

HKASME **Oct/Nov--2022** Mail Pack

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

< Serving ALL teachers since 1964 ... >

NEW New school year & 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!!!



<< 2022: IYOG >>



>>(*)* Just happened that the **Primary Science Project Competition 2022** (『常識百搭』)... is using the IYFV & UN-SDGoals as basic theme. The **FINAL STAGE** exhibition and competition had been held in July & Aug-2022 – virtually online (due to pandemic situation) -- Final Results could be found on <https://www.edcity.hk/pspe/zh-hant> !!!



Also... The **IYFA-2022** > THEME: “To acknowledge the

highly varied nature of small-scale fisheries and aquaculture ..AND.. contribution to global food security, nutrition & achievement of SDG (Sustainable Development Goals). ” → ** Update

Activity: <https://blueventures.org/hooked/february-2022-connection/> include lots of articles & videos about present fishery actions & ocean restoration ... !!!

The **official site** is: <https://www.fao.org/artisanal-fisheries-aquaculture-2022/home/en/>

... Video intro at: <https://www.youtube.com/watch?v=7H2ujoqbYeg> (Chi Sub)

FAO is the lead agency for celebrating the year in collaboration with other relevant organizations and bodies of the United Nations system.... >>> >>>>....

< ←=====→>

International Year of GLASS : **IYOG 2022**



-- **Why Glass?** → How is glass important to us?? →.. More News in this Mailpack.

>> * Could you name a few? ... Or, what's around your students with glass?

>> Check Video introduction at: <https://www.youtube.com/watch?v=TWHdFWSl3mE>

→** Update Activity: [Sept- 2022+ https://www.iyog2022.org/home/upcoming_events/]**

➤ >> We encourage you to help promoting the above IY-activities so as to get aligned with the UN's “Sustainable Development Goals” (SDG)! ... Check & Plan for you, your students & **the World....** In the NEW School Year (2022-2023).

((~~~~~))

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◆ **Council News** – ☺ **Activities Resumed? & Count towards 60th -2024 ...** P.3-6



◆ **“60th Corner”** – (60-2) **People & Building** P.7-9

◆ **“STEM Corner”** -- (ST-1) Midjourney ? AI for artistic creation ?... P.10

◆ **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) Nobel Prize 2022 – Medicine. (S-3) Nobel Prize 2022 – Chemistry. P.11-16

◆ (S-P1) Primary STEM Project Competition – completed on 11/8/2022 and results online !!!

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



of HKASME-60”. **SME #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 31/10/2022 ... Briefing session & Talk on 5/11/2022. P.17-25

- ◆ Biology News – (B-1) **HKBLA 2022-23** – 14/1/2023.. apply online by 30/11/22. (B-2) Australia announces plan to halt extinction crisis and save 110 species P.26-28
- ◆ Maths News – P.29
- ◆ Physics News -- (P-1) Physics Mock Exams (Dec-30th & 31st) P.30
- ◆ Resources Collection -- **Stock is LOW!** ... “**Element Cubes**” ! “**Element Packs**” ! New “**Periodic Table items**” ... P.31-35



- ◆ -- Marching towards the 60th (2024) !
- >> Check recap of pieces and issues in the “**60th Corner**” in Mailpack from this month (Sep-2022) onward (until 2024). Know more about the past and check how to sustain our profession in times of Ups and Downs!!!

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



– including learning & teaching!

((~~~~~))

Council News

☺☺☺ Activities Resumed? & Count towards Our 60th-2024 ... ☺☺☺

What's the most important thing that we are addressing at this moment? Of course, every HongKongers would like to get back to pre-pandemic situation – resuming our “normal” activities. From last year's experience, we are lucky that some activities had resumed with different modes to suit the changing environment – avoiding most face-to-face meetings. This is not just our hope, but also numerous wishes of teachers and students as we have received many queries about our routine/traditional for this year (2022-23). Although the relax of pandemic constraint is not as free as we hope, several activities could be initiated since September, e.g. the Mock Exams. Once the news was posted online, some activities had been overwhelmingly booked and by now most are FULLY BOOKED!

