TELESTO
The Science Fest

Science Exhibition - 2024

Proposed dates: January 30, 2025 (KG to III); November 14, 2024 (IV to X GS & BS)
(This By-Law serves as a complete guideline for classes 4 – 10)

Main theme

Science and Technology for Better Tomorrow.

Sub themes

1. **Food, health and hygiene**
2. **Waste management**
3. **Transport and communication**
4. **Natural farming**
5. **Mathematical modelling and computational thinking**
6. **Robotics**
7. **Renewable energy & Sustainable development**
8. **Disaster management**
9. **Resource management**
10. **Artificial intelligence**

Rules and Regulation

- The sub – theme once selected cannot be changed.
- The exhibit/model may include –
  -Working model to explain a concept, principle or a process.
  -An indigenous design of a machine/device.
  -An innovative/inexpensive design or technique.
  -Application of basic principles of Science/Technology.
  -Scheme/design of a device or machine to reduce production cost.
  -Investigation based study.
  -A novel solution/indigenous design to a problem/challenge.

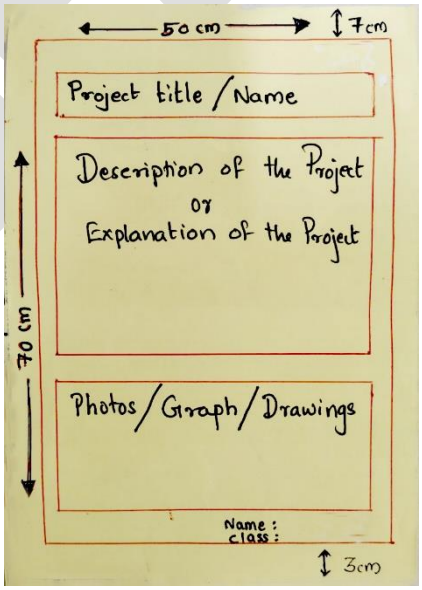
Exhibition Instructions:

1. The students may prepare an exhibit / model on any sub–theme other than the above listed eleven sub–themes but it should be in the context of the main theme of the exhibition as mentioned above.
2. Students are advised to prepare single PROJECT for the exhibition. For more than one exhibit, they are advised to consult the coordinator and an approval for the same is a MANDATE before preparation.

3. If any special arrangements are required for project, it should be informed well in advance before Nov 07, 2024 (Thur) for the classes IV and above.
4. No project, device, activity or substance that may be deemed hazardous to student health or safety to be used.
5. Electrical projects may use batteries as sources of electricity.
6. Those who want extension cords should arrange for the same by themselves and inform that to the coordinator.
7. Harmful materials (high voltage electrical, poisonous and explosive chemicals) are strictly prohibited to use.
8. No human/animal parts or body fluids (for example, blood, urine) to be used.
9. No sharp items (for example: syringes, needles, pipettes, knives, tacks, nails) to be used.
10. No glass or glass objects unless encased or a necessary part of a commercial product (for example, a computer screen) to be used.
11. No Special Claim for working models. All projects, irrespective of being working, still or experiment shall be treated same. However, students are guided to prepare working models, if they could.
12. Classes 4 - 7 shall go for individual projects and Classes 8 - 10 should be going with the Group projects where group implies a pair. No group projects shall be permitted for classes 4 - 7 and no individual projects for classes 8 - 10.
13. The judges' decisions are final and no appeals will be heard or correspondence entered into.

Chart setting:

1. Charts are to support the project prepared and compulsory for classes IV & above.
2. Written material, drawings, and pictures should be securely attached to the chart. A participant can prepare an extra chart if the content doesn't fit in One chart.
3. **Use standard size** chart of dimension 50cm x 70cm
4. Write and place the chart **vertically**.
5. Charts must be completed with all relevant information. Incomplete charts will not be accepted.
6. If chart doesn't fit with rules then project will not be considered for evaluation.
7. **Written works** (texts) on chart should be visible and readable.
8. **Upper margin** on chart should be of width 7cm, lower and side margins can be 3cm



Presentation:

1. The explanation of the project should be in English.
2. Timing of the presentation is limited to 3 minutes maximum.
3. For classes 8 – 10, both the members should be equally involved in the presentation of the project.
4. Judgement criteria could be referred to for further clarity.

Group Event:

1. Classes 4 - 7 shall go for individual projects and Classes 8 - 10 should be going with the Group projects where group implies a pair. No group projects shall be permitted for classes 4 - 7 and no individual projects for classes 8 - 10.

Dress code for science fest:

1. Students should wear complete REGULAR school uniform, with ID card.
2. School Cabinet should be in full uniform with designation badge.
3. Being in complete uniform will also be part of the judgement.

Note for the Parents:

Parents who do the thinking or build the project for students do not really help them. Parents are encouraged to help their children in these ways:

a. Read and discuss the "Rules for Participation".
b. Select projects which are appropriate for the child's age and grade level.
c. Plan and manage project work, documentation and clean-up times
d. Listen to your child's oral explanation of the project
e. Help in gathering the required material for the projects.
f. Please note to avoid the repetitions as far as possible.
g. Contact the science fest coordinator, if required.

