

HKASME Dec--2022 Mail Pack

< A charitable institution since 15 May 2010 under the Section 88 of the IR Ordinance. >

< Serving ALL teachers since 1964 ... >



school year(22-23) & Count to 60th



>>(NEW)* 2 more years to go for our 60th Anniversary (since 1964).... Check new items in this

mail pack leading to 2024 – the Association 60th Anniversary and more..... → ... whether you

are New or Old members – think what you would contribute to the celebration!!!



> What's the IY of 2023 ? >>



>>(*)* What are the global problems? Is Food & Health in your category? India's proposal to observe an International Year of Millets in 2023 was approved by the Food and Agriculture Organisation (FAO) in 2018 and the United Nations General Assembly has declared the year 2023 as

the International Year of Millets (IYMO-2023) .!!!

??- Millets? What are they? Why focus on that? How?



> Try to find out more in the coming mail

pack ... !!! You could explore and get prepare for your students in 2023!!! >>>>

Items in this pack:

- ◆ Council News – ☺ Activities Ongoing & Push to 60th-2024 ... ☺ P. 1–6



- ◆ “60th Corner” – (60-3) Life-long Activities of

HKASME (1) P.7-9

- ◆ “STEM Corner” -- (ST-1) Sony to replace plastic packaging !? (ST-2) Midjourney ? AI for artistic creation ?... P.10-11

- ◆ Science News – (S-1) “Digi-Science” Video Competition for HK Sec. Schools – Theme: “Food Testing in Daily Life” Apply due by 16/12/2022 online. (S-2) IYOM-2023 ... intro... P.12-16

- ◆ Chemistry News – (C1) NEW competition: “Chemical Celebration



of HKASME-60” : FAQ! (C2) International Chemistry Quiz

2022 (ICQ, previously named as ANCQ (Australian Chemistry) – reports hope to be available by Oct-2022. (C3) IYOG 2022 – Owens Corning is building a

sustainable future through material innovation!!! – More Events of IYOG in Sep-2022 ... >> to Dec-2022 . (C4) Chemistry Mock Exam (Dec: 24th to 29th) (C5) Paper Review of 2022 HKDSE Chemistry RERUN (C6) HKChO (Chemistry Olympiad) – Theme: “Waste – Second Life – Chemistry”. Apply online due by 16/12/2022 ... P.17-22

- ◆ Biology News – (B-1) HKBLA 2022-23 – 14/1/2023.. apply online by 30/11/22. (B-2)

Diseases caused by virus (e.g. COVID19) or bacteria P.23-24

- ◆ Physics News – (P-1) Physics Mock Exams (Dec-30th & 31st) P.25

- ◆ Online Chemistry STEM Program – P.26

- ◆ ETV news – P.27- 38

- ◆ Resources Collection -- Stock is LOW! ... “Element Cubes!” “Element Packs!” New

“Periodic Table items” ... P.39-41



♦ -- 2023 declared as "International Year of

Millets...

>> Check relevant details and prepare your students for the International Year Celebration in 2023 !!!

➤ *Living in a pandemic means we have had to accept changes to many aspects of our daily routines*

AND ISSUES of POST-COVID19 – including learning & teaching!



((~~~~~))

Council News

☺☺☺ Activities Ongoing & Push to 60th -2024 ... ☺☺☺

Time flies. It's almost towards the end of Term 1 (for most schools). Yet, we are still under the dark cloud of viral atmosphere. Lucky is that most schools could still manage to operate "normally" as set by the regulations of the EDB in the past school days.

As the Association works alongside with school teachers and students, a stable situation enables most routine activities to be run as previous years (except for the Primary ones). In view of such, the organizers need to work hard to find suitable centres for various face-to-face activities. As most schools need to protect their own spaces for their own activities and especially safety against the viral infection; we have difficulties in finding suitable centres for the overwhelming applications. Anyway, we will try hard to make activities go. Just thanks very much for your support. And, we must remind all again that places are limited and so apply early is the only way to secure a place for you.

Of course, we are happy with the situation and we hope this could be maintained (or even more vigorous) towards our 60th anniversary. But, how about you and your schools / students? We hope you could also arrange different activities for your students / teachers. One of such is to arrange minor competition for your classes / students with alignment to

some of our activities. This include "Digi-science" and "Chemical Celebration of HKASME-60". How? Just set some preliminary competition tasks for all (may be as homework? Online work? With AI? ...) and you could choose the better ones to be submitted to our real competition in the final round. Another event that you may prepare for 2023 is the "International Year of Millets" which is proclaimed by the UN for 2023! Just try and encourage your students with different mode of activities.

If you have checked our webpage since September, you will notice that there are 2 new stuff ongoing due to our **60th Anniversary by 2024**. One is a frequent new column in our 22-23 MailPack - the "**60th Corner**" - citing selected memories/ events/ issues from our 60 years' of development. Another related activity is a competition for secondary students to encourage students to merge their creativity with all sorts of presentation skills with the Association historical past – the "**Chemical Celebration of HKASME-60**". For details of the competition, please refer to the post at www.hkasme.org. However, as some are new to this mode of competition; we would prepare some FAQs in the mailpack to explain some ideas behind the competition. Check section (C-1) for the FAQ in this mail pack.

Again, we would like to thank our dedicated colleagues in helping and supporting different activities in this hard time and we hope the 60th Anniversary could come with something special in the coming years.

Afterall, just to remind teachers about the ordering of references and tools from the Office. We must alert all teachers that delivery time for many orders will be much longer than before due to the global viral impact on logistics. Hence, if you want to place orders for certain materials, please be patient.

For latest updates (including cancellation) of the SME activities, the usual channel is our web: www.hkasme.org or phone the Office (23330096, 23337602) – we still open as usual.

Stay safe

The Council

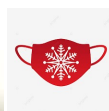
Nov 2022

< *The Office will stay operation EXCEPT for serious incidence!* >

* Thanks for all donations in the past 58 years that support the Association to this day.

Donations are welcome, either for specific event or for general support. The HKASME is a charitable organization under the section 88.

... Marching towards the 60th ...>



<

((=====))



Update News at <http://www.icaseonline.net/>

(ICASE = "International Council of Associations for Science Education". HKASME is one of the founding member of ICASE.)

>> NEW:: **COVID-19 PHENOMENON-BASED LEARNING (PhBL) ENGINEERING CHALLENGE**

>> NEW resource can be downloaded at ... <http://www.icaseonline.net/coronavirus.pdf>
"GUIDANCE on active learning at HOME" !!! <<< Grasp your copy NOW!

>>>=====<<<

**** Up-coming Events of HKASME ****

HKASME Coming Issues ... due to Impact of Coronavirus Infection ... may be..

