



**21st International Mathematics and Science Olympiad (IMSO) for Primary School Students
October 01 – 06, 2024
Host – Wenzhou, China**

Guidelines, Timelines, and Reminders

A. Board Resolution:

The IMSO Executive Council, in a resolution, approved en masse, has approved holding the 21st International Mathematics and Science Olympiad (IMSO) for Primary School Students in October 2024 offline/on-Site in Wenzhou, China.

B. Competition Date:

October 01 – 06 (Tuesday – Sunday), 2024

C. Important Deadlines:

Date	Activity Deadlines
Monday, July 22, 2024	Last day for confirmation of participation
Thursday, July 25, 2024	First day for registration of Team Leaders, Tutors, and Participants
Wednesday, August 14, 2024	Deadline for submission of Proposed Contest Problems
Wednesday, August 22, 2024	Last day for registration of Team Leaders, Tutors, and Participants
Friday, August 30, 2024	Deadline for Submission of the flight schedules

D. Schedule of Activity

**Attached as Annexure A*

E. Participants, Officials, and Expenses:

1. Each participating country is allowed to nominate
 - 1 team leader
 - 1 tutor and 6 participants for the Math competition,
 - 1 tutor and 6 participants for the Science competition,

Furthermore, a privilege granted to former host countries: Indonesia, India, Philippines, Thailand, China, Singapore, and Vietnam and to members of the IMSO Executive Committee:

- 12 participants in each category/subject. (i.e. a further 6 participants in each category)
2. The participants of the Olympiad must be primary school students and not older than 13 years of age before **October 1, 2024**. Participants should be chosen through a selection process.
 3. The Team Leader of each country shall be responsible for communicating with the organizing committee, managing the selection of participants, and registering the delegation from their country. The Team Leader shall also nominate a math tutor and a science tutor.

- The Team Leader and Tutors should have the ability to communicate in English.
 - The Tutors should also have a good understanding of their subject matter as outlined in the Mathematics or Science syllabus *, as they will work with the jury in moderating their students' papers. (* see Annexure B)
4. Each participating country is responsible for their own travelling expenses including the procurement of the passports and VISAs to and from Wenzhou, China.
 5. The organizers of the 21st IMSO will provide all delegates as stated in point (1) with free registration and free accommodation, including meals, as well as local transportation, for the duration of the contest schedule.
 6. Additional participants, observers, tutors, and parents shall pay a registration fee of USD \$700 per delegate.

F. Contest Problem Proposals:

1. Each participating country must submit 2 sets of proposed questions to the organizing committee: 1 set (9 questions) for the Mathematics Division and 1 set (9 questions) for the Science Division on or before the deadline stated above.
 - *For Mathematics, there should be a set of 4 questions for Theoretical Test 1 (1 mark each), 3 questions for Theoretical Test 2 (3 marks each), and 2 questions for Exploration in 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).*
2. Instructions, questions and the full solutions will be in English and in Word files.

G. Contest Problem:

1. The 21st IMSO is an individual competition. The Problems consist of three parts for each subject.
 - Short Answer, Essay, and Exploration problems for Mathematics.
 - Theory 1, Theory 2, and Experimental problems for Science.
2. The problems are constructed based on the mathematics and science elementary curricula, reference books and other relevant sources which develop intellectual reasoning and creativity.
3. The official language for the contest is ENGLISH and participants are allowed to use a hard-copy English - Native language dictionary during the contest.

H. Awards:

1. Approximately two thirds of the contestants will be awarded gold, silver and bronze medals in the ratio 1 : 2 : 3.
2. The Contestant who has the highest score of the competition will receive the Overall Champion trophy.
3. The Best Exploration Champion trophy and The Best Theoretical Champion trophy will also be awarded.
4. A Contestant can get at most one of those trophies, in the order of Overall Champion, Exploration Champion and then Theoretical Champion trophy.
5. Every contestant who attends the event will receive a certificate of participation.

L. Contact Person:

- **IMSO Board Technical Support**
Email address: imso.official.board@gmail.com
- **China Organizer**
Email address: imso2024@163.com

ANNEXURE A: DAILY SCHEDULE

Schedule						
Timing	Itinerary	Student	Leaders /Teachers	Parents	Note	
Day1(2024/10/1)						
Whole day	Arrival	1. Meet at the airport				
		2. Arrival in China, reporting and payment of fees				
		3. Dormitory assignment				
		4. Pick up materials				
Day2(2024/10/2)						
7:30-8:30	Breakfast	all				
9:00-11:30	Opening ceremony	all				
11:30-12:30	Lunch	all				
12:30-13:00	Breaks	all				
13:00-17:00	Discovery STEM	Each team of participating countries present their STEM project	watch or free time	watch or free time		
17:00-18:30	Dinner	all				
19:00 - 20:00			Leader and Teacher Meetings			
20:00 - ...	Free Time	all				
Day3(2024/10/3)						
7:30-8:30	Breakfast					
9:00-10:00	Theory Test 1	Test	Conference for the Teacher	sightseeing		
10:00-11:00	Breaks					
11:00-12:30	Theory Test 2	Test				
12:30-14:30	Lunch					
14:30-17:30	Free time	all				
17:30-19:00	Dinner	all				
19:00 - ...	Free time		Propose marking and scoring for Theory Test 2		Pick up the day's papers and answers at the end of the day	
Day4(2024/10/4)						
7:30-8:30	Breakfast					
9:00-11:30	Exploration / Experiment Test			sightseeing		
11:30-13:00	Lunch					
13:00-14:00	Breaks					
14:00-17:30	Activity Time	Evening rehearsal	Moderation (T1 and T2)			
17:30-19:00	Dinner					
19:00-22:00	"Culture Night" exchange evening	all				Pick up the day's papers and answers at the end of the day
22:00 - ...		Free Time	2nd Moderation and Cut off	Free Time		
Day5(2024/10/5)						
7:30-8:30	Breakfast					
9:00-11:30	Wenzhou Polar Ocean World			Shopping		
11:30-13:00	Lunch			Shopping		
13:00-17:30	Cultural practice			Shopping		
17:30-19:30	Celebration Dinner					
19:30-21:30	Award ceremony and closing ceremony					Giving each other gifts
21:30-...	Free Time	all				
Day6(2024/10/6)						
Whole day	Return					1. Assembly, check-out 2. Transfer to the airport by the organizers

ANNEX B: 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, and Ratio and Proportion
2. **Geometry**
Properties of polygons (Triangle, quadrilateral, parallelogram, trapezium) and circles
 - Angle and its measure
 - Area and Perimeter of different polygons
 - Symmetry, reflection and rotation, similarity and proportionProperties solid figures
 - Nets of a 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**

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 the solar system, rotation of earth and moon, earth and moon eclipses
10. **Planet Earth:** structure, surface, the 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