

TEACHERS' BRIEFING

22 FEB 2018, TAMPINES PRIMARY SCHOOL

23 FEB 2018, SCIENCE CENTRE SINGAPORE

ORGANISED BY:



SONY

SUPPORTED BY:







- I. Objectives of SCSA
- 2. Categories in the competition
- 3. Judging Criteria
- 4. Examples of Toys
- 5. SCSA (Schools) Competition
- 6. SCSA 2018 Timeline
- 7. Pointers for Toy Submission

OBJECTIVES OF SCSA



X-cited

Cultivate

Inspire

Transform

Encourage

Discover

multiplier, x-factor, multi-disciplinary, x-traordinary

hands-on and hand-making ability by themselves

creativity from a young age

science concepts or ideas into fascinating toys

the entrepreneurial skills

the joy for learning through creating something they

like most – toys!



SCSA has the ability to translate complex ideas into something that young children find simple and easy to comprehend. SCSA has made science learning fun and enjoyable.

Mr Jegendren Tanapal Yew Tee Primary School Diamond Award Recipient

CATEGORIES



JUNIOR WHIZKID

Primary I & 2 (or equivalent)

Participants will have to create any toy creation that:

- demonstrates scientific concepts creatively
- incorporate **bottle caps**
- To submit a photo of themselves working on the toy!

WHIZKID

Primary 3 to 6 (or equivalent)

Participants can submit any toy creation that

- demonstrates scientific concepts creatively
- To submit a journal of the toy-making process.

WORK INDIVIDUALLY OR TEAM OF MAX. 2 STUDENTS



What are Judges Looking for?

By
Dr Chew Soon Hoe
NUS
SCSA 2018 Chairman

JUDGING CRITERIA



SHORTLISTING ROUND:

JUNIOR WHIZKID

- Scientific Concept
- Creativity and Originality
- Sturdiness and Design
- Fulfils Requirement

WHIZKID

- Scientific Concept
- Creativity and Originality
- Sturdiness
- Design





FINAL JUDGING ROUND:

WHIZKID

- Craftsmanship
- Problem-solving Skill
- Creative use of resources
- X-Factor

JUDGING CRITERIA



- Depth of Understanding
 Scientific principle behind the toy
- Toy-making Process
 Contribution to the toy creation process
- Design and Conceptualisation
 Making and testing
- Active Participation
 Experience gained through building the toy
- <u>SCSA organisers do not endorse any SCSA training courses conducted by external trainers</u>

COMMON TOYS - TO AVOID



- Hydraulic toys
- Cars, Boats and Aeroplanes
- Rolling can toys
- Quiz toys
- Automata
- Catapults
- Workshop toys
- Commercial toys
- Jack-in-the-box









THINK OUT OF THE BOX!

DO TRY TO AVOID



- Purchased or assembled toys for DIY kits (eg. Lego, LittleBits)
- Toys using 3D-printed components







DO TRY TO AVOID



- Similar toys from the same school (in design, mechanism employed, etc.)
- Aim to be unique!







ADMINISTRATIVE DETAILS OF COMPETITION

PRIZES





First Prize Winner stands to go home with up to **\$\$1,000** worth of cash prizes!



Schools producing the **TOP 3** prize winners in the WhizKid category will receive cash prizes of up to **\$\$1,000** and certificates.



Schools with **most number of shortlisted toys** in each category will receive cash prize of **\$\$1,000**.



- Internal school competition organised by teachers_as a prelude to the SCSA competition.
- Shortlisted entries submitted for SCSA 2018 Competition
- Min. 30 students (work individually or team of max. 2 students)





- During the process, students get the opportunity to build on their confidence, determination and perseverance through collaborative work.
- SCSA (Schools) can also be applied as part of the Applied Learning Programme (ALP) and Project Work (PW).
- Over 50 schools in Singapore held the SCSA (Schools) in 2017.







