



HABITAT SCHOOL
AL JURF, AJMAN

SCIMATICS 3.0
Grade 5 to 12

Circular No: HB/AC/23-24/33

Dated: 22/06/2023

Dear Parent,
Greetings!

“SCIMATICS 3.0” is a Science, Mathematics and Social Science Exhibition organized for the students of Grades 5 to 12. It is a unique platform for the students to discover, learn new things and exhibit their innovations.

At Habitat school , Al Jurf we would like to provide students with the opportunity to showcase their creative innovations , aesthetic ideas and ignite the young minds in the field of Science Mathematics and Social Science

The date for the final exhibition is 14-09-2023 ,and the CATEGORIES who could take part in SCIMATICS are as follow:

- Category 1 - Grades 5 and 6
- Category 2 - Grades 7 and 8
- Category 3- Grades 9 and 10
- Category 3- Grades 11 and 12

Note:

- Last date for submission of projects/exhibits: 08-09-2023
- The selected students will be participating in the final round on 14-09-2023

Category	Event/ Theme/ <i>Science</i>	Details / Explanation.
Category 1 (Grade 5 & 6)	"Smart Development for Urban Habitats" <i>(MODEL)</i> Group Event (Maximum members in a group-3)	"Design a model of smart cities and sustainable habitats in future"
	DESIGN YOUR OWN PLANET <i>(video presentation)</i> (Individual)	Develop your concept: Imagine and create your unique planet with its own features,landscapes, inhabitants, and any other fascinating aspects you can think of. Prepare your video: Record a video presentation (2 min) where you introduce and explain your planet's design. Feel free to include drawings, animations, any visual aids or models that can enhance your presentation
	POSTCARDS TO SPACE	Use a thick paper to take the prints.

	<p>(COLLAGE)</p> <p>(Individual)</p>	<p>On one side make a collage on an idea to show how astronauts should work to make SPACE a better place.</p> <p>On the other side, write your return address.</p> <p>Place the postcard in an envelope</p> <p>Live session</p> <p>Time limit: 1 hr</p> <p>Material required: A6 paper which is 105 x 148mm, Envelope</p>
	<p>EVERYDAY</p> <p>‘I AM CALCULATING’</p> <p>(MODEL)</p> <p>Group Event (Maximum members in a group-3)</p>	<p>This is a group event.</p> <p>Each group will have 3 participants.</p> <p>Students will have to prepare a Model displaying how Mathematics can be combined with another subject depicting its uses in real life.</p>
	<p>TIRA - COMICA</p> <p>Comic Strip Designing</p> <p>Individual Event</p>	<p>This will be a solo event conducted exclusively for the students of Class V-VI.</p> <p>Live Session</p> <p>Time Limit - 1 hour</p> <p>A comic strip must be made on the topic ‘Myths and Misconceptions related to Mathematics’.</p> <p>Participant must give a befitting caption to their Comic.</p>
<p>Category 2 (Grade 7 & 8)</p>	<p>INNOVATION AND SUSTAINABILITY</p> <p>(Working model)</p> <p>Group Event (Maximum members in a group-3)</p>	Environmental Science: Solutions for water/air purification, noise pollution etc.
		Biological Science: Treatment of injuries, diseases, vaccinations etc.
		Physical Science: Improving efficiency of machines/tools etc.
		Chemical Science: Identifying Adulterants etc
	<p>DIGITAL DESIGNING</p> <p>Group Event (Maximum members in a group-3)</p>	a) Website to create awareness about the issues of climate change
		b) Infrastructure to support technology.
		c) Artificial Intelligence Models using Simulators to create awareness and provide solutions on climate change
	<p>PAINTING</p> <p>(Individual)</p>	<p>Theme: “Your vision of a healthy tomorrow”</p> <p>Live Session</p> <p>Time limit: 2 hours</p> <p>Materials to be used: A3 paper</p>