>> Always check updated news at www.hkasme.org

Activity / Issue	Current situation	Remarks
"60th Corner" NEW > a NEW Column to recap important events in the Association history leading to 2024 -- the 60 th Anniversary	(60-3) : Life-long activities of HKASME (1) {note: (60-1) & (60-2) in Sep & Oct-Pack: From "1964? To....	Members could contribute to this Column with notes, special items, blessings, etc.. Just email us: enquiry@hkasme.org
"Chemical Celebration of HKASME-60" NEW > a NEW competition to celebrate our 60 th Anniversary	Article design within about 2 A4-pages with "chemical elements" having atomic nos. rounding up to 60. Need to explain why such elements are used.	Check details online and also FAQ in this mailpack. 1 st Batch due by 1/12/2022 **→ Whether there will be 2nd Batch in 2023 depends on the popularity of the 1st Batch. We'll see in Jan-2023!
Chemistry Mock Exam (Dec-2022: 24 th to 29 th AM / PM)	Application due by 28/10/2022.	Check details & Apply online Vaccination Pass required!
Physics Mock Exam (Dec-2022: 30 th to 31 th - 3	Application due by 28/10/2022.	Check details & Apply online Vaccination Pass required!

sessions per day)		
ICQ-2022 (previous ANCO) Chemistry ...	Results & Reports processing BUT delayed due to problem on Australian new platform	Results released by Oct-2022 ... & Nov-2022
Sales of equipment & references	Office still operate within our limits.	Phone (23330096, 23337602) ++ ONLINE data & order
NEW Digi Science Video Competition 2022/23 – Theme: "Food Testing in daily life"	Apply online due by 9/1/2023. Submission due by 11/4/2023	Check WWW for details of Final Results of 2021-22.. & newspaper interviews.
NEW Chemistry Olympiad for Sec. Schools – Theme: "Waste – Second Life - Chemistry"	Apply online due by 9/1/2023. Submission due by 31/3/2023	Check WWW for details of Final Results of 2021-22
NEW HKBLA 2022-23	14/1/2023 at different centres	Apply online. Check details at WWW. Vaccination Pass required!

>> As the spread of Coronavirus is still developing with weird patterns, no one is sure of anything in the future. In case that the activities have to be cancelled, the most update information will be posted via our webpage: www.hkasme.org.

>>> For some routine activities, regret that they have to be cancelled or delayed!!! If you have any suggestion that they could be handled safely, please forward to our managers for consideration in coming activities!!!

→ **Resources for New Year (2022-23)-** "Element cubes", "metal packages", New "Periodic Table" items !!! → Check details at end of this Mailpack. --- Ordering References / Materials -->> phone up the Office for order & enquiries. Check update catalogue at www.
 → **Some books (Maths & Chem) are on sale about 50% OFF! -->>**
 CHECK at office!

60th Corner

(60-3) Life-long Activities of HKASME <1: AGM & Forum> ...

Activities, especially educational activities, is the flesh and blood of the HKASME. Without activity, the Association is just an organization on paper. For nearly 60 years, no matter how difficult the situation is, the Association tries hard to maintain different kinds of activities with reference to the school-year-cycle (from September to August). This included times of financial crisis and the recent pandemic.

In the long history of HKASME, we had managed to initiate some activities that have brought insights to the field and hence some could still work for years until now. Of course, part of the reason why such activities could remain alive for so many years is due to the overwhelming support of members and non-member teachers. The indicator is about the application rate – for those “hot items”, the places will easily be fully filled within a very short period (within a week). One of such is the Chemistry Mock Exam.

For activity with the longest history would be the AGM & Forum of the HKASME which is held annually in Summer. One reason is that it is according to law (our memorandum & articles [since 1984, the first year of proper registration as Company Ltd.]) that we need to organize such official management yearly to keep the Association running. Another reason is that usually we will have guest speaker(s) in the AGM Forum and the theme of such would be hot topic(s) of the year. This not only helps to sustain the growth of the Association but also a chance for continual professional development of teachers. A list of some old and recent AGM forum themes is included in the table below. Some photos of AGM forum are also presented below. The only change in recent years due to pandemic is the use of ZOOM for our annual gathering. So, this activity of the Association would continue so long as she exists. We hope this could refresh your mind about the key issues at contemporary stages through all these years.

Other than the AGM & Forum, there are many other popular activities that the Association has organized. Some of them have special stories linked. We will talk about them in coming months. See you next time!

Memorable Photos of Some Past AGM of HKASME :



Photo1: AGM in the 1970s. Standing: Dr. P.K. Tao (*had great contribution to the Association. He left us in 2004.*)



Photo2: 1984 AGM & Forum (*This year's important issue: Self-owned New Association Office at Hung Hom, Formal M & A filed in Government, different events to raise fund for running the Association, ...*)



Photo3: 1986 AGM – (from left to right: Cheung pak-hong [chairman], Cheng chi-leung, Au-yeung Man, Carole Lee, Leung chun-tung.)



Photo4: 2005 AGM – Forum theme: “Medium of Instruction and Maths & Science Education” (Left: chairman [1992, 1999-2006] Or choi-kuen)



Photo5: 2008 AGM (Chairman [right 3]: Ng chung-chun and Council [left 2] Pang chi-chuen. *BOTH have great contribution to the Association but had left us in 200x and 201x!*)

**** Themes of some AGM-Forum**

<u>Year</u>	<u>AGM Forum Theme</u>	<u>Remarks</u>
2022	Metaverse and Blockchain	Pandemic but AGM continued ... (+ZOOM)
2021	STEM Profession	Pandemic but AGM continued ... (+ZOOM)
2019	STEM teachers & teaching in the Age of AI	Pandemic began but AGM continued ...
.../		
2016	Implementing STEM in HK – How?	
2014	50 years of Science and Maths education and Way Forward	50 th Anniversary of HKASME
2011	HKDSE – The New Assessment frame with uncertainties?!	2012 is the 1 st HKDSE 2011 is the last year of HKCEE.
.../		
2004	The Impact of New SS on Sc. & Maths Educators	40 th Anniversary of HKASME
2003	SARS – Reflections and Implications for Educators	SARS pandemic
2002	The Prospects for Science & Maths Education under the NSS Education System	New Secondary System plan for change from (3+2+2) to (3+3) with first Public Exam HKDSE at 2012.

{{.. Note: The first article of “**60th Corner**” is (60-1) “1964? What happened?” -- in the HKASME September Mailpack. }}

*** << **STEM Corner** >>***

**(ST-1) Sony to replace plastic packaging !?**

Sony is going to eliminate plastic packaging, starting with phones and earbuds – they will be replaced by paper and bamboo materials ...

While TV packaging will continue to rely on polystyrene foam for the foreseeable future, Sony will look to adopt new technology that creates a foam from powdered recycled paper.

Of the roughly 440,000 tonnes of products that Sony Group shipped in fiscal 2021, packaging accounted for about 90,000 tonnes.

The use of plastic in packaging and single-use products has been called one of the biggest threats to the environment. Most plastics do not readily decompose in nature and instead break down into microplastics, a pollutant particularly harmful to marine life.

For more details, check <https://asia.nikkei.com/Business/Companies/Sony-to-eliminate-plastic-packaging-starting-with-phones-and-earbuds>

**(ST-2) << Midjourney (3) ? ... >>**

<<>>

** The above photos are produced by the online AI-package “Midjourney” (mentioned last time) with input of “text = STEM education”. What do they tell? How would you visualize the link between the text and image AI production.

It's impossible to bring up Robots without mentioning AI, which powers robots' brains or central processing systems. As AI improves, so will central processors and other technologies. AI systems will speed up research and discoveries through mega computer systems able to process massive amounts of information quickly.

