

Tangents



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**CONGRATULATIONS!
SEE YOU IN THE NEXT KMC**

For primary and secondary school all over MALAYSIA www.kangaroomath.com.my



ALL SET FOR KMC 2018?

Kangaroo Day falls on 15th March this year and it is just around the corner. All of us from Kangaroo Math Malaysia would like to wish all the best to all KMC 2018 participants.

For this year, Kangaroo Math Malaysia aims to make new achievement with the highest number of participants and number of schools registered. This competition has been made possible by the cooperation between Association of Kangaroo without Borders (AKSF), Ministry of Education, Kangaroo Math Malaysia and many others. We are grateful to them for all their commitment. We also would like to express our sincere thanks and appreciation to all the teachers, parent and participants who keep supporting us from 2013 until now.

To school that have not participated yet, this is your chance to be a part of the community.

1ST KANCIL SCIENCE COMPETITION IN MALAYSIA



Kancil Science Competition (KSC) is a one-of-a-kind science competition for 7 to 18 year old students of all primary and secondary schools as well as pre u students. Kancil Science Competition is unique by implicating Malaysian culture into science education. Kancil or a mouse-deer is a famous folktale animal character in Malaysia that always described as a very clever animal.

KSC objective is to challenge students' science knowledge through critical thinking, problem solving, and general knowledge. It also aims to encourage students' interest to embark in science streams as well as a form of public awareness to STEM empowerment.

The questions in KSC are aligned with the Malaysian standard curriculum syllabus and 20% of the question is based on general knowledge. For upper secondary and pre-university levels, the questions involve Biology, Physics and Chemistry. This competition will be held each year starting from 2018. KSC's questions test students' science inquiry skills with different level of difficulty based on each category. For more information, check out Kancil Science Malaysia website at www.kancilscience.my.

BEAVER COMPUTATIONAL THINKING COMPETITION

In 2018, Beaver Computational Thinking Competition will be having its 4th year of competition. Beaver is endorsed by KPM which allows participants to receive co-curricular marks. To schools that have not yet participated in Beaver Computational Thinking Competition, this is your chance to be a part of the Beaver community!

Last year's Beaver had received nearly 6,000 participants from 360 schools from all over Malaysia.



The Beaver Secretariat was also given the opportunity to organize the Computational Thinking Cup Challenge which had taken place during the #MYDIGITALMAKER event at Kuala Lumpur Convention Centre on 16th of September 2017. The winners of each school category; Primary, Lower Secondary and Upper Secondary; were awarded the Anugerah Pembestarian Sekolah from Bahagian Teknologi Pendidikan.

As the field of Computational Thinking grows bigger and the government pushing for 21st Century Skills, we hope that our efforts will help to develop Computational Thinking Skills among students in Malaysia which then will lead us to the success of digital economy in this country.

We look forward to your participation in Beaver Computational Thinking Competition 2018 and hopefully, at the Beaver Competition Award Ceremony 2018 as well.

Head over to beaver.my for more info about this international competition! For more inquiries, you can email us at hello@beaver.my. We'd like to announce the important dates for Beaver in 2018. Take out your planners and start planning!

- **1st Jan 2018**
KMC Registration Open
- **23rd March 2018**
Registration Deadline
- **10th April 2018**
Teachers receive contest manual and username & password for participants through email
- **17th & 18th April 2018**
Contest Period
- **Mid of May**
Announcement of Result
- **21st July 2018**
Award Ceremony

2018

UPCOMING TEACHERS' CONFERENCE 2018

Kangaroo Math Malaysia has organized it's 4th Teachers' Conference last year with a twist! Wanting to make a change, the conference last year no longer focused solely on Mathematics as it also incorporated Computational Thinking.

This year's conference will be held at Ancasa Hotel, Kuala Lumpur on 29th & 30th September 2018. The theme for this year is "Towards Excellence in Mathematics and Computational Thinking Education". This year's conference will focus more on pedagogy and teaching methods to cater to teachers. Registration will be announced through our social media platforms so do not miss out on this opportunity! Follow us now at www.kangaroomath.com.my.