Of course, we are happy with the situation. But, that comes with a price – the Office tried very hard to contact possible venues – mostly schools – for arranging required precautions and necessary regulations against the pandemic. We understand the difficult situation that Schools could not allow our booking as they have to face – the danger of getting

influenced by crowds and pandemic influence. Even if we succeed in preparing the activity schedules, there is no guarantee if that activity would be cancelled due to similar reasons as year's before. Anyway, we could just pray and bless for the best to come and everyone stays safe and healthy. .

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.

Back to our new school year (2022-23), unfortunately we are still threatened by the pandemic and cases are still common in our society and normal schooling could be affected occasionally. All we could do is to find alternative strategies and / or new ways to handle the normal stuff.

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

October 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.



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

<u>Activity / Issue</u>	<u>Current situation</u>	<u>Remarks</u>
“60th Corner”  > a NEW Column to recap important events in the Association history leading to 2024 -- the 60 th Anniversary	(60-2) : People & Office <i>{note: (60-1) in Sep-Pack: "1964? What happened?"}</i>	Members could contribute to this Column with notes, special items, blessings, etc.. Just email us: enquiry@hkasme.org
“Chemical Celebration of HKASME-60”  > 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
DSE Chemistry Paper Review 2022 (re-run) -- via ZOOM	8/10/2022 9 am to 12:00	Application due by 5/10 Max. Enrollment: 60
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 sessions per day)	Application due by 28/10/2022.	Check details & Apply online Vaccination Pass required!
ICQ-2022 (previous ANCO) Chemistry ...	Results & Reports processing BUT delayed due to problem	Results hope to be released by Oct-2022 ...

	on Australian new platform	
Sales of equipment & references	Office still operate within our limits.	Phone (23330096, 23337602) ++ ONLINE data & order
 Digi Science Video Competition 2022/23 – Theme: “Food Testing in daily life”	Apply online due by 31/10/2022. Submission due by 11/4/2023	Check WWW for details of Final Results of 2021-22.. & newspaper interviews.
 Chemistry Olympiad for Sec. Schools – Theme: “Waste – Second Life - Chemistry”	Apply online due by 31/10/2022. Submission due by 31/3/2023	Check WWW for details of Final Results of 2021-22
 HKBLA 2022-23	14/1/2023 at different centres	Apply online. Check details at WWW. Vaccination Pass required!
Maths Talk: Interesting Geometry Examples by Prof. Lee (HKUST).....	Completed on 3/10/2022 Evening.	----

>> 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.hkasme.org.
 ➔➔ **Some books (Maths & Chem) are on sale about 50% OFF!** -->> CHECK at office!

60th Corner

(60-2) People & Office – 60 years of the Association (1964 - ...

Some dedicated members said that the HKASME could survive through different difficult stage is due to a self-owned office. Before that, the SME office was attached to the Diocesan Boys' School since its establishment in 1964.

** Opening of the Association's first self-owned office at Hunghom Commercial Centre in 1984 ...



(Photo of our OLD office in Hunghom: [Front left 4] was the Chairman of that year: Dr. Nancy Law).



(Opening Ceremony at the Hunghom Office in 1984 -- chaired by Sir Q.W. Lee [President and donation of the Office] accompanied by the Association's Council: Ms Carole Lee)



(Guests and Association members gathering after the Opening Ceremony in 1984).



1984 Walkathon – fund raising for the HKASME

....

Hello again!!! This is the second of this NEW CORNER for celebrating the 60th anniversary (2024) of the Association (since 1964). This is not just for memory but also try to let dedicated and new members to refresh our efforts in the past 60 years with further review of what could be further developed with different capacities in the years to come.

From photos above, one could imagine that “1984” was another important year of the “Hong Kong Association of Science & Maths Education”. With the injection of financial support from donations, the Association could plan for more activities with a stable address and spaces for various purposes. Of course, that comes with a price – management fee and daily routine running of the office need a constant sum for every month! Under financial pressure, the Association needed to claim back some funds for continuous maintenance and had to switch to a smaller office at Shamshuipo up to now (in 1997). This allowed the Association to keep running with a basic sum for all these years.

