

h. Evaluation

- i. Participants should answer all the questions.
- ii. Juries score the answers and the results are turn over to the tutors/trainers of each team for review.
- iii. Tutors/trainers are allowed to respond to the juries'scoring results through moderation.
- iv. Juries will announce the winners based on the scoring results. The winners are decided by the percentages of correct answers.

i. Medals and Trophies

- i. Approximately two-thirds of the participants will be awarded gold, silver, or bronze medals. Each participant will receive a certificate of participation.
- ii. Trophies will be awarded to participants with the highest score for Theory, Exploration/Experiment, as well as for the highest overall score in the subject.

j. Medical Care

- i. Participants should bring their own medications if necessary. Participants incurring health issues will be directed to the nearest available medical clinic or facilities for medical consultation and attention, at the participating teams'own expense.
- ii. Each participating country should make certain that all members of their delegation are fully insured before coming to China.

k. Additional Information

- i. Each participating country must prepare a performance (duration not more than 10 minutes) for the cultural night. If the performance has audio or video elements, please record/save them in a CD/DVD and submit it to the organizing committee upon arrival in Zhejiang China.
- ii. There will be time set aside for participants to interact with each other and to exchange gifts before the start of the cultural night.

ANNEX A: COMPETITION SYLLABUS

Mathematics:

1. Arithmetic
 - Whole numbers
 - Rational numbers and their representations (fraction, decimals and percentages)
 - Pattern recognition
 - Factors and Multiples
 - Greatest Common Divisor
 - Least Common Multiples
 - Ordering of numbers
 - Ratio and Proportion

2. Geometry
 - Properties of polygons (Triangle, quadrilateral, parallelogram, trapezoid) and circles
 - Angle and its measure
 - Area and Perimeter of different polygons
 - Symmetry, reflection and rotation, similarity and proportion Properties of solid figures
 - Nets of cube and parallelepiped
 - Symmetry, reflection and rotation, similarity and proportion
3. Data and Measurement
 - Data representation and interpretation
 - Mean, median and mode of a set of data
4. Counting Techniques
5. Recreational Mathematics such as mathematical puzzle

Science:

1. Science skills and methodology: general health (nutrition, common disease and prevention)
2. General environmental issues: deforestation, managing natural resource pollution, water and carbon cycle, etc
3. Basic ecology: habitat, interaction, food chain and food web, population, ecosystem, life cycle, etc
4. Physiology: photosynthesis and respiration.
5. Current technological developments: GMOs, biotech, biofuel, satellites, etc.
6. Human anatomy and functions: skeleton and movement, olfactory system, auditory system, mouth, eyes, circulatory, digestive system, skin, respiratory system) and its disease and problems.
7. Classifying organisms: based on their food, anatomy, systematics, reproduction system and its habitat.
8. Mechanics: motion of objects, static fluid and gas
9. Solar system: members of solar system, rotation of earth and moon, earth and moon eclipses
10. Planet Earth: structure, surface, process of earth formation, water cycle, renewable resources, climate, seasons, gravitation, wind
11. Electricity and magnetism: applications, models
12. Matter: properties, phase transformation (solid, liquid, gas) physical, chemical, and biological transformation)
13. Thermal properties: temperature, thermometer, energy, conduction, convection, radiation
14. Light: property, vision, color
15. Forces: change in shape, magnetic, gravitation, frictional forces
16. Energy and energy changes: kinetic, potential, heat, sound, renewable, energy conversion



Zhejiang Province, China • 28 September - 4 October 2018



Rationale

It has been generally acknowledged that education determines the quality of human resources. Elementary school, as a part of basic education, provides students with skills in reading, writing, arithmetic and basic science. It is a program which stimulates creativity, develops critical and analytical thinking; and its importance in the formative years of the students at the primary school level is regarded as the “golden period of education”.

To enhance the importance of this program, the Hailiang Education Group is organizing the 15th International Mathematics and Science Olympiad (IMSO) for primary school students. Participation in 15th IMSO 2018 is by invitation.

Theme

“Smart, Skilled, and Creative, In a Joyful Competition for Excellence”

Objectives

IMSO 2018 aims to provide opportunities to:

- develop the primary school students’ talent and interest in Mathematics and Science;
- motivate them to develop their higher order thinking skills in Mathematics and Science; and forge friendships amongst primary school students for the appreciation of cultural diversity.