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*T&C apply

TEACHERS' CONFERENCE

MATHEMATICS & COMPUTATIONAL THINKING

"Towards Excellence in Mathematics and
Computational Thinking Education"

**29th & 30th
SEPTEMBER 2018**

Ancasa Hotel, Kuala Lumpur

www.kangaroomath.com.my





Malaysia Earth Science Olympiad (MyESO) is an annual national school-level competition that introduces earth science knowledge to the secondary school and pre-university students in Malaysia. This annual competition was held for the first time this year and has attracted 1,878 participants from all over Malaysia. MyESO is endorsed by the Ministry of Education Malaysia, which enables all participants to collect co-curriculum marks. MyESO is the best platform to choose the local students to represent Malaysia in the International Earth Science Olympiad (IESO), to take place in Thailand in August 2018.

IESO was founded as one of the major activities of the International Geoscience Education Organization (IGEO). It is an annual competition for secondary school students.



IESO aims to encourage students' interest and public awareness of earth science and enhance earth sciences learning and teaching at school level.

It also aims to further foster friendly relationships among young learners from different countries and promote international cooperation in exchanging ideas and materials on earth sciences and earth sciences education. As of 2017, 34 countries had participated in IESO.

Last year, 60 participants managed to get Certificate of Distinction and therefore qualified to the Final Round which was held on the 3rd of February this year.

February this year. From this number, 20 top participants will be selected to attend a 5-day training camp and they will be assessed by our national trainers. For the first time, Malaysia will send a national team consisting of the best four participants from the training camp to the IESO 2018 which will be held in Kanchanaburi, Thailand

We believe that MyESO will be a huge success in producing great students and raising the name of our country in the international arena in the future.



By Aidel Salleh, Secretariat MyESO

On 22nd-29th August 2017, Mr Syamil Syakir (Kolej Permata Insan) and I attended the 11th International Earth Science Olympiad (IESO) in Côte d'Azur, France as observers. IESO is an annual competition to test school students' knowledge in all the main areas of earth science; geophysics, geology, astronomy, meteorology, oceanography and environmental science. This competition which was founded in 2007 and is a major project of the International Geoscience Education Organization (IGEO) has attracted a total of 117 participants from 34 countries around the world and is expected to increase from time to time.

The competition was divided into 3 main parts; theoretical & practical examinations, International Team Field Investigation (ITFI) and Earth System Project (ESP).

For theoretical and practical examinations, the participants were assessed individually by the appointed juries. Whereas for ITFI and ESP, the participants were assessed in groups. Later on, each group presented their findings to the juries which consisted of a mentor from each country.

For theoretical and practical examination, 10% of the top participants received the gold medals, the next top 20% received silver medals and the next top 30% receive the bronze medals. In addition, there were also several side awards such as solidarity team, most valuable team and most valuable person. I look forward on seeing our national team competing in the upcoming 12th International Earth Science Olympiad!



Chair of IESO Advisory Board, Prof Shankar Rajasekhariah (center), with the host of IESO 2017 (France) and IESO 2018 (Thailand) in the closing ceremony.



The best overall participant from China, Xin Chen Wei (right) with the new Chair of IESO Advisory Board, Dr Roberto Greco.



All participants took a group photo with the volunteers in the IESO 2017 opening ceremony.

KANGAROO MATH ROAD TOUR 4.0 2018

KANGAROO MATH ROAD TOUR 4.0

- **Eastern Region**
8th - 12th January 2018
- **Northern Region**
15th - 19th January 2018
- **Southern Region**
22nd - 26th January 2018
- **Central Region**
29th January - 9th February 2018



2018

www.kangaroomath.com.my



Photo session at Kangaroo Math Road Tour AIU International School, Alor Star, Kedah.



Student receive prizes from Kangaroo Math after getting correct answer for Kangaroo Math Road Tour Quiz at SM Sains Tapah, Perak.



Overwhelming responses from SMK Muadzam Jaya, Pahang students.



Trainer making friendly contact with students at Kangaroo Math Road Tour at SK Sungai Lalang, Kedah.



Student having fun experience at Kangaroo Math Road Tour SK Sultan Ismail, Terengganu

Kangaroo Math Road Tour is now on its 4th edition and it was a successful job well done! The Road Tour was conducted last January and February 2018. Our Road Tour team had been busy touring the country and visiting nearly 70 schools that are all interested in joining the year's Kangaroo Math Competition. All schools had contributed in achieving the objective in promoting Kangaroo Math Competition (KMC) to teachers and students from all over Malaysia.