The new research lab with the base: “Text-to-Image” AI package is open for all to try their exploration in different sense they like. You could subscribe to the website: <https://www.midjourney.com/home/> They try to check what this new mode of creation would lead to any new mediums of thought and expanding the imaginative powers of the human species.

SO, try yourself by logging in to the Midjourney ... and see what you could create!
And, will you try to ignite your students' creativity via this AI-package? :) :) :)



**** Science News ** --**

(S-1) “Digi-Science” Video Competition for Hong Kong Secondary Schools 2022-2023

1. Aims

The competition aims at:

- promoting students' interest in learning Science;
- developing students' problem solving, communication and science process skills through demonstrating and explaining interesting experiments;
- encouraging students to communicate scientific ideas to the public in a meaningful and creative way; and
- raising students' awareness of testing and certification and its importance to their daily life.

2. Participants' Qualification

Participant must be a secondary student of a whole-day school.

3. Requirement of Entry

(a) Theme:

Food Testing in Daily Life “生活中的食品檢測”

(b) Video:

- The duration of the video should be not exceeding 2 minutes.
- The science experimental work should be conducted in the school laboratory using materials obtained at home, schools or any daily products. Risk assessment should be conducted before starting the experiment. Supervision from the teacher should be provided when the students carrying out the experiments.
- The content could be presented in either Chinese or English. Mixed language is not accepted.
- The content should not be promoting any product brands and should not display the brand name or logo of any products;
- The video should be uploaded on YouTube (URL: www.youtube.com) before submitting the Application Form and the report.

(c) Report:

- The video should be accompanied by a report including the experimental principle and the safety-related aspects for the experiment. The coverage of the report should not exceed four single sided A4 papers (including reference sheet). The idea can be illustrated by texts, diagrams or photos, etc.
- The report shall have a cover page with the title of the video. School logo or name should be avoided on any work, otherwise participants may be disqualified.
- The language used in the report should be consistent with that used in the video.

4. Rules

(a) The competition consists of Junior Secondary Division and Senior Secondary Division:

1. Junior Secondary Division: Students of S1 to S3.
2. Senior Secondary Division: Students of S4 or above.

- (b) Teams, comprising not more than three students in a team, must be nominated by schools. Each school can nominate a maximum of two teams and each team can only submit one entry. A team who submits more than one entry will be disqualified.
- (c) Each entry should include a video and a report.
- (d) Entries must be the participants' original work that have not been published previously, nor submitted for other competitions.
- (e) Entries must not infringe any intellectual property rights or any other rights of any third party.

5. Submission of Entries

(A) Application (due by 9 Jan 2023): Fill in the Application Form (Appendix I) and email to digisci@hkasme.org.

(B) Submission of Report: The report(s) for the video(s) should be submitted together with the attached Submission Form (Appendix II) via schools **by post** to "Hong Kong Association for Science and Mathematics Education, Rm 114, 1/F., Po On Court, 1 Po On Road, Sham Shui Po, Kowloon". Please mark clearly on the envelope "*Digi-science*". The deadline for the entry submission is 11 **April 2023 (Tuesday)** (the postal chop date will be the date of receipt).

6. Judging

- (a) The judging panel for the competition will comprise representatives from HKCTC and HKASME.
- (b) Entries will be marked according to the following criteria:
- How the experiment and the report are presented and elaborated;
 - Whether the idea of experiment is creative; and
 - Whether the entry is interesting, original, scientifically accurate and engaging to ordinary audience.

7. Awards

- (a) The competition consists of the following awards for each junior secondary and senior secondary levels:
- One Champion : One trophy and book coupons worth HK \$1,000
 - One first runner-up : One trophy and book coupons worth HK \$800
 - One second runner-up : One trophy and book coupons worth HK \$600
 - Two merit awards : One award certificate and book coupons worth HK \$300 each
- (b) All participants will receive a certificate of participation.
- (c) Winners will be notified of the competition results before **Early May 2023** and be invited to receive their awards in a prize-giving ceremony, details of which will be given in due course.

Copyright The organisers reserve the right to publish in full or part of the entries. All entries will not be returned to schools.

For details, please visit our website: www.hkasme.org

“Digi-Science” Video Production Competition for Hong Kong Secondary Schools 2022-2023

Application Form

(Application deadline: 9 Jan 2023(Monday))

To: Hong Kong Association for Science and Mathematics Education,

Email to: digisci@hkasme.org or Fax No.: 2333 3355

I nominate _____ team(s) of students⁽¹⁾⁽²⁾ to participate in the captioned competition. The following are the details of participating students :

Participating Team(s) :					
Team A			Team B (if any)		
Class	English (in block letters)	Chinese	Class	English (in block letters)	Chinese
Division: Junior / Senior* secondary			Division: Junior / Senior* secondary		
Teacher-in-charge(s) :					
Mr / Ms*			Mr / Ms*		
Mobile No.:			Mobile No.:		
Email:			Email:		

* Please delete as appropriate

Note: (1) Each school can nominate up to two teams of students and each team should not consist of more than 3 students.

(2) Each team can only submit one entry.

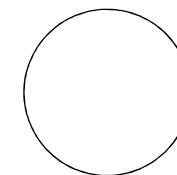
School Name: _____

School Tel. No.: _____

Name of Principal: _____

Signature of Principal: _____

Date: _____



School Chop

(“Digi-Science” Video Production Competition for Hong Kong Secondary Schools 2022-2023)

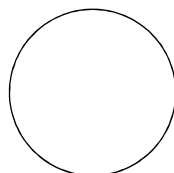
URL of the video Submission Form (11 April 2023(Tuesday))

Name of School	:	
Responsible Teacher(s)	:	
Email	:	
Team	:	Team A
Division	:	Junior / Senior* secondary
Title of the video	:	
URL of the video	:	
Responsible Teacher(s)	:	
Email	:	
Team (if any)	:	Team B
Division	:	Junior / Senior* secondary
Title of the video	:	
URL of the video	:	

Signature of Principal : _____

Name of Principal : _____

Date : _____



School Chop



(S-2) IYOM-2023

<-- Millets – What are they? Why so important?

Millets are a highly varied group of small-seeded grasses. They are widely grown on the globe as cereal crops or grains for food. They are important in the tropics of Asia and Africa (especially in India, Mali, and Nigeria). 97% millet production is in developing countries.

This crop is favoured due to its productivity and short growing season under dry, high-temperature conditions. They are highly tolerant of drought and other extreme weather conditions and have a similar nutrient content to other major cereals. It has been consumed by humans for about 7000 years and potentially had a pivotal role in the rise of multi-crop agriculture and settled farming societies.

The IYOM-2023 was supported by 72 countries principally to reverse the consumption decline of the nutrient-rich grain and open opportunities for the country's millet growers, accounting for 41% total world production since 2020. Could this be a solution for the food problem in this year of crisis??

Check for more online about IYOM-2023 and prepare for updates to your students!!!

** Chemistry News **

(C1) Competition: "Chemical Celebration of HKASME-60".



{Submission date for the 1st Batch: 1/12/2022}

<< For submission details, please check online : www.hkasme.org >>

*** Notes on queries and some *FAQ* about this "Csme60 Competition":

Thanks for supporting the activity as there are queries about different details of the competition. And, at the time of writing, some submissions have already been received (to our surprise!) Though we have referred this competition to that about IYPT-2019, there will not be monthly submission like the IYPT-2019. The 1st batch of collection is due by 1/12/2022. Whether we will have 2nd batch of collection (or competition) depends on the popularity and quality of this 1st Batch.