One person who had involved in this important event was our memorable past secretary Mrs. Cheng. She had served the Association for more than 20 years from 1990s to 2016. She had witnessed the move of our Office from Hunghom to Shamshuipo. The handling of relevant documents and materials from a big office to a small one is not an easy task. Other than that, she had also been involved in the selection and trimming of our paper documents in the 2000s to electronic form. Further, she had also witnessed many of our important events – namely the 40th and 50th anniversary (in 2004 and 2014). Many dedicated members had also paid their tribute to Mrs Cheng when she left us in 2016.



➤ Mrs. Cheng visiting our President Prof. Chu in his HKUST office with chairman Mr. Ng C.C. and vice-chairman Mr. Wong C.K. in 2006.

>> SME new office since 1997 at Shamshuipo – Po On Court, 1st Floor, Rm 114 Small office with networked computers and basic office equipment. Small number of publications and equipment on shelf.



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

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



(ST-1) << Midjourney ? ...



Now everything can claim to be STEM! Recently, a very hot 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? :) :) :)



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** 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 :

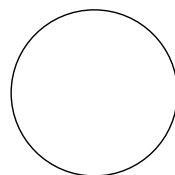
Participating Team(s) :					
Team A			Team B (if any)		
Class	English (in block letters)	Chinese	Class	English (in block letters)	Chinese
Division: Junior / Senior* secondary			Division: Junior / Senior* secondary		
Teacher-in-charge(s) :					
Mr / Ms*			Mr / Ms*		
Mobile No.:			Mobile No.:		
Email: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



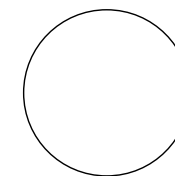
School Chop

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

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

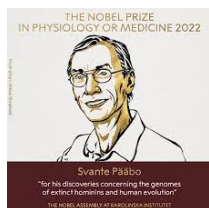
Name of School	:	
Responsible Teacher(s)	:	
Email	:	
Team	:	Team A
Division	:	Junior / Senior* secondary
Title of the video	:	
URL of the video	:	
Responsible Teacher(s)	:	
Email	:	
Team (if any)	:	Team B
Division	:	Junior / Senior* secondary
Title of the video	:	
URL of the video	:	

Signature of Principal : _____
 Name of Principal : _____
 Date : _____



School Chop

The Nobel Prize Awards is an annual timely incidence. How would you use such stories to alert your students in learning of science across different disciplines? What ideas would this year's award ignite you and your students' learning directives?



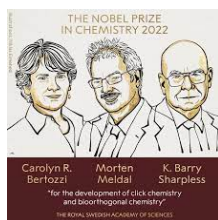
(S-2) Nobel Prize: Medicine 2022 ..

** Again A Swedish geneticist, Svante Pääbo, has been awarded the 2022 Nobel prize in physiology or medicine- for his discoveries concerning the genomes of extinct hominins and human evolution.

** --- Humanity has always been intrigued by its origins. Where do we come from, and how are we related to those who came before us? What makes us, Homo sapiens, different from other hominins?

>> A seemingly impossible task -- Pääbo started to develop methods to study DNA from Neanderthals, an endeavor that lasted several decades, since 1990 when he was first recruited to the University of Munich to continue his work on "archaic DNA". He decided to analyze DNA from Neanderthal mitochondria – organelles in cells that contain their own DNA. The mitochondrial genome is small and contains only a fraction of the genetic information in the cell, but it is present in thousands of copies, increasing the chance of success. With his refined methods, Pääbo managed to sequence a region of mitochondrial DNA from a 40,000-year-old piece of bone. Thus, for the first time, we had access to a sequence from an extinct relative. Comparisons with contemporary humans and chimpanzees demonstrated that Neanderthals were genetically distinct.

