



# HKISO & HKICO FINAL 2020



## Theme Park

Universal Studio, Singapore



## Working Partner

National University of Singapore

School of Computing



## Attractions

Merlion Park



## Attractions

Gardens by the Bay

## Follow Us



Website: <http://www.hongkongiso.org/>



Website: <http://www.hongkongico.org/>

## **HKISO Background**

Hong Kong International Science Olympiad, HKISO is organized by Olympiad Champion Education Centre from Hong Kong, a registered educational centre listed on Education Bureau of Hong Kong (EDB Reg No: 598 216) to provide Science Olympiad classes in Hong Kong.

Mr Lai Chun Yin, former Gold winner from Hong Kong Physics Olympiad in 2017, gold winner in MATHEMATICS & PHYSICS in The Hong Kong Polytechnic University Secondary School Mathematics and Science Competition in 2018, is also a former IMO winner.

To inspire curiosity and an attitude of discovery, to promote the understanding that progress has been happening in scientific fields for centuries, to encourage the integration of ideas and subjects, to encourage truth-seeking, to allow students to study important scientists who asked good questions and worked towards good answers, we all decide to organize Hong Kong International Science Olympiad (HKISO) that included a mini experiment in the heat round.

## **HKICO Background**

Hong Kong International Computational Olympiad, HKICO is organized by Olympiad Champion Education Centre from Hong Kong, a registered educational centre listed on Education Bureau of Hong Kong (EDB Reg No: 598 216) to provide Computational Olympiad classes in Hong Kong.

Mr Hayden Lee, former GOLD winners from HKOI in Junior Secondary Group in Year 2016/17, former winners from 35th National Olympiad in Informatics, China (NOI) in Year 2018.

Computational thinking involves using a set of problem-solving skills and techniques that software engineers use to write programs and apps. Hong Kong International Computational Olympiad promotes problem solving skills and Informatics concepts including the ability to break down complex tasks into simpler components, algorithm design, pattern recognition, pattern generalisation and abstraction.

## HKISO & HKICO Schedule

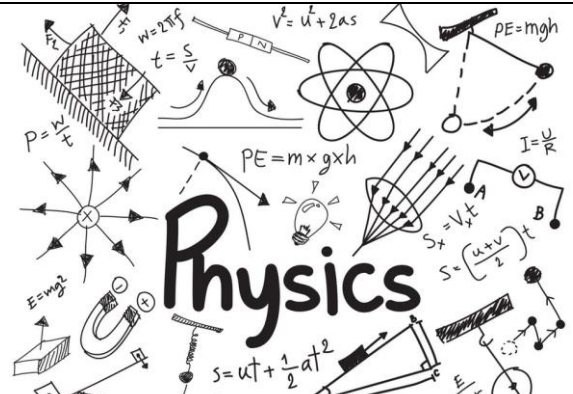

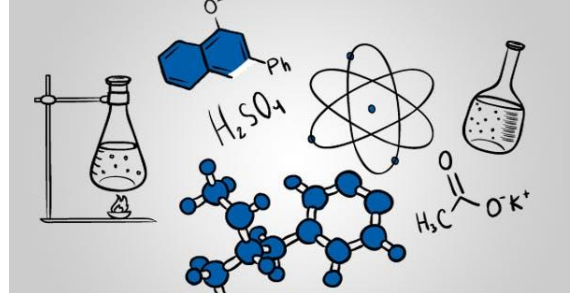


	HKISO Heat Round	HKICO Heat Round
Period	Sep – Dec 2019	Jan – Mar 2020
Deadline for Registration	Depend on your decision	Depend on your decision
Result to be released	15 <sup>th</sup> Dec 2019	19 <sup>th</sup> Apr 2020
Place	At your own region	At your own region
Jointed-Camp for HKISO & HKICO Final Round	25 <sup>th</sup> – 29 <sup>th</sup> June 2020 at Singapore	