Another query is about the type of presentation. Actually, we welcome any mode of presentation – so long they fits in the main aim of this competition. We would like students to try different possible presenting skills and to encourage them to explore links between the knowledge (characteristics of elements and their stories) to meet the very slim limits set in the regulation. So, we won't limit the presentation to just one mode – and don't ask if "poster" is allowed. From past experience, students are much creative than we estimate – we could disclose that some already submitted designs already have very good ideas and mode of presentation. In past competition, we have received a lot of different designs: writings (in poems, in different text version, ...), drawings with different characteristics, cartoons, animations, posters, conversation,

(C2) Chemistry Mock Exam (Dec-2022: 24th to 29th) -- application online.

All centre-exams are FULL. Teachers could arrange their own exams at their own schools and scripts could also be handled by returning to the Association after Exam. Check Details at www.hkasme.org

(C3) Hong Kong Chemistry Olympiad for Secondary Schools (2022-23)

The Hong Kong Chemistry Olympiad for Secondary Schools is a project learning competition jointly organized by the Hong Kong Association for Science and Mathematics Education (HKASME), the Hong Kong Chemical Society and the Royal Society of Chemistry. It aims at promoting the interest of students in learning Chemistry and developing students' problem solving, communication and science process skills through project learning.

Details of the Olympiad are given below:

Theme	Waste. Second Life. Chemistry (廢. 再生. 化學)
Participants	Each team comprises three to five Secondary 3-6 students and each school can present a maximum of two teams of students to compete in the Olympiad.
Rules for the competition	<ul style="list-style-type: none"> (a) Students will design and work on their own project in school. The project should include experimental work. (b) Each team of students should write up a report to give a concise and well-ordered account of their project including the objectives, an abstract of not more than 200 words, principles, experimental methods, presentation and interpretation of results, discussions, conclusions and references. (c) No school logo or name should appear on any works, otherwise participants will be disqualified. (d) The Competition consists of two rounds. A preliminary screening based on the written reports and all presentation materials will be conducted. <u>The best 6-10 teams (approximate)</u> will be invited to attend the Final Round Competition. (e) During the Final Round Competition, each team is allowed to give a 10-minute presentation, including a maximum of 7 minutes to report their project and 3 minutes to play the video showing their experiment. After each presentation, there will be <u>7 minutes</u> for the team to respond to questions raised by the panel of judges and the audience. The softcopies of PowerPoint, video, report, abstract and summary should be stored in a CD-R and submit to the HKASME before the Final Round Competition. (f) If finalist teams participate in other competitions, they should notify the organizing committee as soon as possible so that proper arrangement could be made. (g) Students can only use either Chinese or English in their project report/website and presentation. Mixed mode of both languages is not allowed. (h) Schools will be responsible for the production costs of their projects.
Adjudication	<p>The panel of judges comprises representatives from the organizers. All projects will be judged according to the following criteria:</p> <ul style="list-style-type: none"> (a) whether the project is relevant to the theme of the Olympiad, (b) whether the chemical principles described are sound and whether the methods used are reliable, (c) whether the project describes a novel but significant experience and can be used or applied in other areas, (d) whether the presentation is clear and convincing, and (e) other criteria as deemed appropriate by the panel of judges.

The preliminary screening will focus on the quality of projects. The final adjudication will focus on the overall performance of the team on the day of the final round competition.

Deadline for 31 March, 2023 (Fri before 5:00 p.m.)

Submission (to the HKASME office)

- Awards**
- Gold, silver and bronze medals will be presented to members of the first three winning teams.
 - A trophy will be presented to the school of the champion team for its retention for one year.
 - Certificates and souvenirs will also be given to all members of the finalist and commendable teams.

Enquiries Enquiries regarding the Olympiad may be directed to Miss CHU of HKASME at 2333 0096, For more details, please visit our website: www.hkasme.org.

Copyright The organizers reserve the right to publish in full or part of the entries. All entries will not be returned to schools.

Safety Matter All participating schools should take all necessary safety precautions and obey laws announced by Education Bureau and other authorities.

Schedule for Hong Kong Chemistry Olympiad for**Secondary School 2022-2023**

Date	Detail
Nov. 5, 2022 (Sat)	☞ Briefing Session with Science Talk Venue: Newman Catholic College, G/F., 2 Cliff Road, Yaumatei, Kowloon. Time: 9:30 a.m. – 11:00 a.m.
Jan. 9, 2023 (Mon) Before 5:00pm	☞ Deadline for submission of application forms for the Olympiad. <i>An application form (Appendix I) is attached.</i>
Mar. 31, 2023 (Fri) Before 5:00pm	☞ Deadline for submission of written reports and any supporting materials (for website report, please store in a CD-R). All materials should be submitted through the Responsible Teacher to: Mr. Ricky Yeung Room 114, 1/F, Po On Court 1-15 Po On Road, Sham Shui Po, Kowloon.
Apr. 21, 2023 (Fri)	☞ Announcement of result for entering (around 6-10 teams)
May 13, 2023 (Sat)	☞ Final Competition and Award Ceremony Time: 9:00 a.m. – 1:00 p.m. Venue: To be confirmed

Application Form

(Deadline: 9 Jan 2023(Mon))

Hong Kong Association for Science and Mathematics Education

Room 114, 1/F, Po On Court, 1-15 Po On Road, Sham Shui Po, Kowloon

(Fax no.: 2333 3355)**Hong Kong Chemistry Olympiad for Secondary Schools (2022-2023)**I nominate the following team(s)[†] to participate in the above competition:**Participating Team(s) :**

Team A			Team B (if any)		
Class	Name		Class	Name	
	English (in block letters)	Chinese		English (in block letters)	Chinese
E-mail of team leader:			E-mail of team leader:		

Responsible Teacher(s) :

Team A: Dr/Mr/Ms* _____ e-mail: _____

Team B: Dr/Mr/Ms* _____ e-mail: _____

[†] Each team comprises three to five Secondary 3-6 students and each school can nominate a maximum of two teams of students to compete in the Olympiad.

* Please delete whichever is inappropriate

Signature of Principal : _____

Name of Principal : _____

School : _____

Tel. No. : _____

Fax No. : _____

Date : _____

(C4) ICQ “International Chemistry Quiz” 2022 – previously named as “ANCQ”

(Australian Chemistry) --> **Resumed** & quiz is ongoing with NEW strategy!..



Results and reports hope to be released by Oct-2022. Next School Year (2022-23).
Check updates at our WWW.

**(C5) IYOG 2022 – International Year of Glass**

Official site: <https://www.iyog2022.org/>

What glass gives society?

- *The use of glass in architecture dates to Roman times, containers have an even earlier history in Egypt and Mesopotamia (now Syria and Iraq) and glass beads were widespread throughout the Middle East, India and China, being traded internationally trade from the Bronze Age*
- *With its unparalleled versatility and technical capabilities, glass in its many guises has fostered innumerable cultural and scientific advancements.*



Owens Corning is an American company that develops and produces insulation, roofing, and fiberglass composites and related materials and products. It is the world's largest manufacturer of fiberglass composites. This US company has served all since 1935... It aims at building a more sustainable future ...