Not to mention, the exposure of both students and teachers to the higher level of understanding for Higher Order Thinking Skills (HOTS) in Mathematics.

In the period of 30 days, the Kangaroo Math team have managed to cover all Eastern, Northern, Southern and Central region schools of Malaysia.

We would like to take this opportunity to express our utmost gratitude to all of the schools that had reached out to us and inviting us over for a session of KMC.

Kangaroo Math Road Tour aims to expose students to KMC problems to spike their interest in Mathematics and with the

cooperation of all the dedicated teachers, we were able to achieve our objective. Students had a lot of fun experience in trying to solve the problems. We were extremely delighted when even teachers were trying to try their luck in solving some of the problems.

This had opened our eyes at the fact that even teachers could use some input on the latest trend that is going in the education sector. Teachers are, after all, in this for the sake of their beloved students.

In 2017, almost 200 responses were received from schools all over Malaysia including matriculation colleges and District Education Offices (PPD).

We also had help from the Kangaroo Math Ambassadors. They have managed to spread news about our Road Tour expeditions to schools and in return, more now than ever, schools have showed us extreme interest by inviting us to give more sessions on KMC.

Kangaroo Team also highly appreciates the effort made by ambassadors and teachers in gathering students and teachers from nearby schools in one place to join the programme.

We are optimistic in continuing our efforts to contribute in producing high quality students in Mathematics. We have faith that this Road Tour expedition brings benefits to both students and teachers all around Malaysia. Join us and be a part of the Kangaroo Family!

ASSOCIATION KANGOUROU SANS FRONTIÈRES

By Faiz Ismail, Secretariat Kangaroo Math Malaysia.



Kangaroo Math Malaysia participated in the Annual General Meeting of the Association Kangourou sans Frontières (AKSF) that took place in Lucerne, Switzerland from 11th to 15th October 2017. ETH Zurich was one of the sponsors for the meeting.

Mr Suhaimi and Mr Faiz were the representatives from Malaysia in Lucerne. After the welcoming ceremony, the delegates were divided into groups to evaluate more than 1000 mathematical problems that had been submitted for the Kangaroo competition, which more than 6 million pupils will take part.

For each of the five age categories, up to thirty problems had to be selected. The delegates discussed each of the chosen problems until the best possible solutions were found. The final problem set will be translated into the respective countries' languages for the competition in March 2018.

Evaluating more than 1000 mathematical problems in 4 days, that was one of the main tasks of the annual country delegates' meeting of the Association Kangourou sans Frontières (AKSF) in Lucerne. Each working group finalized the problems and meeting among the group leaders was conducted to make some modification in wording and the figure for better looking problems.

