UNIVERSITY OF SYDNEY SLEEK GEEKS SCIENCE EUREKA PRIZE - PRIMARY

The University of Sydney Sleek Geeks Science Eureka Prize - Primary asks students with a passion for science to produce a 1-3 minute film that communicates a scientific concept, discovery or invention in an entertaining and accessible way.

Entries may be submitted by an individual student or a team of up to six students. Full conditions of entry can be found at eureka-entry.australianmuseum.net.au.

CURRICULUM OUTCOMES

The Sleek Geeks Science Eureka Prize provides the means of combining outcomes from the Science syllabus with those from other subjects.

Australian curriculum

Science outcomes Foundation – Year 2

This prize is open to students from Kindergarten – Year 6. Please consult your syllabus documents to identify specific objectives, outcomes and suitable forms of assessment for your state.

Science outcomes Year 3 – Year 4

Science Understanding

Dependent on topic chosen.

Science as a Human Endeavour

Nature and development of science:

- Science involves making predictions and describing patterns and relationships (ACSHE050 – Year 3, ACSHE061 – Year 4)

Use and influence of science:

- Science knowledge helps people to understand the effect of their actions (ACSHE051– Year 3, ACSHE062 – Year 4)

Science Inquiry Skills

Communicating:

- Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports (ACSIS060 – Year 3, ACSIS071 – Year 4)

Science outcomes Year 5-6

Science Understanding
Dependent on topic chosen.

Science as a Human Endeavour
Nature and development of science:

- Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE081 – Year 5, ACSHE098 – Year 6)
- Important contributions to the advancement of science have been made by people from a range of cultures (ACSHE082 – Year 5, ACSHE099 – Year 6)

Use and influence of science:

- Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives (ACSHE083 – Year 5, ACSHE100 – Year 6)
- Scientific knowledge is used to inform personal and community decisions (ACSHE217 – Year 5, ACSHE220 – Year 6)

Science Inquiry Skills
Communicating:

- Communicate ideas, explanations and processes in a variety of ways, including multimodal texts (ACSIS093 – Year 5, ACSIS110 – Year 6)

SUGGESTED LESSON PLAN

STEP 1

a) Read further information about the Sleek Geeks Science Eureka Prize, including conditions of entry at australianmuseum.net.au/eureka.

b) **Outline** purpose and prizes to be won.

c) **Clarify** entry requirements:

- Field of entrants
- Individual/team classification. It is recommended that ALL children be involved
- Entry length – minimum; maximum
- Format of entry: online entry and hard copy entry
- Statement of nature and extent of any assistance (from teachers, parents, etc.)

d) **Be aware** of all details regarding entry terms and conditions, confidentiality, copyright, and publicity and promotion for highly commended and winning entries.

e) **Brainstorm** all scientific topics, experiments and discoveries that the students have studied at school. Add individuals' ideas and interests to list.
E.g. Darcy has a real fossil; Tom has phasmids at home; Ahsan knows which dinosaurs lived in Australia; Tara built an electric buzzer.

f) **What** are some of the scientific ideas (concepts) connected to the topics listed? *E.g. Plants need sunlight, air and water to grow; salt water is denser than freshwater; all insects have six legs, spiders have eight; the Earth has a magnetic field; Earth rotates around the Sun; energy can be passed from one object to another.*

g) **Which** ideas could be 'acted out'? Record your results for review in Step 2.

h) **View** winning and highly commended entries from 2016 and 2017 on the Australian Museum YouTube channel.

STEP 2

a) **Review** *Icy Cold, But Toast Warm!* at https://youtu.be/B9g1XodoN2E and generate discussion around its success. E.g. what science did it explain? Why is that scientific idea or discovery important to us? How was it entertaining? Why did it appeal to you (and if it didn't, why not?).

b) **Decide** on a short list of scientific ideas (from Step 1) suitable for entry.

c) **Decide** on classification of entry – teams of 6 or less; individual.

d) **Construct a timeline** of production. For example:

February:	choose topic, research topic, story board topic
March:	rehearse scenes, review, revise
April:	full dress rehearsal, filming, review, edit; view and assess
May:	submit

e) In teams or individually **plan** the timeline and allocate research tasks for the film.

STEP 3

a) Demonstrate storyboarding.

b) Write a brief plan of the film:

- Briefly describe the scientific idea/discovery

- How idea is to be communicated
- Prepare storyboard(s) outlining scene by scene account

STEP 4

Rehearse scenes, review, revise, full dress rehearsal, *filming, review, *edit.

* While it is anticipated that filming and editing will involve adult assistance at this step, students' storyboarding ideas (i.e. direction) should be sustained. We should stress that good sound and visual quality is important – judges won't be able to score highly if they can't understand what they see or hear. Many students tend to speak too quickly when filming.

Optional
Screen all videos and have students award marks for:

1. **Originality in the choice of the scientific concept(s)**
   Is the chosen idea a unique one?
2. **Reality**
   No fake or loony science concepts, please!
3. **Quality of the science content**
   Is the science proven, factual, tested?
4. **Originality of the communication method**
   Are methods such as music, acting, or multi-media applications used to assist in telling the story?
5. **Effectiveness of communication method**
   Are the communication methods effective? Could a person with no science knowledge understand the concept after watching the entry?
6. **Audiovisual quality**
   Can it be seen and hear clearly?
7. **Adherence to time limit**
   Does the film between one and three minutes?
8. **Flair**
   Does the film 'grab' you?

STEP 5

Submit the entries!

Complete and submit an online entry form at eureka-entry.australianmuseum.net.au/. Don't forget to print a copy for your records!

To successfully do this, you must provide a link to your uploaded file when you complete your online entry **or** indicate that you will be sending a hard copy entry by post. Options for submitting your video are further explained below.

Submitting your video

Upload your entry to Vimeo and enter the file link in your online entry form. Note: You will need to create an account with either of these tools to upload your entry.

OR

Prepare the hard copy entry by attaching a copy of your printed entry form to a copy of your film and submit the entry to:

Sleek Geeks Science Eureka Prize – Primary
Australian Museum
1 William Street
SYDNEY NSW 2010