Check for updates at <https://www.owenscorning.com/en-us>



➤ You are encouraged to organize some activities with your classes / school to celebrate / promote this International Event. Below are some suggestions for your students' "vacation activities":

- Online exploration about "optical fibres" – a special kind of glass.
- Poster competition about glass – ancient and modern times
- Project about glass -- (refinements depend on your choice....
-

New upcoming events at ➔ The ICG (International Commission on Glass) are pleased to announce that the Glass Trend Board & IYOG-2022 are cooperating to offer a joint **GlassTrend – IYOG 2022** series of events.



Some international programs about IYOG-2022: ==

- ◆ July-2022: An International ICG Congress – Berlin, (celebrating the 100th Anniversary of DGG)
- ◆ International glass displays in Art Galleries and Museums throughout the year
- ◆ Dec-2022: Closing Congress in Japan
- ◆

Check for more updates at : <https://www.iyog2022.org/>

>> And, you can arrange your own celebration with your students ... !!!

Biology News

(B-1) Hong Kong Biology Literacy Award (2022-23) [HKBLA]

In order to further promote the learning morals among ALL secondary school Biology students, the Hong Kong Association for Science and Mathematics Education (HKASME), together with Royal Society of Biology – HK Branch, The Education University of Hong Kong and The University of Hong Kong will organize the above captioned event. Students of your school are now strongly encouraged to participate.

Details are described as follows:

<u>Aims</u>	(a) To stimulate students' active interest in Biology (b) To challenge and expand their talents; and (c) To enhance their scientific literacy; and (d) To widen their exposure in cutting-edge biological knowledge and innovation.
<u>Regulations and Eligibility</u>	(a) Students <u>MUST</u> be in S3 to S6 in the academic year 2022-2023. (b) Students <u>SHOULD</u> form a group with 4 students. (Students who fail to form group will <u>NOT</u> be eligible for taking part in the presentation contest regardless of their scores) (c) Number of teams nominated by each school is 2 teams, however, if the quotas are exceeded in the first round of enrolment, places will be allocated automatically to FIRST team of each school ONLY.
<u>Fee</u>	\$600 per team (Include administration, marking, analysis report and certificates)
<u>Academic Advisor</u>	Dr. YIP, Valerie Wing-yan (Deputy Director, Committee on Double Degree Curriculum, Faculty of Education, The University of Hong Kong)
<u>Application Deadline</u>	30 November 2022 (Wednesday)

This competition includes the (I) **Heat** and (II) **3-minute presentation contest cum Prize Presentation Ceremony**. **8 TEAMS** with **HIGHEST AVERAGE SCORES** in the Heat will enter the 3-minute presentation.

(I) Details of the Heat:

Date:	14 January 2023 (Saturday)
Session:	To be confirmed
Venue:	To be confirmed <u>Note: Participants should comply with the vaccination requirements under the Vaccine Pass regulation of the HKSAR.</u>
Assessment:	<u>Individual</u> 1-hour test with 60 multiple-choice questions

Scope:	Questions are set in 4 areas: (1) Scientific inquiry; (2) Nature of science; (3) STEM Education; and (4) Science, technology, social & environment connection. <i>Note 1: The areas covered are NOT limited to HKDSE Biology curriculum.</i> <i>Note 2: The test paper is set in bilingual format.</i>
Awards:	Individual: First, Second and Third Class Awards. Best School Awards (schools with the average scores of the students ranked in the top eight among all participating schools.)

(II) Details of the 3-minute presentation contest:

Date:	18 February 2023 (Saturday)
Format:	8 TEAMS with HIGHEST AVERAGE SCORES in the Heat. 3-minute presentation & 1.5-minute Q&A session after 30-minute preparation time . The scoring will be based on: (1) Students' understanding of the selected topic (60%); (2) Students' presentation and communication skills (20%); and (3) Team spirit (20%) The presentation may be delivered in either Chinese or English.
Awards:	For participating teams: 1) Champion cup; 2) First, Second and Third runners-up and 2 merit awards; 3) Best Q&A Response to two groups. For student audience, 2 Best Questioning Awards.

(III) Enquiries

Enquiries	For any enquiry, please contact Ms. Chu Tel.: 2333 0096, Fax: 2333 3355, Email: hkbla@hkasme.org
-----------	---

(IV) Submission of Entries

Submission of Entries	(On School Basis) The information of Applicants should be submitted ONLINE (www.hkasme.org). (Please use CHROME BROWSER for online registration). Application Link : https://form.jotform.com/222833700675456 Grateful if it is completed, returned together with a cheque of an appropriate amount, crossed and payable to "HKASME LTD", to us by 30 November 2022. (Room 114, 1/F, Po On Court, 1-15 Po On Road, Sham Shui Po, Kowloon.)
-----------------------	--

(B-2) Diseases caused by virus (e.g. COVID-19) OR bacteria (e.g. melioidosis) ?

Melioidosis,(類鼻疽) also called Whitmore's disease, is an infectious disease that can infect humans or animals. The disease is caused by the bacteria *Burkholderia pseudomallei* (*Left photo*) or *B. pseudomallei* (*Right photo*), which is found in contaminated soil and water.

In contrast, the COVID-19 disease is caused by a new virus called “SARS-CoV-2”. It cannot live by itself like the bacteria (actually a cell) and its transmission need some host-cells!

Check for more at <https://www.wwf.org.au/get-involved/end-animal-extinction> ..

“ Protecting Biodiversity, Protecting Life”

((=====

Physics News

(P-1) Physics Mock Exam in Dec-2022 (30th & 31st – 3 sessions per day)

ALL centres filled Could go for self-administration at your own school. Check details online www.hkasme.org

((=====

Online Chemistry STEM Program (<http://www.microChemlab.org>)

Hosted by MicroChem Lab

The above website is a newly released online program for DSE Chemistry STEM education. It is a holistic subject-based STEM program, mainly targeting at supplementing the experimental part of the syllabus by introducing micro-scale experiments. The program (STEM 1 and STEM 2) also includes techniques for building instruments, updating information of innovative materials related to chemistry and daily life STEM information of wireless communication like present and future smartphones. Due to the limited number of teaching periods, teachers find it difficult to meet the needs of both laboratory session and classroom teaching. As a result, student practical experience is sacrificed. Demonstrations or viewing video clips are the often substitutes. It would be educationally beneficial to home-make the innovative micro-scale equipment as depicted in the program and perform the syllabus related experiments, whether using group experiments or teacher demonstrations.

Student members of the STEM team of schools have the necessary manipulative and electronic skills to make sophisticated devices of innovative prototypes, notably robots. I would have thought that they are the right persons to build the instruments. Associated project can be looked upon as feedback of STEM achievement to school.

Down-to-earth promotion of innovative micro-scale chemistry experiments would be arrangement of hands-on workshops for participating teachers to actually try out such experiments. MicroChem Lab will announce activities of this nature. It is hoped that teachers would bring back organized ideas of school implementation tailored to their own resources.

Duplication or modification of designs are for school use only. Any kind of commercial reproductions violate the stated copyright.


Feel free to express your opinion about the website by contacting us.


Happy viewing!

Thank you for your kind attention.