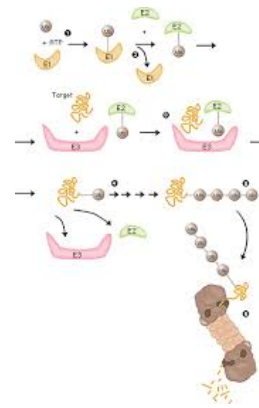
Check for more at <https://www.nobelprize.org/prizes/medicine/2022/press-release/>



(S-3) Nobel Prize: Chemistry 2022 ..

** Sometimes simple answers are the best. Barry Sharpless and Morten Meldal are awarded the Nobel Prize in Chemistry 2022 because they brought chemistry into the era of functionalism and laid

the foundations of click chemistry. They share the prize with Carolyn Bertozzi, who took click chemistry to a new dimension and began using it to map cells. Her bioorthogonal reactions are now contributing to more targeted cancer treatments, among many other applications.



--->> Chemistry has entered the era of functionalism

Barry Sharpless, who is now being awarded **his second Nobel Prize** in Chemistry, was the one who started the snowball rolling. Around the turn of the century, he coined the concept of "**click chemistry**" for a functional form of chemistry, where molecular building blocks snap together quickly and efficiently. The snowball became an avalanche when Morten Meldal and Barry Sharpless – independently of each other – discovered what has become the crown jewel of click chemistry: the copper catalysed azide-alkyne cycloaddition.

.... **Carolyn Bertozzi** developed "**click reactions**" that can be used inside living organisms. Her bioorthogonal reactions – which occur without disturbing the normal chemistry of the cell – are used globally to map how cells function. Some researchers are now investigating how these reactions can be used to diagnose and treat cancer,

Check for more at <https://www.nobelprize.org/prizes/chemistry/2022/popular-information/>

** 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,

"Chemical Celebration of HKASME-60" 1st Due Date: 01-12-2022

Competition to celebrate the 60th Anniversary of HKASME (慶祝 HKASME 60 年 [2024])

The "Chemical Celebration of HKASME-60" is a competition to celebrate the "60th Anniversary of the Hong Kong Association of Science and Maths. Education" (established since 1964). It aims to promote the interest of students in learning Chemistry, with elements and their applications, and developing students' communication and science process skills through article writing with various presentation skills.

Details of the competition are given below: {Submission Form & this regulation can be downloaded from www.hkasme.org}

Participants All secondary school students (F.2 to F.6) are welcome. Each student can choose element(s) and use their features to celebrate the 60th Anniversary of HKASME (2024).

- Rules for the competition**
(Check notes in another file).
- The article could be in either Chinese or English.
 - Each article should be **within TWO A4 pages**. Text and / or graphics could be included. There is no restriction to the format of presentation in the article.
 - Students should choose a number of element(s) and present their special features, linking to the 60th Anniversary of HKASME (2024). Focus of the competition is to call for students' science-related knowledge and skills, communication skills and creativity in relation to **elements as building blocks**. Explain the link in another file: Supplement Document File [download sample file].
 - Atomic nos. of chosen elements should make up to "60". [Check examples in Note File].
 - No school logo or name should appear in the article.
 - Student's name+element-No.** should be used as **submitted filename** (e.g. ChanTM_60).
 - Students' data should be stated on the Submission Form (available from WWW).
 - The maximum number of participants from EACH school is 6 for EACH batch.
 - Submission of all files should be via email – csme60@hkasme.org with specific filenames (see examples in "Note file")

Submission Submission due date **for Batch-1 is 01/12/2022**. All participants should hand in their **articles & SuppFile, together with the "Submission form"**(^^), to csme60@hkasme.org on or before the deadline **through one responsible teacher**. Check details in "Ref_Note File".

- Awards**
- ONE best winner will be awarded for EACH batch (Dec-2022) as **"Best Chemical Celebration of HKASME-60"**. The article will be posted online and be cumulated for final competition with other batches (2nd batch may be Mar-2023). Each winner will have a certificate and \$400 coupons.
 - Two other outstanding articles may be awarded for each batch. Each outstanding article will have an outstanding certificate and \$200 coupons.
 - Up to a maximum of 10 merit articles(^) will be awarded for each batch. Each merit article will have a merit certificate and a periodic-table-related souvenir.
 - **ALL other participants** will receive a certificate of participation for the Celebration and their names will appear in the final overall "Anniversary Celebration" [published in the Final Report] as a token of being a participant for this special event [continual professional development of HKASME].(^)

Enquiries Enquiries regarding the competition may contact HKASME at Tel: 2333 0096 / 23337602.

