



Project Paridhi - Vernal Equinox 2018 Report **Bal Bharati Public School, Pitampura**

ABOUT THE PROGRAMME: 'Project Paridhi' is a science experimentation project by SPACE to popularize hands on science. This project was initiated by SPACE 6 years ago with the intention to increase awareness amongst Indians that science can be done without any complicated equipment. Under this project the students find out the circumference of the Earth by taking measurements of the shadows made by the sun in a day, as done 2300 years back by astronomer Eratosthenes, who was able to measure it within 2% of the present accepted value.

Project Paridhi can be done on any day of the year, but on days of equinox and solstices the sun is directly overhead on the equator or Tropics of Cancer/Capricorn hence making the calculation easier. This project also celebrates the days of solstice and equinox and helps participants understand seasons and motion of the Earth. Gnomons (a Greek word for an object whose shadow serves as an indicator of time, especially of the hour of the day) of all sizes and shapes have been used in the past - including soft drink bottles and cricket wickets to huge gnomons such as, Qutub Minar, Samrat Yantra at Jantar Mantar and sundial at Barapullah, Delhi.

Overall 39 students have participated in the event. Students were briefed on the activity with presentation and demonstration by SPACE educator Chitra Khatri.

After a short break students assembled in the Skating Rink to setup their experimental apparatus. They started the activity by marking shadows at regular intervals. With the help of the shadow readings, students successfully found the sun angle and calculated the circumference of the Earth. Coordinator and teachers were fully involved and enjoyed seeing the student's involvement in the field science activity.

PHOTOGRAPHS OF THE EVENT:



Students attended the presentation of Project Paridhi



Students checked the stability of Gnomon using Plumb line

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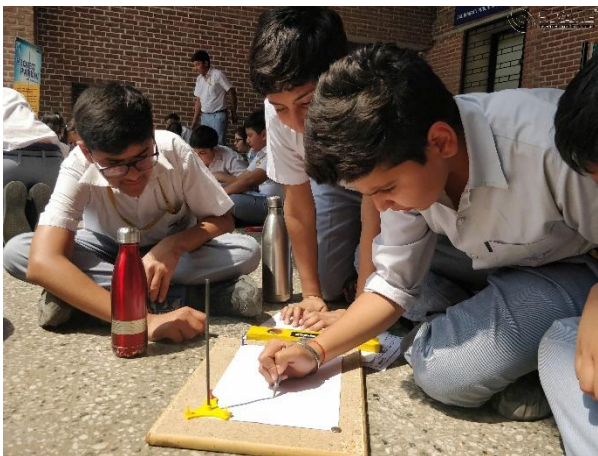
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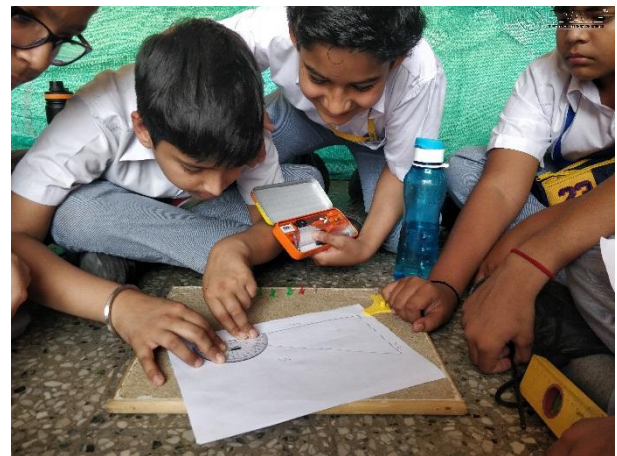
Students did the setup of Project Paridhi



Students ready with the setup of Project Paridhi



Students marked the shadow of the Gnomon



Students measured the Sun angle during the experiment



Group photograph of students participated in Project Paridhi

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