## HKISO & HKICO Competition Details

Competition Name		HKISO		HKICO	
Stage		Heat Round	Final Round	Heat Round	Final Round
No.of Questions		20	24	20	24
Type of Questions		MCQ 5 options A / B / C / D / E	MCQ 5 options A / B / C / D / E	MCQ 5 options A / B / C / D / E	MCQ 5 options A / B / C / D / E
Scoring	Correct	+2	+2	+2	+2
	Empty	0	0	0	0
	Wrong	-1	-1	-1	-1
Topics	Physics	5	6	5	6
	Biology	5	6	5	6
	Chemistry	5	6	5	6
	Integrated Science	5	6	5	6
Time Allowed		60 minutes	90 minutes	60 minutes	90 minutes
Language		English Or your own region language	English Or your own region language	English Or your own region language	English Or your own region language

## Grades

Kindergarten Group	Primary Group	Secondary Group
Kindergarten Group	Primary 1	Secondary 1
	Primary 2	Secondary 2
	Primary 3	Secondary 3
	Primary 4	Senior Secondary Group
	Primary 5	
	Primary 6	

<p>Physics</p>	
<p>Biology</p>	
<p>Chemistry</p>	
<p>Integrated Science</p>	
<p>Mini Experiment</p>	 <p><b>The Experiment</b></p>


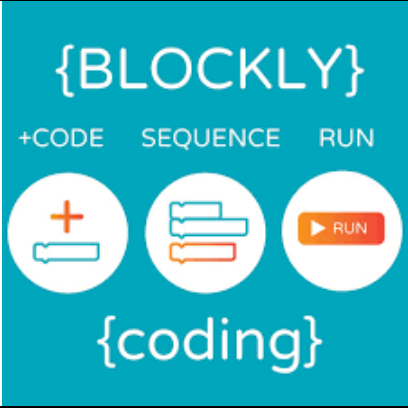




## HKISO Mini Experiment

Schedule	1 <sup>st</sup> Sep – 24 <sup>th</sup> Nov 2019
Duration	Less than <b>5 minutes</b>
Deadline	24 <sup>th</sup> Nov 2019 (HKT 23:59)
Target Audience	ALL participants for HKISO Heat 2019
Language	In <b>ENGLISH ONLY</b>
Admission Fee	<b>FREE</b>
Time for submitting the video	<b>ONCE</b> *If participants submit the product more than ONCE, they will be disqualified.
How to submit	<b>Uploaded on YOUTUBE and submit the link to HKISO</b> *HKISO has the exclusive right to upload winners' video on HKISO website
Result to be released	<b>15<sup>th</sup> Dec 2019</b> (Together with Heat Round)
Marking	<p>A. Scientific Knowledge (40%)</p> <ul style="list-style-type: none"> <li>● To elaborate the scientific concept clearly</li> <li>● To provide accurate content in FULL angles of views with strong supporting evidence</li> </ul> <p>B. Creativity (30%)</p> <ul style="list-style-type: none"> <li>● To create the presentation in an interesting, attractive, innovative way</li> <li>● For visual stimulation</li> </ul> <p>C. Presentation Skills (30%)</p> <ul style="list-style-type: none"> <li>● To represent the idea clearly</li> <li>● To well-organize the presentation in order</li> <li>● To represent in fluent English</li> </ul>
Topics	No assigned topics Related to Science

### Remark:

- HKISO has the final decision on the eligibility of the participants.
- Decision made by the panel of judges shall be final. In case of any dispute, HKISO reserves the final decision.
- HKISO accepts no responsibility for any data submission delay, lost, error, non-recognizing etc. situations due to computer, network and other technical issues. The proof of dispatch cannot be accepted as proof of delivery or successful transmission of the entry.
- Participants have to ensure that the submitted entries do not contain abusive language, or content related to sex and violence, infringe or violate any copyright or trademark rights, or violate the intellectual property undelegated copyrighted materials. Failure to comply will result in the submission not being valid for entry. HKISO reserves the right to delete the related content, remove the eligibility of any participants who have violated any of the above guidelines as well as the right to take legal actions. HKISO will not hold any responsibility for such infringing acts.