ANNUAL BEBRAS TASK WORKSHOP

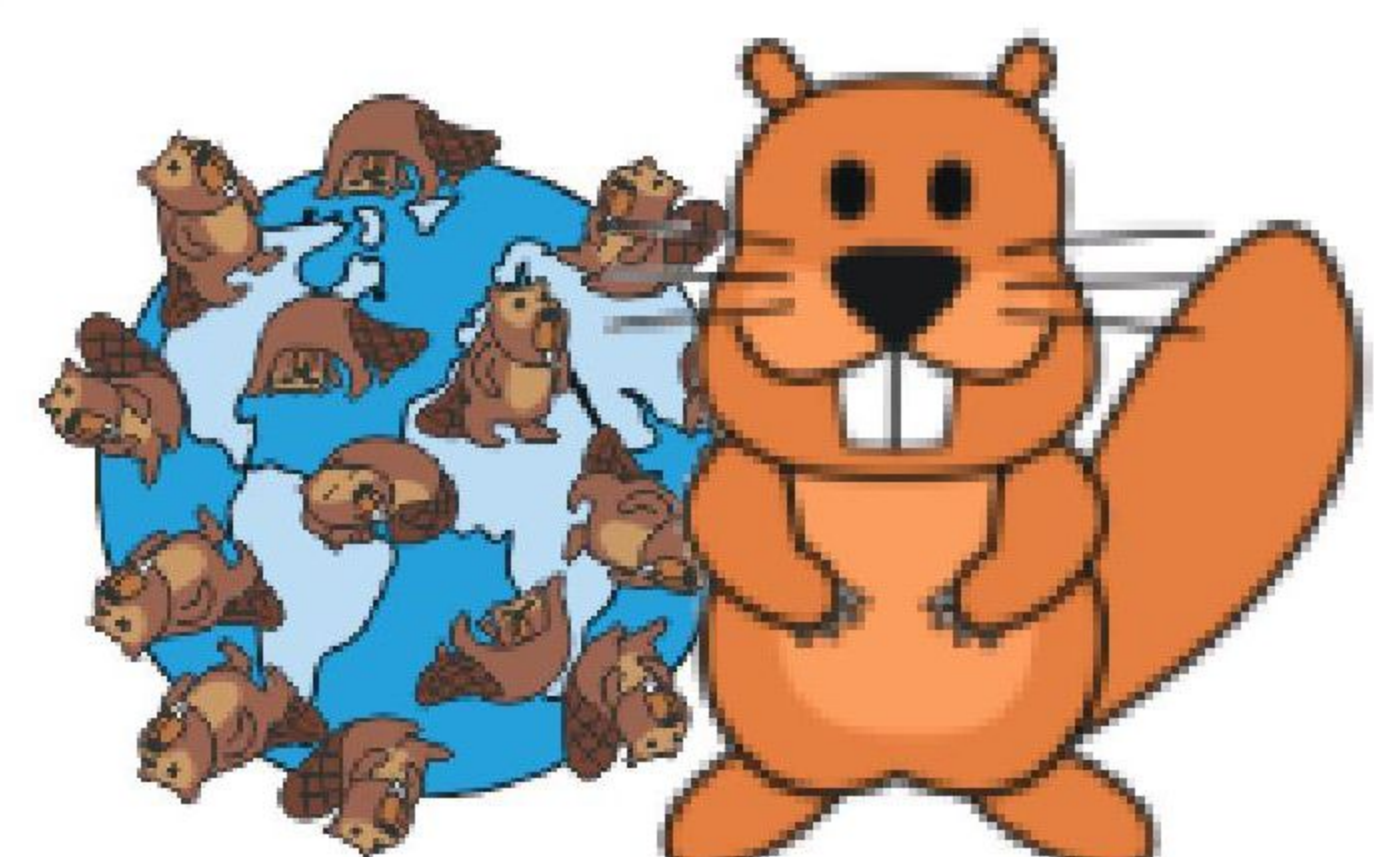
By Wafiuddin Harun, Secretariat of Beaver Computational Thinking Malaysia.



On 29th May - 2nd June 2017, En. Khairul Anwar M. Zaki and I, Ahmad Wafiuddin Harun as the representative from Beaver Informatics

Malaysia had attend the Annual Bebras Task Workshop 2017 in Brescia, Italy. They were joined by more than 90 experts from 54 countries all over the world to discuss and prepare tasks for the competition. We attended the opening ceremony at Centro Congressi Paolo VI, Via Gezio Calini on the first day. En. Khairul Anwar was one of the speakers and he presented how the Computational Thinking Movement in Malaysia has grown bigger.

We also had the opportunity to join a tour around the historical city of Brescia and made some friends with several representatives from other countries. The next Bebras Task Workshop will be held in Protaras, Cyprus this upcoming 7th to 11th May. We hope to join this meeting again and also in the upcoming years.



OTHER INTERNATIONAL OLYMPIADS



What does Birom, Kimbundu, and Madak has in common? No, these are not the names of fictional monsters in a movie.

These are three languages that appeared in the International Linguistics Olympiad (IOL) 2017, an international contest of linguistics for high school students.

The IOL was founded in 2003 by a group of linguistic educators in Eastern Europe; it has since grown into a truly global event involving countries from Europe, Asia and the Americas. The participants put their skills into solving some of the toughest linguistic puzzles, alongside some of the best linguistic young talents from around the world.



Our picture with Harold Somers (Secretary of the IOL Board)

IOL 2017 took place in Dublin, Ireland on 31 July to 4 August 2017. The Malaysian delegation consisting of Mr. Khairul Anwar M. Zaki and M. Suhaimi Ramly.

