teams if that suits their situation.

For those familiar with our contests over our many past years, we assure you that the differences are minimal and designed to enable the widest array of teacher, student, and class situations that we face. Enrollment, registration of students, number, and timing of contests, reporting scores, receiving results, awards will be the same for both testing formats. One major change is that the time available for each contest (the “Administration Window”) has been modified to approximately 4 weeks. As in past years there is an “Earliest Date” for administering each contest, but now this will be the same for all teams whether school teams or institute teams, for both divisions whether Division E or Division M, and for both administrative formats whether OnPaper or OnLine. **Additionally, there will be a “Latest Date” after which the contest may no longer be administered. Furthermore, there will be a deadline (“Final Date”) for each contest’s scores to be entered.** Beyond these, the major differences between the two testing formats will be found in the regular team practices and the procedure for testing.

Regular Practice

We have always recommended at least one hour of practice weekly and have always made practice resources available by providing 50 practice problems to enrolled teams, our Problem of the Month at our website, and books of instructional methods and past problems at our store. It is our hope that all students be exposed to problem solving as a regular part of their mathematics education but have never specified the practice sessions. While remote learning has affected group classwork and collaboration, it has not eliminated it.

Day of Contest Procedures

The major differences between the new MOEMS® OnLine testing format and the traditional MOEMS® OnPaper format is found in the nuts and bolts about administering the contest.

New MOEMS® OnLine	Traditional MOEMS® OnPaper
<ul style="list-style-type: none">The date and time of each contest is scheduled by the PICO for the entire team from the approximately 4 week testing window specified by MOEMS. If a PICO has multiple teams, these contests may be administered at different times, preferably within 2 days of each other.	<ul style="list-style-type: none">The date and time of each contest is scheduled by the PICO for the entire team from the approximately 4 week testing window specified by MOEMS. No make-up of any contest may be administered to any student for any reason. If it’s clear that a few students