MicroChem Lab

二零二二年十一月份教育多媒體最新上載資源

資源名稱	科目/系	年級/	資源簡介/學習目標	資源網址
我們的 STEAM 教育 (中文字幕可供選擇) 	科學教育 STEAM 教育 家長/教師資源	小一至中六 家長/教師	本片介紹教育局在中小學以普及化、趣味化、多元化的方式，大力推動 STEAM 教育，為學生打好基礎，配合香港未來發展創科的大方向。重點包括： -加強創科學習，鞏固學習數理科技的基礎； -進一步加強專業培訓，裝備教師創新科技及其應用的知識； -加強推動電子學習，提升 STEAM 範疇的學與教效能； -透過 STEAM 教育培養學生正面價值觀和態度； -提供進階的學習活動，培育具 STEAM 潛質的學生； -持續提供資源支援，促進推動 STEAM 教育。 (鳴謝善德基金會提供內地考察活動相關照片。) 精華版本： https://cdnapisec.kaltura.com/html5/ht	https://emm.edcity.hk/media/1_rm4u09n

宋末皇室南逃香港遺蹟 (中、英文字幕可供選擇) 	中國歷史	中一至中三	本短片介紹宋末的歷史，以及香港相關的歷史遺蹟和景點，包括宋王臺花園、皇帝巖、文天祥公園等。	https://emm.edcity.hk/media/1_1qq8y7b
--	------	-------	---	---

小學教育課程指引系列：持續專業發展和學習型組織 	其他學習領域 家長/教師資源	小一至小六 教師	課程發展議會編訂的《小學教育課程指引》(試行版) 已經公布，並供學校採用 (https://www.edb.gov.hk/pecg)。教育局課程發展處製作《小學教育課程指引系列》短片，讓校長和教師從不同角度了解相關更新重點。 本短片的主題為「持續專業發展與學習型組織」，如欲參閱更多詳情，可細閱《小學教育課程指引》分章三：持續專業發展與學習型組織 (https://www.edb.gov.hk/attachment/tc/curriculum-development/major-level-of-edu/primary/curriculum-documents/Primary Education Curriculum Guide/pecg_ch3.pdf)。 本短片的 1 分鐘精華版可參看以下網頁： https://cdnapisec.kaltura.com/p/2621712	https://emm.edcity.hk/media/1_glzydypx
「公民、經濟與社會」推廣短片 	家長/教師資源	中一至中三 家長/教師	介紹「公民、經濟與社會」的課程內容以及學習經歷。	https://emm.edcity.hk/media/1_4c7pizsg
「躍動校園 活力人生」計劃——精英運動員分享會：欖球運動無界限（第一部分） 	體育 家長/教師資源	小一至中六 家長/教師	本資源配合「躍動校園 活力人生」計劃，透過中國欖球精英運動員姚錦成、岑惠心、卓銘然、黃耀斌及黎寶芬分享他們的奮鬥經歷，帶出運動競賽和體育精神的意義，鼓勵學生建立堅毅、勇於接受挑戰等正面價值觀和態度，並啟發他們追求夢想，發揮潛能。一直以來，欖球精英運動員在地區錦標賽中表現出色，男子欖球代表隊於 2018 年在雅加達舉行的亞運會中勇奪金牌和於 2021 年亞洲盃中奪得季軍。	https://emm.edcity.hk/media/1_zeblmhfh

「躍動校園 活力人生」計劃——精英運動員分享會：欖球運動無界限(第二部分)	體育家長/教師資源	小一至中六家長/教師	為進一步協助學生建立活躍及健康的生活方式，教育局於2021/22學年啟動「躍動校園 活力人生」計劃(“Active Students, Active People” Campaign, 下稱「ASAP」計劃)。本資源輯錄了2021/22學年的活動精華，希望鼓勵學校和家長積極支持和配合，透過凝聚不同持份者的力量，營造更理想的校園體育和社	https://emm.edcity.hk/media/1_3e3jmggo
【漢】戰爭與和平(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	在中國的歷史上，往往以殘酷的戰爭去解決國內的社會矛盾；亦會以戰爭解決邊患問題。戰爭改變着中國人的天命觀和世界觀，亦塑造了中華民族的性格。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_7opjgij3
【漢及唐】民族融和之路(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	在中華民族融和過程中，有通過和親、歸附的方式，也有以戰爭的碰撞而融入來的。其中最為人所樂道的，莫如北魏孝文帝的漢化運動和唐朝文成公主入藏，對民族融和造成深遠的影響。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_bwndhu7k
【漢及明】開拓中外交通(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一至中二	中國人有強烈的開拓精神和對外交流的願望，漢朝張騫鑿空，建立了絲綢之路。明朝鄭和下西洋，更是世界航海史上的奇跡。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_p0244h1t
【商】信史時代的開始(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	從甲骨文上的文字讓我們知道漢字的起源。商朝人利用甲骨占卜以及把占卜結果刻在甲骨之上。甲骨文的發現，讓我們發現了商代文明的發展及中國古文字的源頭。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_pnl3lqp7
【周】西周第一次分封(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	周滅商之後，周武王封商紂兒子武庚於殷，並於殷附近分封弟弟管叔、霍叔和蔡叔，以監視商遺民，史稱三監。周武王死後，周公輔政。在武庚的挑撥下，發生三監之亂。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_2wj9vaai

【周】西周第二次分封(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	周公在平定三監之亂後，進行第二次分封，這次分封是以姬姓的王室裔親和異姓的姻親為主，如魯國、燕國、晉國、衛國、齊國等，以藩屏周室。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_egpriy6
【周】周王朝的夕陽(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	周平王遷都洛陽建立東周，鄭莊公以護送平王有功，成為跋扈難制的諸侯，東周自此禮崩樂壞，諸侯國實力凌駕於周王之上。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_njgwziwz
【周】烽火戲諸侯(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	周幽王為博取愛妃褒姒一笑，不惜烽火戲諸侯，引起諸侯不滿。周幽王更廢黜太子宜臼，促使太子外公申侯聯合犬戎部落進攻西周，由於幽王早已失去諸侯的信任，即使點燃烽火也等不到救援，最終被殺，西周覆亡。	https://emm.edcity.hk/media/1_05linzt9
【春秋戰國】春秋霸政(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	周平王東遷後，周室衰微，史稱春秋時期，諸侯競相爭霸，出現了春秋五霸。五霸是齊桓公、宋襄公、晉文公、秦穆公及楚莊王；另一說法是齊桓公、晉文公、楚莊王、吳王夫差越王勾踐。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_y2uib6ta
【春秋戰國】尊王攘夷(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	燕國被山戎壓迫，面臨滅國，齊桓公北上救燕，盡顯尊崇禮制、匡扶周室的大道，各國諸侯都心悅誠服。其後在召陵之盟，遏制了楚國的野心，又在葵丘會盟上，成為春秋時代第一位霸主。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_7gopvvll
【春秋戰國】晉文公登位(重點課題資源)	中國歷史《中國通史》多媒體教材套	中一	晉文公在秦國的幫助下，重返晉國，成為國君。晉文公整頓內政，發展生產，迅速強盛。在城濮之戰中，大敗楚軍。之後，晉文公召集八國諸侯，參加踐土之盟，定下同心協助王室，互不侵犯的盟約，晉文公成為新霸主。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_q3iefzlm