Malaysia will first participate in IOL 2018, to take place in Prague, Czech Republic. The selection of the national team will be through the Malaysian Computational Linguistics Olympiad (MyCLO). For more details, visit <https://www.myclo.my/>. The next MyCLO will be take place on 5th May 2018.

IOL problems do not test knowledge of a specific language, but rather problem-solving ability (how to translate terms of two languages to each other, given a sample of sentences in each language) and linguistic skills (the ability to parse a language into various aspects, and analyze the structure of it).

In fact, you can speak only one language fluently, and be able to solve the IOL problems. You certainly do not need to know Kimbundu! You should try your hand at some sample problems at <http://www.ioling.org/problems/samples/>. Who knows, if you are into this kind of puzzles, you might do well in MyCLO and have a chance to represent Malaysia at the IOL!



The International Junior Science Olympiad (IJSO) is an annual international contest for the sciences involving junior high school students, defined to be students of age 15 and below. IJSO 2017 was held at the scenic town of Nijmegen, Netherlands, on 3-12 December 2017. The event was hosted by Radboud University.

IJSO 2017 involved participants from more than 50 countries, where each country was represented by up to 6 students. The students sat for three examinations: the first is a multiple-choice test, covering the three main scientific branches of biology, chemistry and physics, the second is a theoretical test, and the third (and most difficult) is an experimental test.

In between the tests, students and their accompanying teachers were taken to visit various sites of interest in the Netherlands. The Dutch organizers took the opportunity of this gathering of bright young minds to showcase various Dutch initiatives on global scientific issues, especially in the field of water management.

Malaysia took part in IJSO 2017 as an observer, with the plan to run our own national science contest that leads to a full participation of the Malaysian team at future IJSOs. IJSO 2018 will take place in the African city of Gaborone, in Botswana. For more details about the IJSO, visit <http://www.ijsoweb.org/>.



The visit by Executive Committee from August 28 to August 30, 2014.



Back in July 2017, the Malaysian delegation to the International Mathematical Olympiad (IMO) brought back happy news from the faraway land of Brazil. In the 58th edition of the IMO that took place in Rio de Janeiro, the Malaysian delegation won two silver medals and two bronze medals. The delegation was led by Dr. Nor Sakinah Mohammad of Pusat PERMATApintar Negara, and Mr. M. Suhaimi Ramly, who is also the Director of Kangaroo Math Malaysia.

The IMO problems are considered extremely difficult, even among practicing mathematicians, due to the ingenuity and creativity needed to produce a solution to the problems within the allotted time limit. In the IMO, students sat for two papers on two separate days. Each paper contains three problems, to be solved in 4 hours and 30 minutes. You can try the IMO 2017 problems at https://artofproblemsolving.com/community/c481799_2017_imo.

The national team was selected through a gruelling selection program that started with the Olimpiad Matematik Kebangsaan (OMK) in July 2016, which led to a series of training camps that took place in the first half of 2017. The final team to IMO was selected in April, and went through intensive coaching to prepare for the IMO.

Registration for OMK 2018 is open; visit www.persama.org.my for details.

Congratulations to the following medal winners for making our country proud:

Ivan Chan Kai Chin (Silver medal)

Yeoh Zi Song (Silver medal)

Hanissa Shamsuddin (Bronze medal)

Tan Li Xuan (Bronze medal)



On August 2nd to 8th, we have sent two of our team, Mr. Iznan Shamsudin and Mr. Fahmi Zaharuddin to the 14th

International Geography Olympiad (IGeo) held in the capital of Serbia, Belgrade. IGeo is the annual competition specialising in geographical studies for secondary students, where they will represent their countries. Our role for the participation in this competition were to observe and get some information on how to manage and conduct the competition at the national level before selecting students to represent our country to IGeo that will be held at Quebec, Canada in 2018.

There was a grand opening ceremony where all countries' representatives were presented at The National Theatre. Altogether, there were about 158 participants from 41 different countries. The opening speech was given by the local organiser followed by the Minister of Education and the acknowledgement of competition announced by Co-Chair of International Geographical Union Olympiad Force, Mdm. Sue Lomas before they end the ceremony with wonderful performances.