Copyright The Association reserves the right to publish in full or part of the entries. All entries will not be returned.

(^) No. of merits depends on quality of presentations & sponsorship. (^^)Files can be downloaded at WWW.

>> References: Check the attached "Note file" and **Students may find the IYPT-2019(HK) competition useful – details could be found at www.hkasme.org > Chemistry > IYPT-2019**

Submission Form (Dec-2022)[Submission deadline *for Batch-1**: 1 Dec 2022 (Thu)]>> Email this form & students' article-files to : csme60@hkasme.org

To: Hong Kong Association for Science and Mathematics Education,

I nominate _____ students⁽¹⁾⁽²⁾ to participate in the captioned competition. I certify that all entries are the original work of my students. The following are details of the participating students and their articles:

Participating Student(s): ^{(1)(2)(#)}		
<u>Student A</u>		
Class:	Name:	email:
Chosen Element(s): _____		Title of the article (if any): _____
Filename submitted: (1) _____; (2) _____		
<u>Student B (if any)</u>		
Class:	Name:	email:
Chosen Element: _____		Title of the article (if any): _____
Filename submitted: (1) _____; (2) _____		
<u>Student C (if any)</u>		
Class:	Name:	email:
Chosen Element: _____		Title of the article (if any): _____
Filename submitted: (1) _____; (2) _____		
Responsible Teacher: Mr / Ms* <u>Email:</u>		

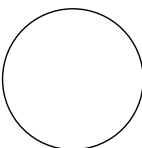
* Please delete as appropriate

(#) Use another page for more participants – MAXIMUM is 6.

Note: (1) Each school can nominate up to six students.

(2) Each student can only submit one entry.

School Name: _____

School Chop: 

School Tel. No: _____

Signature of Teacher: _____

Date: _____

(C2) 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.

(C3) IYOG 2022 – International Year of GlassOfficial site: <https://www.iyog2022.org/>

What glass gives society?
➤ <i>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</i>
➤ <i>With its unparalleled versatility and technical capabilities, glass in its many guises has fostered innumerable cultural and scientific advancements.</i>



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 ... !!!

(C4) 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

(C5) Paper Review of 2022 DSE Chemistry ** RERUN** -- completed online (via ZOOM) on 8/10/2022. Please check updates online. Thanks again for supporting our activities.

(C6) 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	<p>(j) Students will design and work on their own project in school. The project should include experimental work.</p> <p>(k) 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.</p> <p>(l) No school logo or name should appear on any works, otherwise participants will be disqualified.</p> <p>(m) 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</u> (approximate) will be invited to attend the Final Round Competition.</p> <p>(n) 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.</p> <p>(o) If finalist teams participate in other competitions, they should notify the organizing committee as soon as possible so that proper arrangement could be made.</p> <p>(p) Students can only use either Chinese or English in their project report/website and presentation. Mixed mode of both languages is not allowed.</p> <p>(q) Schools will be responsible for the production costs of their projects.</p>
Adjudication	<p>The panel of judges comprises representatives from the organizers. All projects will be judged according to the following criteria:</p> <p>(a) whether the project is relevant to the theme of the Olympiad,</p> <p>(b) whether the chemical principles described are sound and whether the methods used are reliable,</p> <p>(c) whether the project describes a novel but significant experience and can be used or applied in other areas,</p> <p>(d) whether the presentation is clear and convincing, and</p> <p>(e) other criteria as deemed appropriate by the panel of judges.</p> <p>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.</p>
Deadline for Submission	31 March, 2023 (Fri before 5:00 p.m. (to the HKASME office))
Awards	<p>➤ Gold, silver and bronze medals will be presented to members of the first three winning teams.</p> <p>➤ A trophy will be presented to the school of the champion team for its retention for one year.</p> <p>➤ Certificates and souvenirs will also be given to all members of the finalist and commendable teams.</p>
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 : _____