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<p>No make-up of any contest may be administered to any student for any reason. If it's clear that a few students will not be available to take a contest, the PICO should find another date to administer the contest within the specified time frame, so that most students can be present.</p> <ul style="list-style-type: none">• All students for whom the contest will be counted should report to their Google® Classroom, ZOOM® Classroom, or other remote class platform approximately 10 – 15 minutes before the actual starting time of the contest.• Each team member is allowed only a pen, pencil and eraser, along with blank sheets of scrap paper. The PICO must verify that the sheets are clean and that no calculators, graph paper, protractors, or other aids or resources are present on the desk/table.• Each team member should be alone in a room. Parents, siblings, tutors, or anyone else should be asked to leave the room.• When the PICO is satisfied that all team members are present and ready, the PICO will provide access to the contest questions to all team members.• Once the students have access to the contest questions and with all pencils down, the PICO should read all five questions aloud to the students. The only questions that may be answered are	<p>will not be available to take a contest, the PICO should find another date to administer the contest within the specified time frame, so that most students can be present.</p> <ul style="list-style-type: none">• All students for whom the contest will be counted should report to the testing room or area approximately 5 – 10 minutes before the actual starting time of the contest.• Each team member is allowed only pen or pencil and eraser. The contest papers are the only place that students show their scrap work. We recommend the contest be printed as a single-sided document which allows the students to use the backs for scrap work. If needed, the PICO may distribute additional scrap paper. No calculators, graph paper, protractors, or other aids or resources are permitted.• All team members should be in the same room or area separated for personal safety and test security.• When the PICO determines that all team members are present and ready, the PICO will distribute all 5 questions of the contest as a single set face down on student desks.• After all contest papers have been distributed face down and with all pencils down, the PICO should read all five questions aloud to the students. The only questions that may be answered are
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<p>words that need clarification for alternate words...no definitions are to be given, (for example, it would be okay to state that a units digit is the same thing as a ones digit, but it would not be permitted to say that “the units digit is the first digit to the left of the decimal place”). Once the questions have been read, the PICO should give the signal to begin, reminding the students that they will be limited to 30 minutes to complete the contest.</p> <ul style="list-style-type: none">• Students arriving to the contest after it has begun (late) may be permitted to join in the contest; however, they will only receive the remaining time allotted for the rest of the class.• Although the test will be closed down by the PICO after 30 minutes, it is incumbent upon the PICO to keep time so that 15-, 10-, and 5-minute warnings are given to the students. Students should be reminded that they may submit their answer sheet anytime during the 30-minute contest. They do not need to wait for the contest to be shut down. Along with the 5-minute warning, the PICO should remind the students that answers must be entered properly in the answer spaces provided and submitted before the contest is closed down.• Once the timed contest begins, it is imperative that the PICO monitor the following:<ul style="list-style-type: none">○ Students’ eyes should never leave the computer screen or the scrap paper being used for that contest○ Students are not permitted to seek the aid of a parent, sibling, friend who may be in another room.	<p>words that need clarification for alternate words...no definitions are to be given, (for example, it would be okay to state that a units digit is the same thing as a ones digit, but it would not be permitted to say that “the units digit is the first digit to the left of the decimal place”). Once the questions have been read, the PICO should give the signal to begin, reminding the students that they have 30 minutes to complete the contest.</p> <ul style="list-style-type: none">• Students arriving to the contest after it has begun (late) may be permitted to join in the contest; however, they will only receive the remaining time allotted for the rest of the class.• It is incumbent upon the PICO to keep time so that 15-, 10-, and 5-minute warnings are given to the students.• The PICO should actively proctor the contest which includes<ul style="list-style-type: none">○ Students’ eyes should be only on the contest papers and scrap.○ Students are not permitted to seek the aid of a classmate, phone, or calculator.
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<ul style="list-style-type: none"> ○ Audio should be enabled on the students' classroom platform. ○ Students are not using any form of assistance. ● After the testing software has been closed, student answer sheets will be sent as a spreadsheet to each PICO, who will grade them based on the answer key provided. To be accepted as correct, answers must be equivalent to those listed on the answer key. All scores should be considered confidential. The answer key (the third and fourth pages of the contest papers) should not be made available to the students at this time*, although it is perfectly acceptable for the PICO to review, elicit their responses, and discuss those answers at the next MOEMS practice session. (*The full answer and solution key may be distributed to the student after the closing date of that contest has passed.) ● It is the PICO's responsibility to enter all scores at the MOEMS secure website before the deadline. Late score entry forms will be available for those missing the deadline. 	<ul style="list-style-type: none"> ● Answer sheets will be collected by the PICO, who will grade them based on the answer key provided. To be accepted as correct, answers must be equivalent to those listed on the answer key. All scores should be considered confidential. The answer key (the third and fourth pages of the contest papers) should not be made available to the students at this time*, although it is perfectly acceptable for the PICO to review, elicit their responses, and discuss those answers at the next MOEMS practice session. (*The full answer and solution key may be distributed to the student after the closing date of that contest has passed.) ● It is the PICO's responsibility to enter all scores at the MOEMS secure website before the deadline. Late score entry forms will be available for those missing the deadline.
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** New Dates for 2020-2021 **

Please keep this chart in a place where it will be easily accessible throughout the MOEMS® contest year.

CONTEST #	Administration Window		Final Date for Score Entry (by 11:59 PM)
	Earliest Date	Latest Date	
1	Mon, Nov 16, 2020	Sat, Dec 12, 2020	‡ U . . .
2	Mon, Dec 14, 2020	Sat, Jan 16, 2021	‡ U . . .
3	Mon, Jan 11, 2021	Sat, Feb 13, 2021	‡ U . . .
4	Mon, Feb 8, 2021	Sat, Mar 6, 2021	‡ U . . .
5	Mon, Mar 8, 2021	Wed, Mar 31, 2021	Wed, Mar 31, 2021