

## Regulations of the 5th International Olympiad of Metropolises

1. General statements
  - 1.1. In 2020, due to the epidemiological situation in the world, the Olympiad is held in a distributed format. The participating cities are supposed to organize venues in their cities.
  - 1.2. Major rounds of the Olympiad are held in 4 disciplines: mathematics, physics, chemistry, informatics.
  - 1.3. High school students aged from 14 to 18, who studied at a general educational institution on September 1, 2020, may take part in the Olympiad.
  - 1.4. A city team includes 8 participants. Exactly 2 team representatives compete in each discipline.
  - 1.5. Each team is accompanied by 4 leaders. Team leaders must be experts in the following subjects: mathematics and informatics, physics, chemistry.
  - 1.6. Major rounds of the Olympiad will be held on December 17 and 19.
  - 1.7. Starting time depends on the list of participants and venues' time zones. It can be different for different cities but the last team starts the exam before the first one finishes. Time regulations for each subject are published on the official website.
  - 1.8. Participation in the Olympiad must be confirmed by registration on the website <https://megapolis.olimpiada.ru> no later than December 5, 2020.
  - 1.9. The contact person registering the team is the "local organizer" of the Olympiad in the city (hereinafter - the local organizer).
  - 1.10. Online registration at <https://megapolis.olimpiada.ru> implies the consent of the participants and team leaders in the processing, cross-border transfer, and storage of their personal data, including surname, name, gender, date of birth, passport data, for 1 year in the manner established by the Federal laws of the Russian Federation. Consent to the processing of personal data can be revoked by sending a request from the local organizer.
  - 1.11. Online registration at <https://megapolis.olimpiada.ru> implies the consent of the participants and team leaders to filming during the rounds of the Olympiad and sending of video materials to the organizing committee.
2. Translation of tasks
  - 2.1. Tasks are given to participants in Russian or English. The team leader can choose to provide the participants with the tasks in native language. The language in which the participants will require the tasks must be indicated during registration process. In this case, the team leaders are obliged to translate the tasks having received them several hours before the rounds.
  - 2.2. If the need for translation is indicated in a timely manner, the organizing committee will try to provide the leaders with a preliminary translation made by professional translators who may not be experts in the subjects of the Olympiad.

- 2.3. Leaders receive the tasks for translation in Russian or English a few hours before the start of the rounds, the exact time depends on the subject (see paragraphs 4-7).
  - 2.4. The local organizer provides the technical ability to organize translation: team leaders have computers with an option to enter text in their native language and installed software for on-screen recording.
  - 2.5. A video recording must be kept at the place of translation from the moment the tasks are received to the sending of the translated versions.
  - 2.6. After the round is over, translated tasks are examined for the absence of hints for the participants. In case one is detected the Jury has the right to abolish the participants' results for a task where there was a hint.
  - 2.7. The procedure for providing tasks for translation, the process of translation and submitting the translation results is determined by the technical regulations for the translation process.
3. Major rounds organization
- 3.1. The local organizer arranges the venue for the Olympiad in the city in compliance with all sanitary and epidemiological measures taken on their territory.
  - 3.2. The venue should have a separate room for the rounds of each subject. An experimental round in chemistry should be conducted in the laboratory with a qualified laboratory technician present.
  - 3.3. The venue must be provided with the opportunity for video recording, stable Internet connection and office equipment for printing tasks and scanning students' papers.
  - 3.4. Video recording should be carried out continuously from the moment the tasks are received until the scanned papers are sent.
  - 3.5. If, according to the regulations, participants are supposed to use a computer during the round (informatics, physics), then the computer screen is also recorded.
  - 3.6. Videos made during translation and rounds must be uploaded to any cloud storage and made available via the link for at least 30 days. Links to the video must be sent to the organizing committee within 8 hours after the recording is completed.
  - 3.7. The local organizer provides participants with everything necessary for the round according to paragraphs 4-7 of the regulations.
  - 3.8. Papers should be written with a black or dark blue pen in order to ensure successful scanning.
  - 3.9. Participants are prohibited from bringing phones and other electronic devices, books and other personal things not listed in paragraphs 4-7.
4. Informatics
- 4.1. The informatics competition includes 2 rounds of 5 hours each.
  - 4.2. Each round variant consists of 4 problems. Each problem will be evaluated with 100 points.