And about the competition format, there will be multiple tests to be completed by students including written test, multimedia test and the most exciting part of this competition, the fieldwork task. The host of competition and the official venue for test were Singidunum University and for the fieldwork task, the location will be announced on the day of the task conducted. Other than that, students of each countries will present their project based on given topic on the poster presentation night and then will performed country-based performance on the following night. All of these will be given marks and the winners were announced individually for bronze, silver and gold medallists.

All in all, this competition was a great opportunity for students to gain more knowledge and experiences that they never had before. We expect a lot of great things when our Malaysian students take part in the upcoming IGeo competition!



Left to right: Tan Li Xuan, Ivan Chan Kai Chin, Sean Gee Zhing, Theam Wing Chun and Hanissa Shamsuddin posing for a photo after their win. Another team member, Yeoh Zi Song is not in the picture.



FROM THE EDITOR

Well, what can I say. 2017 has been a very busy year for the Kangaroo Math team, and 2018 promises so much more. At the time of writing, we are in the midst of our Kangaroo Math Road Tour, covering more than 80 schools around the country. Our contest team is busy making sure that the 2018 contest will take place without any problem.

Another important milestone is our collaboration with the University of Malaya's Faculty of Education to organize a series of teacher workshop for mathematics and science teachers. This workshop started from an idea developed during the 2018 Teachers' Conference, in which we invited several experienced math educationists from local universities. Do check our FB page for more details on the workshop.

We are happy to report that we will expand our competition to cover Science subject as well. For the past 5 years, many teachers, parents and students have asked whether there is a Kangaroo equivalent for Science subject. We hear you, and so I am proud to announce our new Science competition called Kancil Science Competition. Kancil is a totally homegrown contest, with problems written by local experts based on our national curriculum. Do register for the first ever Kancil contest in Malaysia!

We have been busy on other fronts as well. Our sister contest, Beaver Computational Thinking Competition, went through a record year in 2017. We have collaborated with other organizations and universities to organize other Olympiad contests, which will lead to international participation for our students. You may get the details elsewhere in this newsletter.

As it is still early into the year, I would like to wish everyone a fruitful and optimistic 2018. Do keep in touch and contact us if you have any idea on how we can serve you better. We'd love to hear from you.

By M. Suhaimi Ramly,
Director Kangaroo Math Malaysia.

SESSIONS TO LOOK OUT FOR

PROGRAM BERSIRI SAINS & MATEMATIK

Tarikh	Topik Matematik	Topik Sains
10 Februari 2018	(T2) Algebra Simbolik	(T2) Kesenambungan Hidup
3 Mac 2018	(T2) Geometri	(T2) Tenaga & Kelestarian Hidup
17 Mac 2018	(T2) Algebra Graf	-
7 April 2018	(T2) Statistik	(T2) Penerokaan Unsur Alam

PROGRAM CUTI SEKOLAH MATEMATIK

Tarikh	Topik Matematik
19 & 20 Mac 2018	(T2) Standard Proses Matematik & Integrasi Teknologi
21 & 22 Mac 2018	(T2) Pentaksiran Bilik Darjah

WHAT'S NEW?

New books up for grabs! Come to our center or purchase online at www.kangaroomath.com.my

In 2018, we bring to you new Kangaroo Math and Beaver books. There are two new volume titles for Kangaroo, each for Primary and Secondary students and one new title for Beaver. These books contain all problems and solutions from last year's competitions written by Mr. Zafree Zaharidan, a trainer for the Malaysian Team to the International Malaysia Olympiad (IMO) and Mr. Khairul Anwar, director of Beaver Informatics Malaysia respectively.



KMC Problems & Solutions (Primary School)
Price : RM12.50 (exclude postage)
Language : English
No. of Pages : 134
Publisher : Ardent Educational Consultants Sdn Bhd



KMC Problems & Solutions (Secondary School)
Price : RM12.50 (exclude postage)
Language : English
No. of Pages : 126
Publisher : Ardent Educational Consultants Sdn Bhd



Beaver Computational Thinking Competition
Price : RM10 (exclude postage)
Language : English
No. of Pages : 84
Publisher : Ardent Educational Consultants Sdn Bhd

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