	<p>MATHEMATICAL DEXTERITY</p> <p>(PPT)</p> <p>Group Event (Maximum members in a group-2)</p>	<p>This event will be open to students of Classes VII-VIII.</p> <p>Each team must have 2 participants.</p> <p>The team members must choose any concept (or any Theorem) of Mathematics and demonstrate the innovative method of learning it.</p> <p>PPT - 10,12 slides</p> <p>Presentation time - 3 minutes</p> <p>The students must make a PowerPoint presentation with a voice over or video and submit the same .</p>
	<p>SUDOKU CHALLENGE</p> <p>(Individual)</p>	<p>It will be an individual event .</p> <p>30 MINUTES will be given to each contestant .</p> <p>Sudoku is a logic-based, combinatorial number-placement puzzle.</p> <p>In classic Sudoku, the objective is to fill a 9×9 grid with digits so that each column, each row, and each of the nine 3×3 subgrids that compose the grid contains all of the digits from 1 to 9. The puzzle setter provides a partially completed grid, which for a well-posed puzzle has a single solution.</p>
Category 3 9 and 10	<p>Poster: Paper Based</p> <p>Theme: Beat Plastic pollution</p> <p>(Individual)</p>	<p>Pictorial projection of one's ideas which should be designed to be both eye-catching and informative</p> <p>Paper size - 60 X 90 cm</p>
	<p>Still Model:</p> <p>Theme: Exploring scientific Phenomena</p> <p>Group Event (Maximum members in a group-3)</p>	<p>This theme focuses on projects that explore and explain various scientific phenomena through still models. Students can create models that depict natural phenomena, scientific concepts, biological processes, physical phenomena, or any other topic of scientific interest.</p>
	<p>Project (Working Model)</p> <p>Theme: Good Health and Well being</p> <p>-Health Innovations</p> <p>Group Event (Maximum members in a group-3)</p>	<p>Any developments, simple or complex, that lead to improvements in health .</p>
	<p>Innovative method to combat climate change.(Model)</p> <p>Group Event (Maximum members in a group-3)</p>	<p>To reduce the carbon footprint.</p> <p>To address the solutions to climate change.</p>
	<p>Still Model: EthnoMathematics</p> <p>Group Event (Maximum members in a</p>	<p>Relation of Mathematics with different cultures around the world. That is, how Mathematics helps in the progress & prosperity of each culture.</p>

	group-2)	For example: Egyptian civilization uses algebra, trigonometry, pythagorean theorem etc to build mighty pyramids.
	Working model: Rhythm in Mathematics Group Event (Maximum members in a group-3)	To introduce the rhythm of Mathematics lessons: The enjoyment and challenge of playing and creating rhythms to learn mathematical concepts underlying the structure of a wide range of musical patterns.
Category 4 11 and 12	Poster: (Paper based) Theme: Your vision of a healthy tomorrow (Individual)	Pictorial projection of one's ideas which should be designed to be both eye-catching and informative Poster size-60x90 cm
	Still Model: Theme: Space Exploration Group Event (Maximum members in a group-3)	The study of issues related to space travel,space tourism, and space exploration, including space medicine and suggested solutions with a model.
	Working Model: Theme: Exploring Sustainable solutions for a better world Group Event (Maximum members in a group-3)	This theme focuses on a range of solutions to the current problems, including reducing waste, affordable and clean energy, and conserving and sustainable use of the oceans.
	Collage : Significance of Mathematics in ancient History (Individual)	Ancient mathematical artifacts or tools, such as an ancient Greek device used for astronomical calculations, or ancient measuring instruments like the Egyptian cubit or the Roman abacus. Ancient mathematical symbols and notations.
	Still Model: Exotic Mathematical surface Group Event (Maximum members in a group-2)	<u>Fascinating Models::</u> Mathematical surface models that are sculptural visualisations of mathematical formulae or a representation of a mathematical concept.
	Working model: Rhythm in Mathematics Group Event (Maximum members in a group-3)	To introduce the rhythm of math lessons: The enjoyment and challenge of playing and creating rhythms to learn mathematical concepts underlying the structure of a wide range of musical patterns.



**Principal,
Bala Reddy Ambati**