Briefing Session with Science Talk Application Form

HKChO Theme: Waste • Second Life • Chemistry (廢 • 再生 • 化學)

Digi-Science Theme: Food Testing in Daily Life 生活中的食品檢測

Deadline:	Oct 31, 2022 (Mon)
Date:	Nov 5, 2022 (Saturday)
Time:	9:15 a.m. to 12:00 noon
Venue:	Newman Catholic College, G/F, 2 Cliff Road, Yaumatei, Kowloon. 天主教新民書院，九龍油麻地石壁道 2 號 地下禮堂。
Target Audience:	F.3-F.6 Science students, Science subject teachers * Participants should comply with the vaccination requirements under the Vaccine Pass of HKSAR.
Language	<i>Cantonese with Presentation Slides in Chinese or English</i>
Organizer:	HKASME & HKCTC
Enquiry:	Tel: 2333 0096 Fax: 2333 3355 For more details, please visit our website: www.hkasme.org
Online Application:	https://forms.gle/pEITubNbd6N6wJJ57 † Each school could nominate a maximum of two teachers/laboratory technicians and ten students. Nominations will be processed on a first-come-first-served basis.

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 MUST be in S3 to S6 in the academic year 2022-2023. (b) Students SHOULD form a group with 4 students. (Students who fail to form group will NOT 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:	Individual 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: hkbld@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-1) Further Note about the Application of HKBLA:

Due to the impact of pandemic, we have difficulties in finding suitable venues for this year's HKBLA. So, we need to amend the application of HKBLA this year as follows:

For schools applying for two teams, the first team will be accepted on the first-come-first-serve basis.

The allocation of the second team will be determined by lucky draw and will notify the successful school later.

Hence, schools need to pay for the application in 2 separate batch – pay the first team to secure the place first. Payment for the Second team will follow after successful notification.

(B-2) Australia announces plan to halt extinction crisis and save 110 species

Australia has the worst mammal extinction rate of any country in the world, and the catastrophic bushfires of 2019-20 impacted nearly 3 billion animals and have pushed many more of our precious wildlife on the fast-track towards extinction.

Over 500 of our wildlife species are at risk of being erased forever, including the greater glider, black-flanked rock-wallaby, regent honeyeater, swift parrot and Australia's iconic koala.

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

" Protecting Biodiversity, Protecting Life"

Maths News

A Year Plan (2022 - 2023)

Date	Activities
3 Oct 2022	數學講座：趣味幾何學
Dec 2022	2022-2023 年新教師研習課程
Jan 2023	保良局青少年數學精英選拔賽
Apr 2023	數學教學研習小組聚會
May 2023	中國古算今譚 — 從傳統數學至西學輸入至現代課堂數學 III

B. HKASME Mathematics Committee member list 2022--2023

Mr. Ho Wai Lung (Chairman of Secondary Mathematics Committee)	YLPMSAA Tang Siu Tong Secondary School
Mr. Fung Tak Wah	HKASME
Dr. Lee Man Sang, Arthur	The University of Hong Kong
Ms. Tsui Fung Ming, Karin	Hon Wah College
Mr. Chow Lai Sum	STFA Cheng Yu Tung Secondary School
Mr. Wong Tak Ming	Sheung Shui Government Secondary School
Mr. Tam Chi Leung	EDB
Mr. Wong Wai Kwun, Terry	Lui Ming Choi Lutheran College
Mr. Chu Wai Man	Wah Yan College, Kowloon
Ms. Ho Lei Kwan	Hong Kong Red Cross Hospital Schools
Mr. Lam Pui Tak	HKASME
Mr. Kwok Sze Chai, Charles	HKU SPACE
Mr. Tsui Ming Yan	United Christian College
Mr. Kwok Yiu Kei, Christopher	Hon Wah College
Mr. Yang Nang Fuk	Sheung Shui Government Secondary School
Mr. Yuen Kai Lun	Shun Tak Fraternal Association Yung Yau College
Mr. Yeung Tsz Ho	Shun Tak Fraternal Association Yung Yau College
Mr. Cheng Chak Hung	Chong Gene Hang College
Mr. Jerry Lin	Chong Gene Hang College