【春秋戰國】覬覦霸主之位的楚莊王（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	楚莊王整頓朝綱，國勢日盛。在郢之戰大敗晉軍。其後雙方再於鄢陵交戰，晉國重新成為霸主。後來在睢陽弭兵之會，晉、楚兩國為共同霸主。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_8zpl8154
【春秋戰國】萬世師表（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	孔子在政治上失意後，便專注於教育活動，他廣收學生，有教無類。他被譽為萬世師表，尤其是他的教育理念備受國人的推崇。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_322f1qjv
【春秋戰國】孔子的學習經歷（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	孔子的成長經歷。春秋時期，周禮在許多諸侯國日漸式微，孔子曾向老子問禮，他堅決維護周禮，提出克己復禮為仁，要求仁者愛人，建立仁政的政治理想。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_u3hb4jp5
【春秋戰國】等待從政的孔子（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	孔子的政治理想是天下為公的大同社會，但是魯國政治大權旁落在三個貴族家族手中，他計劃削弱三桓的勢力，但最終失敗。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_shdbatl0
【春秋戰國】周遊列國（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	孔子不容於魯國，於是展開了長達14年的周遊列國生涯，一路顛沛流離，曾被困於陳、蔡，在鄭又被視為喪家之犬。在政治上失意後，他專注於教育。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_pz2sdvoq
【春秋戰國】春秋末期 霸政衰落 七雄並立（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	在春秋戰國的紛亂局勢中，列強爭相變法以求強，包括招攬賢才、學者、謀士、劍客，不問出身，不理貴賤，量才進用，促成戰國七雄的崛起。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_299q4u1p

【春秋戰國】戰國變法（一）：衛人吳起的變法（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	概述衛人吳起一生求榮求顯的事蹟，殺妻求將，母死不奔喪，雖然先後為魯、魏、楚等國君晉用，最終卻被楚國貴族殺害。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_tyr5hmns
【春秋戰國】戰國變法（二）：魏 李悝變法（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	介紹李悝在魏國變法時編定《法經》去約束人民的違規行為，實行嚴刑峻法，並以盡地利和獎勵農耕，使魏國日益強大起來。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_hi0ghcvy
【春秋戰國】戰國變法（三）：秦 商鞅變法（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	概述商鞅在秦國實行治亂世、用重典的法律體制，厚賞軍功，禁止私鬥，實行戶口編制和連坐法令，為秦統一六國打下富強的基礎。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_ng24ymg4
【春秋戰國】從春秋到戰國（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	概述戰國時代諸侯追求採用富國強兵之策，意圖兼併天下，由稱霸發展至爭強，統一宇內的背景，並介紹戰國七雄的崛起概況。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_gvtvfugu
【春秋戰國】戰國時期的軍事發展（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	分析戰國七雄爭勝的四個重要元素，包括：人數眾多的軍隊、步兵和騎兵的操練、武器和護甲的精良製做，還有優良的主帥等，缺一不可。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_0whbgznn
【春秋戰國】戰國最後大贏家（重點課題資源） 	中國歷史 《中國通史》多媒體教材套	中一	概述戰國時期最具關鍵性的幾場戰役：桂陵和馬陵之戰，使魏國一蹶不振，其後五國攻齊，直搗齊都臨淄，最終以秦趙長平之戰最為慘烈，也是奠定秦一統天下的原因。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_5pfe6uqs

【春秋戰國】百家爭鳴的時代 (重點課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	概述先秦時代是中國的覺醒時代，諸子百家，互相辯難，各種學說，轟出並起，而齊國的稷下更成為學子研習講學的地方。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_t5o1ging
【商】甲骨文的發現 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	晚清時期翰林院編修王懿榮發現中藥龍骨上的古老文字，經研究是商代甲骨文。商代文明逐漸顯露出它的真實面目。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_2admep9
【商】商代農畜經濟的發展 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	商代畜牧業及農業發展迅速，而天文曆法之進步，亦帶動了農業和釀酒業發展，商人更獨創了酒麴釀造法，飲酒文化盛行起來。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_bof8kx33
【商】青銅器時代 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	商代鑄造青銅器的技術，商代青銅器上的紋飾表現出對神權的崇拜。商人亦以青銅鑄造出各種器具，如禮器、兵器、樂器。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_g5q16ujc
【周】制禮作樂 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	周制禮作樂，定尊卑、親疏、貴賤、等級，講究尚德、尊尊、親親、敬老、慈幼，奠定中國倫理道德的規範，使整個社會從尊神尚鬼、迷信巫術走向禮治、德治。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_wfkr3tqe
【周】建立宗法制度 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	周朝除了封建制度外，還以宗法制度來配合，以嫡長子為大宗，其餘諸子為小宗，利用血緣等級關係，來鞏固周王朝內部的凝聚力。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_nr0m2in3

【周】外外交困的周王朝 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	原本犬戎臣服於周朝，周穆王不聽進諫，西征犬戎，引起犬戎報復，不斷侵擾周朝；而封建及宗法制度背後的隱患，導致周室財產規模不斷減少，影響王朝實力和地位。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_48118rke
【周】走向衰落的王朝 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	周夷王下堂接見諸侯，造成周天子失禮之始。周厲王採用鐵腕手段振興軟弱的周室，但最終死於餓地。雖有周宣王的短暫中興，但亦無力阻止王室的頹敗之勢。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_z0sh4f69
【春秋戰國】齊桓公登位 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	齊襄公被殺，君位空懸，流亡外地的公子小白及公子糾互爭王位，最後公子小白早一步趕回齊國登位，成為齊桓公。在管仲的協助下，齊國國力迅速強盛起來。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_tjyfvjpf
【春秋戰國】一飛沖天一鳴驚人 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	楚莊王即位時，國家處於內憂外患之中，他為了觀察朝野的動態，他「不理政務三年」，楚國大臣忍無可忍，用三年不飛不鳴的鳥的謎語勸戒楚莊王。莊王明白國民渴求富國強兵的心情，於是發憤圖強，終成霸主。	https://emm.edcity.hk/media/1_wu03rpyk
【春秋戰國】孔子的童年 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	孔子出生於曲阜，先祖是一個沒落的貴族。年輕時生活貧賤，幹過粗活。在母親淳淳教導下，勤奮好學，精通六藝。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_14m7rluu
【春秋戰國】有趣小故事 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	泰山旁有一婦人因為兒子及丈夫都給老虎咬死了而哭泣，孔子問她為何不離開，她說因為沒有苛政。這是「苛政猛於虎」故事的來源。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_k26mwedd

