

Hong Kong **Student Science Project Competition** **香港學生科學比賽 2020**

Project Requirements and Judging Criteria

Project Requirements

1. A project could be in the form of the following:
 - (i) **An invention:** A new and original invention created by students with scientific knowledge and imagination. Students are required to demonstrate to the judges how their invention works and its applicability.
 - (ii) **An investigation:** This should be a research on scientific phenomena or the application of scientific theories. The project has to be submitted in the form of a report supported by experimental data and results.
2. **Entries can be in either the “Physics and Engineering” stream OR the “Biology and Chemistry” stream.** For the “Physics and Engineering” stream, astronomy, meteorology, material science, earth science, environmental science, electronics, mechanics, communication, information technology, computer science and energy may be included. For the “Biology and Chemistry” stream, chemistry, chemical engineering, ecology, life science, biotechnology, food science, health science and medicine may be included.
3. The science projects submitted must be original work by the teams which should not infringe on the copyright of any third parties. If a participant has sought advice/assistance from any person, including his/her guiding teacher and assigned advisor, all sources of information must be explicitly acknowledged in the registration form and report. The organizer accepts no legal responsibility whatsoever in respect of any copyright issues.
4. The copyrights of the photos and videos of all activities, and science projects are deemed the properties of the organizers and the teams jointly. Once the registration form is submitted, means that the teams agreed that the organizers have the right to edit, delete, duplicate, file, transfer, issue or display the photos and videos of all activities, and science projects for educational or other non-commercial purposes.
5. The results of competition shall be subject to the decision of the Judging Panel. In all aspects, the Judging Panel shall be the final arbiter.

Judging Criteria

Invention	Investigation
A. Originality (15%) <ul style="list-style-type: none">➤ A new and original invention	A. Originality (10%) <ul style="list-style-type: none">➤ Innovativeness
B. Design of Invention (30%) <ul style="list-style-type: none">➤ Definition of applicability➤ Application of theories➤ Practicability➤ Efficacy of invention	B. Definition of Problem and Analysis (30%) <ul style="list-style-type: none">➤ Definition of the problem➤ Explanation of scientific phenomenon / relevance to the community➤ Logic of analysis
C. Realization of Design (30%) <ul style="list-style-type: none">➤ Craftsmanship➤ Experimental method➤ Cost effectiveness	C. Methodology (35%) <ul style="list-style-type: none">➤ Literature review➤ Choice of method for survey or investigation method➤ Availability of research / experiment / data to support the findings / analysis of information➤ Validity of findings➤ Impact of findings
D. Presentation Skills (15%) <ul style="list-style-type: none">➤ Demonstration of operation and function of the invention➤ Presentation of data➤ Writing skills in the report➤ Layout of the report➤ Fluency of language	D. Presentation Skills (15%) <ul style="list-style-type: none">➤ Demonstration of experiment➤ Presentation of data➤ Writing skills in the report➤ Layout of the report➤ Fluency of language
E. Team Work (5%)	
F. Abstract (5%) Ability to summarize clearly the project and its results in no more than 300 English words	

Safety Regulations for Projects

The organizers emphasized that to ensure safety is of the first importance to carry out the projects and experiments. The following items are **NOT** allowed in the competition venue:

1. Infectious pathogens, including microorganisms and virus
2. Displays of live animals
3. Photographs showing vertebrate animals in any non-normal condition
4. Open or concealed flames, matches, or lighters
5. Hazardous chemicals
6. Highly combustible solids, fluids, or gases
7. Sharp items (e.g. syringes, needles, knives)
8. Controlled substances
9. Radioactive materials
10. Operating lasers
11. Batteries with open-top cells
12. High voltage equipment must be shielded with a grounded metal box or cage to prevent accidental contact
13. All wiring must be properly insulated
14. Electrical connections in 220V circuits must be soldered or fixed with approved connectors
15. Devices emitting ultraviolet light must be equipped with the proper filters for eye protection

Hong Kong Student Science Project Competition Secretariat

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