Honorary Advisor: Prof. Siu Man Keung

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

A. Year Plan (2022 - 2023)

Date	Activities
19 Aug 2022	2022 Assessment for Learning (Physics)
Dec 2022	小學常識百搭 – 甄選入圍作品
Dec 30 2022 – Dec 31, 2022	2022 HKDSE Physics Mock Examination
2022-2023	Fun Science Competition – Briefing 趣味科學比賽 – 簡介會
2023	2022 Fun Science Competition – Final 趣味科學比賽 – 決賽
2023	小學常識百搭 – 決賽

B. HKASME Physics Committee member list 2022--2023

Mr. Ng Hon Hing, Harry, Chairman of Physics	YLPMSAA Tang Siu Tong Secondary School
Mr. Chi Leung, CHENG	HKASME
Mr. Lau Kwok Leung	Chinese Y.M.C.A. College
Mr. Lam Wai Chung	TWGHs C.Y. Ma Memorial College

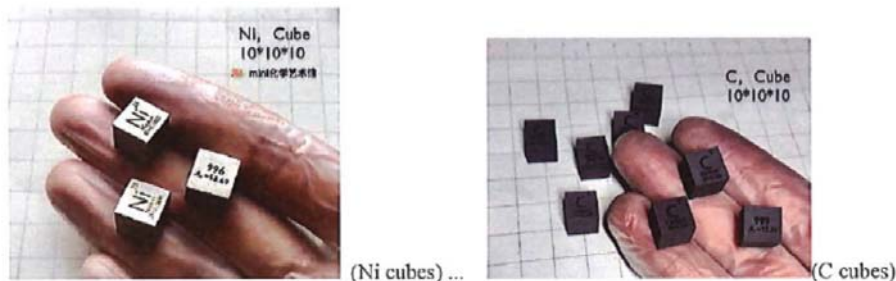
Resources Collection --- Continue Celebrating the IYPT-2019 (International Year of Periodic Table) ... -

(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



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)!

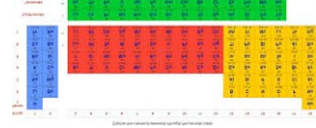



(B) Periodic Table items for IYPT-2019 >> & Still extending into 2021! ...

>> 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. Different size: A4 / postcard / bookmark -- 
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) **Periodic Table Mugs:**

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

EQ0450 - Radiometer 光動儀 \$200/\$220



EQ0451 - Balancing Bird (Small) 平衡鳥 \$10/\$20



EQ0452 - Drink Birds 飲水鳥 \$80/\$90



EQ0453 - Love Meter \$20/\$30



EQ0454 - 淨水機 DIY Water purifier \$90/\$100



EQ0455 - 水晶套裝 DIY Crystal Science \$90/\$100



EQ0456 - 手指陀螺 finger gyro \$20/\$30



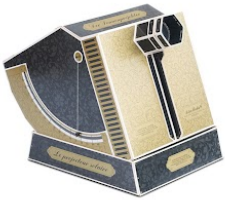
EQ0447 - 伽利略望遠鏡(大型) (德國製，2 塊鏡片，10 倍放大率) Galileo Telescope (Made in German, 2 lenses, 10 Magnification power) \$80/90



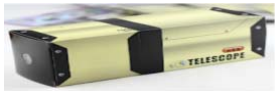
EQ0448 - DIY 手提光譜儀 (德國製) Hand Spectroscope (Made in German) \$100/120



EQ0449 - DIY 太陽投影儀 (德國製) Solar Projector (Made in German) \$280/300



EQ0409 Paper Fold scope Instrument \$60/70



– Ask Office for updates at 2333-0096.

Check for more at the SME Office ... [!\[\]\(6bb0e4f14c4133b37d2887cb37e67ddd_img.jpg\) !\[\]\(5677a36a9444aca55c9ef7a9b7d8dd5c_img.jpg\)](#) ***STEM nourishment needs experiential learning !!!***