- 4.3. The local organizer ensures that each participant has a computer or laptop that meets the technical requirements and with the necessary software installed (the list of compilers in the testing system and recommendations for software are published on the official website of the Olympiad, a trial round is held for participants before the start of the main rounds).
- 4.4. In addition to video recording in the room, the on-screen recording of the computers of participants should be carried out using special software installed in advance.
- 4.5. Participants are allowed to have a pen, a pencil and draft paper in their workplace.
- 4.6. During the rounds, participants cannot use previously written code, as well as open sites other than the Olympiad website and testing system. The official programming language documentation may be used if it was downloaded to the participant's computer before the start of the round.
- 4.7. Team leaders who have requested translation into their native language receive a preliminary translation for verification and correction 6 hours before the start of the round. In some languages, an official translation from the jury will be prepared, in this case the translation will not be given to the leaders for review and correction and will be provided exactly before the start of the round.

## 5. Mathematics

- 5.1. The mathematics competition includes 2 rounds of 4.5 hours each.
- 5.2. The variant of each round consists of 3 problems, each problem will be evaluated with 7 points.
- 5.3. Participants are allowed to have a pen, a pencil, a ruler at their workplace.
- 5.4. Team leaders who have requested translation into their native language receive a preliminary translation for verification and correction 4 hours before the start of the round.

## 6. Physics

- 6.1. The physics competition includes pseudo-experimental and theoretical rounds.
- 6.2. The duration of the first (pseudo-experimental) round is 6 hours. In advance, the team leader will be sent teaching materials in English, which must be discussed with participants before the start of the pseudo-experimental round. During the round, participants will be provided with a video of the experiment for repeated viewing. The questions that the participants will have to answer will be based on teaching materials and the video.
- 6.3. The local organizer ensures that each participant has a computer or laptop to watch the video. During the round, recording of what is happening on the screens of the participants should be carried out using special software installed in advance.
- 6.4. The duration of the second theoretical round is 6 hours, the variant consists of 3 tasks.
- 6.5. Participants are allowed to have a pen, a pencil, a ruler, a non-programmable calculator at their workplace.

- 6.6. Team leaders who request translation into their native language will receive a preliminary translation of the problems, question texts and video transcripts for review and correction 6 hours before the start of the tour.
7. Chemistry
- 7.1. The chemistry competition includes experimental and theoretical rounds of 4 hours each.
- 7.2. The experimental round should be conducted in the laboratory with a qualified laboratory technician present.
- 7.3. For the experimental tour, the local organizer provides the necessary glassware and reagents (the list is published in advance on the official website of the Olympiad).
- 7.4. During the experimental round, participants must wear laboratory coats and eye protection.
- 7.5. Participants are allowed to have only a pen, a pencil, a ruler, a non-programmable calculator in their workplace. Reference materials will be attached to the problems.
- 7.6. Team leaders who have requested translation into their native language receive a preliminary translation for verification and correction 6 hours before the start of the round.
8. Marking and coordination
- 8.1. Problem solutions in Russian and English are published on the official website of the Olympiad after the round ends.
- 8.2. Preliminary results and marking criteria are sent to the team leaders one day before the start of the coordination.
- 8.3. In case of disagreement, the team leader can appeal. The procedure for coordination for each subject is published on the official website.
9. Summarizing and awards
- 9.1. The results will be summed up in the team standings in all disciplines and in the individual standings in each discipline.
- 9.2. In the team competition the results of all team members are taken into account. After the best personal result in the subject is established, the rest are measured as the percentage of this result. The result of each team is the sum of these personal results.
- Example: If a participant scored 15 points in two rounds in mathematics, and the best result among all participants is 30 points, the participant brought his team  $15/30=50\%$ .*
- 9.3. At least half of all the teams will be awarded. No more than 5 teams for 1st place, no more than 10 teams for 2nd place, and no more than 15 teams for 3rd place are awarded.
- 9.4. At least half of the participants in each discipline will be awarded. A gold medal is awarded to no more than 10 participants, a silver medal - no more than 20 participants, a bronze medal - no more than 30 participants.
- 9.5. The closing and awarding ceremony is held on December 22 (online).