Note for students:

- The most important thing that you know about your project.
- How did you get the idea for your project?
- Skills those you acquire to do this project.
- What surprised you most about your experiment/ project/ model?
- If you were to continue the same project next year, what changes would you make?
- Applications your project could have in everyday life.
- What experimental errors did your encounter and how did you correct for them?
- Check if the project is a repetition for the event.
- Proper coordination of planning, preparation, & presentation for the group projects.
- Contact the science fest coordinator, if required.

THEME: SCIENCE AND TECHNOLOGY FOR BETTER TOMORROW.

1. FOOD, HEALTH AND HYGEINE:

Healthy diet is essential for good health and nutrition. It protects you against many chronic noncommunicable diseases, such as heart disease, diabetes and cancer. Eating a variety of foods and consuming less salt, sugars and saturated and industrially-produced trans-fats, are essential for healthy diet.

2. **WASTE MANAGEMENT:**

Waste management is intended to reduce adverse effects of waste on human health, the environment, planetary resources and aesthetics. The aim of waste management is to reduce the dangerous effects of such waste on the environment and human health.

3. **TRANSPORT AND COMMUNICATION:**

Movement of people from one place to another place in search of job, education and emergency through transport facility. Communication keeps us informed about the world's events and trends. It brings in positive changes in the life of the people and thereby enhancing their economic conditions.

4. **NATURAL FARMING:**

Natural Farming aims to drastically cut down production costs by encouraging farmers to prepare essential nutrients and plant protection materials with locally available resources, thereby ending the need for external and commercial inputs like fertilizers and other chemicals.

5. **MATHEMATICAL MODELLING AND COMPUTATIONAL THINKING:**

The goal of computational mathematics, put simply, is to find or develop algorithms that solve mathematical problems computationally (i.e. using computers). Mathematics is the study of geometrical figures, their co-relation, and their dependency on each other. It deals with quantity, measurement, and spatial relationships.

6. **ROBOTICS:**

Robotics is a branch of engineering and computer science that involves the conception, design, manufacture and operation of robots. The objective of the robotics field is to create intelligent machines that can assist humans in a variety of ways. Robotics can take on a number of forms..

7. **RENEWABLE ENERGY & SUSTAINABLE DEVELOPMENT:**

The objectives of renewable resources include reducing dependence on finite fossil fuels, mitigating environmental impact, and promoting sustainable energy practices. The aim of sustainable development is to balance our economic, environmental and social needs, allowing prosperity for now and future generations

8. **DISASTER MANAGEMENT:**

Specifically, disaster management is about organizing and directing resources to cope with a disaster and coordinating the roles and responsibilities of responders, private sector organizations, public sector agencies, non-profit and faith-based organizations, volunteers, donations, etc.

9. **RESOURCE MANAGEMENT:**

Resource management ensures resource managers have on-demand, real-time visibility into people and other resources so they can have greater control over delivery. When you execute resource management properly, you can help your organization reduce costs, improve efficiencies, and boost productivity .THE basic objective of "Resource management" is to supply and support field operations so that established time objectives can be met and costs can be kept within the construction budget.

10. ARTIFICIAL INTELLIGENCE:

Artificial intelligence (AI) is a set of technologies that enable computers to perform a variety of advanced functions, including the ability to see, understand and translate spoken and written language, analyse data, make recommendations, and more.

Submission:

a) The consent form / Project Name sheet needs to be submitted by Oct 27, 2024 (Sun).
b) The submissions should be done between Nov 11, 2024 & Nov 13, 2024 (Both days inclusive). Submissions shall not be taken before these days due to limitation of space for preserving the projects.
c) The Girls Section Projects (IV to X) can be submitted at the GS itself. Likewise, the Boys Section (IV – X) projects should be submitted at the BS campus.
d) Special arrangements, like Electrical Extension Cords etc., to be submitted with the project itself.
e) Incomplete, half done, unpresentable projects shall not be taken for the submission and returned, possibly on the same day itself.
f) Only fully finished and well-presented projects would be judged for the evaluation purpose.

The project will be assessed on the basis of following criteria. *(Sample Judgement sheet)*

Class	Category	Judges clue					Time limit maintained (Yes / No)	In complete Uniform (Yes / No)	Total
		Visual presentation (10)	Chart (10)	Presentation					
				Eye contact and body language (10)	Presentation and language (10)	Subject knowledge & organization (10)			
4-5	III (Individual)								50
6-7	IV (Individual)								50
8-10	V (Group)								50

Science Fest Coordinator's for Academic Year 2024 - 2025

- Girls' Section (4 - 10) - Mrs. Anjum Unnisa
- Boys' Section (4 - 10) - Mr. Amjith Khan Muhammed

You may call the coordinators at school number or send a diary note for any clarifications / discussion with respect to your child's project. Kindly do not send any WhatsApp communications pertaining to the projects and its clarification to school Number.

School Number(s)

- Girls' Section : 14 - 3225830 (08:00am to 12:30pm)
- Boys' Section : 14 - 3224244 (09:00am to 01:30pm)