



The Journey To Space

FOR GRADES 6



SESSION 1

A Universal Intro!

Explore how our Solar System is placed within the Universe. Together we will define some celestial terms like sun, dwarf planet, comets and many more. Explore how the planets interact with the Sun. We'll speak about Galileo as well!



SESSION 2

Sketchy Affairs

Explore the basics of sketching. You don't even need to know how to sketch, we'll make it that easy. We teach you a really easy-to-use and really cool 2D sketching software so your ideas can take shape.



SESSION 3-4

Explore The 3rd Dimension

Take your idea from 2D to 3D and explore how it looks from every angle.



SESSION 5-9

Delta Wing-it With Natural Inspiration

Learn about the functions and forces regarding wing design. See how bird's wings work and why they inspired inventors to create successful flights of all kinds. Explore various aircraft wing shapes and finally, calculate some basic wing parameters.

Kit Included - E-Glider



SESSION 10-12

Pi in tha sky

This visual math problem set, students a chance to try using the mathematical constant pi on some of the real calculations space explorers use every day. A chance to see some of the exciting, real-world applications of the math they're learning in school.





SESSION 13-15

Earth Weather and Space Weather

Understand the differences between weather and climate. From the freezing arctic to the blazing deserts, see how long-term weather measurement relates to climate change.



SESSION 16-19

Rocket Launcher

Ready? Set? Boost! We launch into rocket science and explain some wonderful ways to design rockets and analyze streams of data. After all, it's all in the numbers.

Kit Included - Rocket Launcher Kit



SESSION 20-21

Rocket Design

Dream of building society on mars can be accomplished by making efficient rockets to travel. To do so let's start conceptual design of rocket and understand its terminology.



SESSION 22-23

Water Rocket

Calculation of rocket fin dimension, stability, CG balancing. Build your first rocket.

Kit Included - Foam Sheet & Papers



SESSION 24-26

Parachute Design & Fabrication

Design & build different type of circular, oval, cross parachute. Find drag & terminal velocity.

Kit Included - Plastic Parachute



SESSION 27

Earth and Mars: An Atmospheric perspective

Explore how the Red Planet (Mars) compares to Earth's very own breathable atmosphere. Get curious about the curiosity rover on Mars and future missions to the Red Planet by ISRO, NASA and SpaceX.



SESSION 28-31

Landing on Mars

Take part in a hands-on activity that demonstrates how the atmosphere can be used to slow down a landing body. Design, build and land your own Mars Rover! **Kit Included - Mars Rover Kit**





SESSION 32

Test your Rocket

Test your rocket by landing rover on surface.
Learn to develop parachute deployment mechanism.



SESSION 33-36

Solar System & Our Universe

Together let's unravel the wonderful mysteries of the universe. What is space? How has our solar system evolved since the Big Bang? Do we have neighbours outside of Earth?
Kit Included - Solar System Kit



SESSION 37-38

Mission: Humankind in Space

Let's have an adventure of our own! You would be in-charge of your own Space Mission- learn to analyse and solve problems from designing and testing to funding the mission.



SESSION 39-40

Get Right With The Satellite

It's the thing that makes possible the broadcast of signals from millions of miles away, and it always orbits around Earth! Explore how satellites help in tracking weather changes and in communication between spacecrafts.



SESSION 41-44

Hands On With A Satellite

Apply your basic learnings from the previous session to design and build your very own Satellite.
Kit Included - Mini Satellite



SESSION 45-46

Space Avionics

Communicate your satellite with your pc or laptop.
Kit Included - Electronics for Satellite



SESSION 47-50

Code Name: Python

Get whacking away on those keys and learn how to generate codes, program a satellite and make awesome mathematical models.





SESSION 51-52

It's All Wire-y Here!

Harness the power behind electrical connections to truly transmit signals, besides playing with a printed Circuit Board!



SESSION 53-55

Nozzle & Thruster Design & Build

Four different type of nozzle designing and build one model.
Kit Included - Nozzle & Thruster ||



SESSION 56-58

Build your Space Shuttle

Design & build your own space shuttle to explore the universe.
Kit Included - Foam sheet with drawing



SESSION 59-60

Get That CEO Hat!

Design a new Rocket Company with a creative new rocket, its payload capacities and logo design.

