

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

(A) **** New **** ^{NEW} -- **“Element Cubes”** ^{NEW} – **IYPT resources ...** ^{NEW} <<== **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)

<u>Element / Symbol (At.No.)</u>	<u>Purity</u>	<u>Density</u>	<u>Price (Member / Non-member)</u>
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 ...

(B) Commonly requested items related to the IYPT are:

(B1)→ There are quite a number of different types of Periodic Tables available – Ask Office.

(B2)→ Several special elements available from the Office Stock:

- (1) Gallium (Ga) – metal that will melt on your hand;
- (2) Bismuth (Bi) – a high mp element with colorful, beautiful but brittle crystals
- (3) Hydrogen (H) – equipment that generates the gas is “Fuel Cell” – check for “fuel cell car” or related equipment ... to discuss hydrogen economy for future energy issues.

(4) Sets of elemental blocks for comparison / metallic investigations... (include Al, Cu, Fe, Mn, ...)
.... → Ask for more updates at the Office (2333-0096)!

(C)“The Foldscope” -- Good for “Hands-on” “Minds-on” STEM + Earth Day
2019 (endangered species) + Year of Public Health-2020

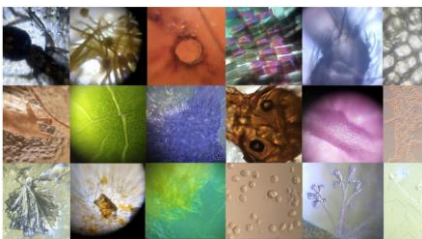


NEW

”Foldscope : Deluxe Version”, with lighting &

glass slides

→ **Aim: A microscope in the pocket of every child !** ←



Use only for biology? → Pushing the limits of investigation to Junior Forms

No! The foldscope could be used for any exploring situation that requires microscopic images. That include in-class and outdoor activities. Different professionals have tried to use this foldscope in their own tasks / exploration: naturalists, gem-collectors, bee-keepers, scrap-metal collectors, parasitologists, space scientists, herders, etc... Of course, if you want to include some hands-on construction experience with your students, you can use the Foldscope Package (A) [the complete paper foldscope plan is included].

More references:

Videos about activities with “Foldscope” : <https://www.foldscope.com/>

Diagnosing Diseases with the Foldscope : <https://youtu.be/ky-cqSI5mwE>

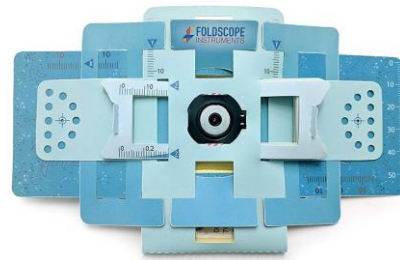
Sample images explored : <https://youtu.be/vQJDV4GE4aY>

The foldscope community -- <http://microcosmos.foldscope.com/>

⇒ Note:

A previous version of DIY version of
“**Foldscope: An Origami-Based
Microscope [\$60 / \$80] – A Paper
Microscope?!**” has been introduced in last
mailpack (check at www.hkasme.org)

Could be ordered for your STEM
activities.



Check for more at the SME Office ... **← →** **STEM nourishment needs experiential learning !!!**
→ Get clusters of items for your STEM plans and have the new year (2018-19)
kicked off. Check for order at www.hkasme.org / phone : 2333-0096 / fax
order: 2333-3355

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