

School Outreach, Agara

Date: 7th October 2017

School: Government Higher Primary School, Agara

Students: 70+ (9th & 10th)

Time: 9:30 AM to 12:45 PM.

Program Outlines:

In this outreach we conducted following events:

- A) Interactive Talk : Introduction to different scales in our universe
- B) Astronomical Kits
- C) Demonstrations: 1) Twinkling of stars 2) Sound Waves
- D) Telescope Session.

Events (C) and (D) were conducted in parallel.

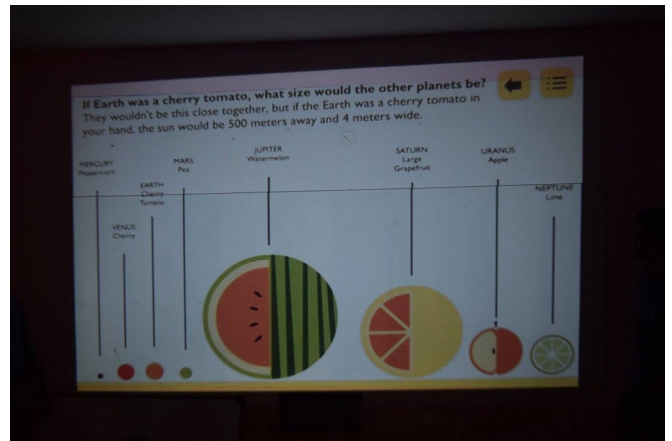
Details:

9:30 AM to 10:30 AM:

a) Interactive Talk : Introduction to different scales in our universe (Ritesh and Phanindra)

We started with interactive talk which was presented by Ritesh and Phanindra. In this talk they made students to have virtual journey from Sun; Planets in our Solar System; Other Stars in our galaxy, Groups of Stars; Other Galaxies; Clusters of Galaxies and then finally to large scale structures of the Universe. They also made a good sense of analogy so that student can connect with terrestrial objects like sizes of planets with different sizes of fruits, vegetables etc.





10:45 AM to 11:30 AM

B) Astronomical Kits(Ramya Phanindra and Varun):In this students were distributed 5 kits which were explained subsequently. This included Sundial, Finding Constellations in the sky, locating the pole star, finding the altitude of star(clinometer), Solar motion etc. Students enjoyed the usage of the kits and curious to see night sky on that day.





11:30 AM to 12:30 PM

C) Experiment Demonstrations:

This session had 2 parallel demonstration which were conducted twice for two groups.

1) Twinkling of Stars(Sandeep and Phanindra): In this session initially students were asked “Do they know, why stars twinkle ?” According to there knowledge and questions we moved on the the demonstration which used a candle, convex mirror, square beaker with water, screen etc. In this session we were amazed to see the curiosity of students as they asked very interesting and genuine questions for unsderstanding the concept of atmospheric diffraction.

2) Sound Wave(Avinash and Ramya): This session was started with a question “Have you seen sound ?” Each of the students was stumbled with this questions as they had perception that sound can only be heard. Then we had made a setup which uses laser, wood stick, balloon and cylindrical object that can be used to explain the frequency of input sound with a laser projection on the wall. Students enjoys the projection of laser light when sound from low to high frequency vibrates the baloon membrane.

11:30 AM to 12:30 PM

D) Telescope Session(Prasanna, Varun and Others): Finally we had the session for which students are always eager. In this students were shown nearby objects through 4" newtonian telescope and 2" Galelion telescope. Students saw nearby objects through the telescopes and appreciated the magnification it can produce.



In the end we donated 2" inch Galelion telescope to the school so that more and more students will be motivated the instrument which gives us power to look our unlimited universe.



Group photo with all the students

Students Experience:

It was really better experience to interact with students who are full of questions. This time we had little problem with the mode of communication which was english. Students seemed friendly with kannada.

Students Volunteers: Sandeep, Ritesh, Phanindra, Avinash, Varun, Prasanna, Ramya.

Education is most powerful weapon
which you can use to change the world.
Nelson Mandela