Over the years, we have seen our students demonstrate selfdirected and collaborative learning as they explore and work on applying science concepts into their toys, while at the same time, teachers from different subjects such as English, Mathematics and Art have helped to impart different skills that assist in the toy development.

Mdm Cheong Oi Koan Compassvale Primary School Diamond Award Recipient

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The children benefit by gaining confidence through presenting their ideas in front of a crowd.

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Mr Lee Hong Khim Head of Department (Science) Pei Chun Public School





Schools involved will:



SCSA Certificate of Participation for ALL participants



Receive exclusive SCSA tokens (up to 40)



Blue Ribbon Awards & Diamond Awards to recognise teachers' efforts



Display panel at SCSA exhibition recognising schools



Video montage of school competitions at exhibition





Friends of SCSA Award

- To recognise your school's excellent support for SCSA
- Have organised SCSA (Schools) Competition for consecutively 3 years (from years 2016 2018)
- certificate



Blue Ribbon Award seeks to recognise:

- the influence teachers have on their students in the SCSA (Schools)
 Competition;
- o the role that teachers have in **motivating** their students to achieve;
- o the role teachers play in guiding, mentoring, and advising students; and
- o teachers that achieve results **outside the classroom**.

Recipients will receive a certificate and customised award







Diamond Award recognises in addition to Blue Ribbon Award:

- Won at least two Blue Ribbon Awards prior;
- Emphasises the participation and success of nominated teacher's students in competition;
- Track record of improving students' achievements, and making a difference in students;
- Using innovative out-of-classroom programme and activities;
- Overcame challenges to positively impact students in competition.

SCSA WORKSHOPS



- I. SCSA Design-Thinking Workshops
 - 3 Venues (SCS, Tampines Primary School & Woodlands Primary)
 - Up to 8 participants per school for each session
- 2. SCSA Teachers' Workshops
 - 3 venues (SCS, Tampines Primary School & Woodlands Primary)
- 3. Science Centre Singapore Workshops
 - Physical Sciences Workshops (5 types) Max. 40 students in each session
 - Marble Machine Workshop Up to 25 participants





Mar – May	Workshops @ Science Centre, Tampines Primary School & Woodlands Primary School
31 May	Deadline for Registration for SCSA & SCSA (Schools) Internal competition
4 – 6 July	Submission of Toy Entries @ SCS
August	Closing for nomination for Blue Ribbon & Diamond Awards
End August	Final Judging Round (Shortlisted students will have to come for a half-day competition at Science centre)
November	Awards Ceremony & Exhibition of Winning Toys





Hardcopy registration form received by mail to upstream@science.edu.sg or

Submit online registration @ http://bit.ly/2o3ny9i

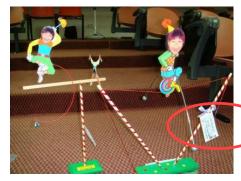
Register by 31 May 2018!

TOY SUBMISSION POINTERS



- Label <u>ALL TOYS AND TOY PARTS</u> with provided sticker labels on the toys, not on the packaging
- Photocopied form or stickers are allowed





Sticker labels should be secured **on the toy** with glue, tape, etc.

- Include entry form and journal (for WhizKid category only) with each toy
- Do test out toys repeatedly before submission!
- Ensure all parts of toy properly secured

PACKAGING OF TOYS





GOOD PACKAGING



- Each toy in a transparent ziplock bag or box (max size A3)
- One toy (with all its parts) per container
- Include a packing list for toys with many components/parts
- Multiple toys, in own packaging, can be placed in bigger box for transport purposes
- Remove batteries from the holders
- Do not use staples, tape or glue to seal the ziplock bag or box





- Different parts of toy in separate bags or box / not attached together
- Only name and class stated on toy
- Toy is larger than A3 size / stored in box larger than A3 size

AWARD CEREMONY + EXHIBITION



- November 2018
- Announcement of winners
- Exhibition of winning entries







ANY QUESTIONS?

More information and all necessary forms can be found at www.science.edu.sg/scsa

Or email us at upstream@science.edu.sg

Tel: **6425 2591**