【春秋戰國】《論語》與儒學 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	《論語》是孔子各弟子之間的對答，有人甚至認為是「中國第一書」，當中概括了政治主張、人生道理、道德倫理觀等。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_7e0wniur
【春秋戰國】孔子的晚年 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	孔子晚年受到一連串的打擊，包括他的兒子及心愛弟子的先後逝世。孔子死後，他的弟子為老師守孝，傳承孝道。孔子學說在漢武帝的提倡後，成為了中國文明中燦爛的一章。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_uros7ely
【春秋戰國】儒家 孟子 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	概述儒家孔子的再傳弟子孟軻向梁惠王講述行仁義之道，可惜未能成功，轉而向齊宣王講述仁政治國之理，成效也不大，晚年只好回家鄉講學。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_tpwual5j
【春秋戰國】道家 老子和莊子 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	概述道家老、莊的抽象學說，道可道，非常道和天地萬物生於有，有生於無的自然之說，也指出莊子在亂世中追求思想自由，才能保全自己。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_beun01x0
【春秋戰國】墨家 墨子 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	概述墨家提出兼愛非攻的偉大主張，為了使天下人相親相愛，墨子刻苦為人，毫不計較自己的利益，乃至犧牲生命，為理想赴湯蹈火。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_12p5loax
【春秋戰國】法家 荀子和韓非 (自學課題資源) 	中國歷史 《中國通史》多媒體教材套	中一	概述荀子的性惡論和韓非提出的法制，以法為教，以吏為師，厲行賞罰，獎勵耕織，成為君主信服而行之有效的治國之術。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_9sykbvun

【春秋戰國】覺醒時代 (教師增益資源) 	中國歷史 《中國通史》多媒體教材套	中一	春秋戰國時期是中國的覺醒時代，各家各派思想家：孔子、孟子、墨子、老子、莊子等或連袂登場，或接踵而出，紛紛提出各自不同的救世思想，形成了一個百家爭鳴的時代。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_v8omlzl3
【漢】獨尊儒術 (教師增益資源) 	中國歷史 《中國通史》多媒體教材套	中一	漢武帝需要一套積極有為的治國新思想，董仲舒向他提出罷黜百家，獨尊儒術的建議。自此，儒家思想成為國家的政治統治思想。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_vq5l4k68
【明】儒學自我更新年代 (教師增益資源) 	中國歷史 《中國通史》多媒體教材套	中一	唐王朝衰落，儒學走入低谷，至宋代出現了儒家新學說，程朱理學成為主流，儒家思想再度振興。至明朝，王陽明再有新的領悟，完成儒家思想的自我更新。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_6avfxsgu
【商】美玉文化 (教師增益資源) 	中國歷史 《中國通史》多媒體教材套	中一	在商代遺址中，發現了大量的玉器，玉器數量之多，證明玉在當時貴族心目中的地位，玉在當時代表仁義、智慧、勇政、堅貞，這顯示當時美玉文化的普及。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_8z3m6irw
【商】商代的對外貿易 (教師增益資源) 	中國歷史 《中國通史》多媒體教材套	中一	在商代遺址中，發現了大量的玉器，玉器數量之多，證明玉在當時貴族心目中的地位，玉在當時代表仁義、智慧、勇政、堅貞，這顯示當時美玉文化的普及。 《中國通史》多媒體教材套主頁	https://emm.edcity.hk/media/1_fbg86ag0

教育多媒體資源目錄(幼稚園、小學、中學)：<https://emm.edcity.hk/static/catalogues>

教育局教育多媒體網站
(<https://emm.edcity.hk>)



EMM 流動應用程式：

只需進入 App Store 或 Google Play，搜尋「教育多媒體」或「EMM」，即可下載 EMM 流動應用程式。

iOS:



Android:



如閣下有興趣日後定期接收最新上載的教育多媒體資源的訊息，歡迎發一個空白電郵至 emm@edb.gov.hk。謝謝！

教育多媒體學與教資源目錄

幼稚園：



幼稚園教育

小學：



中國語文教育



普通話科



English Language
Education



數學教育



小學常識科

教育多媒體學與教資源目錄

中學：



中國語文教育



English Language
Education



數學教育



公民與社會發展科/
通識教育科



個人、社會及
人文教育



科學教育
(中一至中三)



科學教育
(中四至中六)

教育多媒體學與教資源目錄

其他：



價值觀教育



全方位學習



其他學習領域/
教育層面



家長/教師資源

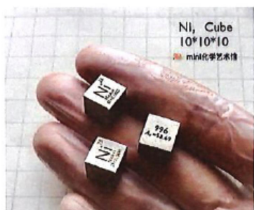
Resources Collection --- *Continue Celebrating the IYPT-2019 (International Year of Periodic Table) ...* -

(A-1) ** New ** -- **“Element Cubes”** -- IYPT resources ... <== could

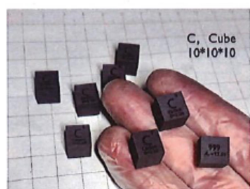
ALSO be used as tools for your students to plan their “Experience Package” for the NEW competition “My experience with the Periodic Table” for IYPT-2019(HK).

--- check Chem News (C1) above....

>>--)) Element CUBES of (1 cm x 1 cm x 1cm) – 4 elements available



(Ni cubes) ...



(C cubes)

Element / Symbol (At.No.)	Purity	Density	Price (Member / Non-member)
Carbon / C (6)	999 (= 99.9 %)	1.82	\$ 30 / 40

Nickel / Ni (27)	995 (= 99.5%)	8.9	\$ 50 / 60
Titanium / Ti (22)	995 (= 99.5%)	4.506	\$ 30 / 40
Molybdenum/ Mo (42)	9995 (= 99.95%)	10.22	\$ 60 / 70
Gold / Au (79) in tube	999	19.3	\$ 30 / 40

“More” How to use the “Element Cubes” ?? – check April mailpack for different uses ... and ...use your imagination & creativity for the followings: ...

1/ Use waste cardboard and papers to make “paper element cubes” with element info on the 6 sides.

2/ How to use the above depend on your imagination ... e.g. as a gift, ... as detective chess, .. as a conversational tool to inspire students

3/ Using the “real cubes” (bought as above) and the “paper cubes” together for different activities ...

(A-2) Sets of elemental package for comparison / metallic investigations ...



various metal combination packs are available with metals Mn, Bi, W, Zn,

Ti, Cr, Sb, Pb, Mo, Some mixed packs with 5 random metals at (\$30) and 3 metals at (\$20).

.... → Ask for more updates at the Office (2333-0096)!

(B) Periodic Table items for IYPT-2019 >> & Still extending into 2021! ...

>> YES, check Chem News Section!

** The IYPT-2019 (International Year of Periodic Table) will have global and local activities until the end of the year. Hence, it is not late for you to initiate activities for your school or class or students to join the grand celebration around the World.

For updates and our new competition (“My Experience with the Periodic Table” – a continuation of the 2018-19 competition “Element of the Month”), please go to www.hkasme.org > Subject Comm > Chemistry > IYPT or email your questions or message to iypt2019@hkasme.org

For details of the competition “Element of the Month for IYPT-2019(HK)”, please refer to the final report in this Journal or check at www.hkasme.org > Chemistry > iypt2019.

(B1)→ Different types of Periodic Tables:

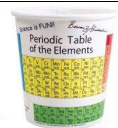
1. <u>Different size:</u> <u>A4 / postcard / bookmark</u> --	
--	--



2. 3D periodic table, large size (\$40) --






3. Heat sensitive periodic table --



4. Heat sensitive Cup with periodic table -- (change colour with cold water).

(B2) *NEW* Periodic Table Mugs:

	Periodic Table Mug (classical)	\$60
	Periodic Table Mug (yellow)	\$60
	Periodic Table Mug (coloured)	\$60

– Ask Office for updates at 2333-0096.

Check for more at the SME Office ... **↔ STEM nourishment needs experiential learning !!!**