# HKICO

Grade	Programming Languages
Primary 2 – 4	
Primary 5 – 6, Secondary 1	
Secondary 2 – Senior Secondary Group (1 out of 3)	
	
	
Mini Project	

## HKICO Mini Project

Schedule	1 <sup>st</sup> Jan – 29 <sup>th</sup> Mar 2020
Duration	Less than <b>5 minutes</b>
Deadline	29 <sup>th</sup> Mar 2020 (HKT 23:59)
Target Audience	ALL participants for HKICO Heat 2019
Language	In <b>ENGLISH ONLY</b>
Admission Fee	<b>FREE</b>
Time for submitting the video	<b>ONCE</b> *If participants submit the product more than ONCE, they will be disqualified.
How to submit	<b>Uploaded on YOUTUBE and submit the link to HKICO</b> *HKICO has the exclusive right to upload winners' video on HKICO website
Result to be released	<b>19<sup>th</sup> Apr 2020</b> (Together with Heat Round)
Marking	A. Programming Knowledge (40%) <ul style="list-style-type: none"><li>● To elaborate the programming concept clearly</li><li>● To provide accurate content in FULL angles of views with strong supporting evidence</li></ul> B. Creativity (30%) <ul style="list-style-type: none"><li>● To create the presentation in an interesting, attractive, innovative way</li><li>● For visual stimulation</li></ul> C. Presentation Skills (30%) <ul style="list-style-type: none"><li>● To represent the idea clearly</li><li>● To well-organize the presentation in order</li><li>● To represent in fluent English</li></ul>
Topics	No assigned topics Related to Programming

### Remark:

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## HKISO & HKICO Prizing for Paper-Based

Award	Heat Round	Final Round	Winners will get
Champion	The highest scorer in each grade by global ranking	The highest scorer in each grade by global ranking	The Champion Trophy Certificate & Medal
1 <sup>st</sup> Runner-up	The 2 <sup>nd</sup> highest scorer in each grade by global ranking	The 2 <sup>nd</sup> highest scorer in each grade by global ranking	1 <sup>st</sup> Runner-up Trophy Certificate & Medal
2 <sup>nd</sup> Runner-up	The 3 <sup>rd</sup> highest scorer in each grade by global ranking	The 3 <sup>rd</sup> highest scorer in each grade by global ranking	2 <sup>nd</sup> Runner-up Trophy Certificate & Medal
Gold Award	About 8% winners in each grade	About 8% winners in each grade	Certificate & Medal
Silver Award	About 16% winners in each grade	About 16% winners in each grade	Certificate & Medal
Bronze Award	About 24% winners in each grade	About 24% winners in each grade	Certificate & Medal
Merit Award	Winners scored <b>above</b> the standard level	Winners scored <b>above</b> the standard level	Certificate

\*If the same score case happened, HKISO / HKICO will consider winner's Date of Birth. The younger winner will be ranked higher.

## HKISO & HKICO Prizing for Mini Experiment / Mini Project

Award	Heat Round	Final Round	Winners will get
Champion	The highest scorer in each grade by global ranking	The highest scorer in each grade by global ranking	The Champion Trophy Certificate
1 <sup>st</sup> Runner-up	The 2 <sup>nd</sup> highest scorer in each grade by global ranking	The 2 <sup>nd</sup> highest scorer in each grade by global ranking	1 <sup>st</sup> Runner-up Trophy Certificate
2 <sup>nd</sup> Runner-up	The 3 <sup>rd</sup> highest scorer in each grade by global ranking	The 3 <sup>rd</sup> highest scorer in each grade by global ranking	2 <sup>nd</sup> Runner-up Trophy Certificate
Gold Award	About 8% winners in each grade	About 8% winners in each grade	Gold Award Trophy Certificate
Silver Award	About 16% winners in each grade	About 16% winners in each grade	Silver Award Trophy Certificate
Bronze Award	About 24% winners in each grade	About 24% winners in each grade	Bronze Award Trophy Certificate

\*For BOTH Heat & Final Round, the result for Mini Experiment and Mini Project **WILL NOT** affect the paper-based result.



## **Chief Committee**



Chief Marking Committee for  
HKISO Mini Experiment  
Prof. T.W. Dominic CHAN  
Professor from  
Chinese University of Hong Kong



Chief Marking Committee for  
HKICO Mini Project  
Prof TAN Sun Teck  
Associate Professor from  
National University of Singapore



Marking Committee for  
HKISO Mini Experiment  
Mr Lai Chun Yin, GOLD winner in Hong Kong  
Physics Olympiad (2017)



Marking Committee for  
HKICO Mini Project  
Mr Hayden Lee, former GOLD winners from  
HKOI in Junior Secondary Group in Year  
2016/17