Guidelines and Regulations

a. Schedule

- The IMSO 2018 will be held in Zhejiang Province, China from 28 September to 4 October 2018.
- Participants and officials must arrive in Zhejiang on 28 September 2018.
- The official language of the event and competition is English.

b. Tentative Itinerary

Date	Activities	
	Students	Tutors
28 Sep 2018 (Friday)	<ul style="list-style-type: none"> Arrival at Hangzhou International Airport or Hangzhou east railway Station Proceed to the campus of Hailiang Education Group for Registration 	<ul style="list-style-type: none"> Arrival at Hangzhou International Airport or Hangzhou east railway Station Proceed to the campus of Hailiang Education Group for Registration
29 Sep 2018 (Saturday)	<ul style="list-style-type: none"> Opening Ceremony Welcome Dinner 	<ul style="list-style-type: none"> Opening Ceremony Welcome dinner Technical Committee Meeting
30 Sep 2018 (Sunday)	<ul style="list-style-type: none"> Theory test (I) Theory test (II) 	<ul style="list-style-type: none"> Tour

1 Oct 2018 (Monday)	<ul style="list-style-type: none"> Math Exploration Science Experiment 	<ul style="list-style-type: none"> Moderation and Marking of Theory test (I) Moderation and Marking of Theory test (II)
2 Oct 2018 (Tuesday)	<ul style="list-style-type: none"> Tour Culture night 	<ul style="list-style-type: none"> Moderation and Marking of Math Exploration Moderation and Marking of Science Experiment Cultural Night
3 Oct 2018 (Wednesday)	Award Presentation and Closing Ceremony	
4 Oct 2018 (Thursday)	HOME SWEET HOME	

c. Types of Problems and Test Regulations

- IMSO 2018 is an individual competition. The questions consist of 2 parts for each subject:
 - Theoretical and exploration questions for Mathematics; and
 - Theoretical and experimental questions for Science
 - The questions are constructed based on Mathematics and Science primary school curricula, reference books, and other relevant sources, which cover intellectual reasoning, and creativity domains.
 - Participating teams are to submit 2 sets of proposed questions to the Local Executive Organizing Committee: 1 set for Math and 1 set for Science.
 - For Mathematics, the set should have 4 questions for Theoretical Test 1 (1 mark each), 3 questions for Theoretical Test 2 (3 marks each), and 2 questions for Exploration with Mathematics (6 marks each).
 - For Science, the set should have 4 multiple-choice questions (1 mark each), 4 open-ended questions (3 marks each) and 1 problem for the experiment test (12 marks).
- Proposed questions are to be emailed to Zhejiang Aolin Education Group at this email address aolinimso@163.com by 1 May 2018.
- Instructions and questions will be in English. All answers must be in English; participants are allowed to use an English dictionary.
 - Participants are not allowed to bring books, scientific dictionaries, calculators, and other electronic devices during the contest. However, they may bring a hard copy English dictionary into the competition hall.
 - Questions are set and coordinated by the Zhejiang Aolin Education. Hailiang Education is not involved in the preparation of questions. Refer to Annex A for the syllabus.

d. Participants and Officials

- Participants
 - The participants of the Olympiad are grade V, VI or level F students, and not older than 13 years of age before 28 September 2018. Participants should be chosen through a selection process.
- Participating Teams
 - Each participating country is entitled to send a maximum of 6 participants for the Math competition and 6 participants for the Science competition.
 - Indonesia, India, Philippines, South Africa, Thailand and Singapore being the previous year host countries and IMSO executive council members can send additional participants for Math /or Science.

iii. Officials

- Every participating country are entitled to send only one (1) team leader and two (2) tutors/trainers.
- The team leader must be able to communicate in English.
 - The tutors/trainers should be familiar with elementary school Mathematics and Science curricula and must be able to communicate in English.

iv. Accompanying Adults

e. Logistics and Expenses

- The organizer will sponsor accommodation, meals, sightseeing and local transportation for one (1) team leader, two (2) tutors/trainers and a maximum of twelve (12) student participants (6 students for each subject area) during the official period of IMSO 2018.
- The following countries are allowed to send additional participants: Indonesia, India, Philippines, Thailand and Singapore. Each additional participant will be charged US\$650.
- Every accompanying person will be charged US\$650.
- Participating teams will be responsible for organizing and financing their own flights to and from Zhejiang China, visa, travel insurance and any other possible expenses for entry into Zhejiang China.
- Accommodation will be provided for 6 nights only, from 28 September to 3 October 2018. Details of the accommodation will be provided later.
- Entry Visa into China: IMSO 2018 participants must have a roundtrip airline ticket. The team leader of each participating team must ensure that their delegation has fully accomplished China’s visa requirements before entering and leaving China. For detailed and updated information, please contact your local Embassy of China.

f. Letter of participation and registration forms

Countries who are interested to join this competition should confirm their participation by sending a letter of participation to the IMSO 2018 Local Executive Organizing Committee on or before 31st May 2018. Registration form containing the names of contestants, tutors/trainers and team leader, as well as travel details must be submitted to the organizing committee not later than the end of July 2018 to address below:

IMSO2018@163.com

g. Juries

Juries are appointed by the IMSO Executive Council and Zhejiang Aolin Education.