

# THE QURIO

Mag

## The Earth & Beyond



Volume 1 | 2022  
PIS Howrah





# CONTENTS

## CONTENTS

1. Chronicles Of Space
2. Space Projects
3. The Universe Today – Space & Astronomy News
4. Movies And Books Recommendations
5. Movies And Books Review
6. Buzzing Poets
7. Space Exploration
8. Space Careers
9. Science Fun @ Home
10. Interstellar Art Gallery
11. Spotlight @ PIS
12. Astrosnacks
13. Brain Play

## FROM THE PRINCIPAL'S DESK

Dear Reader

I feel happy to present to you the first issue of our magazine, The Qurio Mag. As you know, the holistic development of children goes beyond classroom teaching or any structured/formal education system. Thus, any such attempt made to offer multi pronged opportunities to its students and further helping them to grow and realize their true potential is always welcome. Our in house magazine provides a platform to students for their creativity, self-expression, learning experiences and even an identity they will be proud of through accepting the challenge of writing.

Such an opportunity assumes importance in today's age of competition, and allows our students to think, explore and constantly introspect self, surroundings and the country.

This magazine allows its readers to delve into and appreciate new voices, at times radical expressions and opinions of the budding poet, writers and essayists.

I sincerely feel that our students will connect better with the world outside of school and home through their creative expressions in the magazine.

Happy reading!

**Shabnam Bhowmick, Principal**

# CHRONICLES OF SPACE



## NASA- New Space Mission - ARTEMIS



NASA is building the Space Launch System, comprising a cargo hold, an Exploration upper stage, a massive core stage and 2 extended solid rocket boosters. Altogether, this is the world's most powerful rocket. And it exceeds the legendary Saturn V of the Apollo era in numerous ways. Sitting on the launch pad, the entire rocket fully fueled, weighs just over 6 million pounds, 5.2 million of which is just the fuel. Once ignited, there is no stopping what comes next. Two minutes after ignition, the solid rocket boosters are spent and released. Eight minutes after launch, the core stage is depleted and separated. The upper stage fires briefly, placing Orion into parking orbit around the Earth.

Everything needed for lunar missions will be positioned in advance by commercial and international partners. This includes rovers, science experiments and human rated systems on the surface. But it also includes a dedicated lunar station in orbit around the Moon, called Gateway. Here at the station, we can pre-stage a robust lunar lander and establish a strong communications relay. Designed with opened standards, the Gateway can be expanded as new missions and partnerships develop, allowing multiple human missions on the moon at the same time, and enabling ongoing science to be conducted even between human missions.

The lunar system itself is built for 3 unique steps: descending from the halo orbit of Gateway down to a low lunar orbit; descending from low lunar orbit to the surface; and once the lunar mission is complete, launching from the surface of the Moon and ascending all the way back to the orbiting Gateway.

Entering Earth's atmosphere at 25,000 miles per hour, the friction of air slows Orion considerably, while also subjecting it to temperatures of 5,000 degrees. With the Orion now at just 300 miles per hour, a series of parachutes uniquely tested and produced for this moment deploy, decelerating the craft to just 20 miles per hour for splashdown. With each successful mission, Artemis ushers in the next wave of men and women to explore our Moon.

And proves that together, we're ready to go beyond.

**Ritsika Ghosh, Std. V**



# CHRONICLES OF SPACE



## NASA'S James Webb telescope shows 'unprecedented' Jupiter's views

Jupiter's Great Red Spot, a storm big enough to swallow Earth, stands out brightly alongside countless smaller storms. With giant storms, powerful winds, auroras, and extreme temperature and pressure conditions, Jupiter has a lot going on. The world's newest and biggest space telescope reveals images showing views of biggest planet 'never seen' before.

The world's newest and biggest space telescope has released photos, showing unprecedented views of Jupiter, the solar system's biggest planet. Scientists released the shots captured by James Webb Space Telescope in July, showing Jupiter's northern and southern lights, and swirling Polar haze.

"We hadn't really expected it to be this good, to be honest," said planetary astronomer Imke de Pater, professor emerita of the University of California, Berkeley. De Pater led the observations of Jupiter with Thierry Fouchet, a professor at the Paris Observatory, as part of an international collaboration for Webb's Early Release Science program. Webb itself is an international mission led by NASA with its partners ESA (European Space Agency) and CSA (Canadian Space Agency). "It's really remarkable that we can see details on Jupiter together with its rings, tiny satellites, and even galaxies in one image," she said.

Scientists hope to behold the dawn of the universe with Webb, peering all the way back to when the first stars and galaxies were forming 13.7 billion years ago.

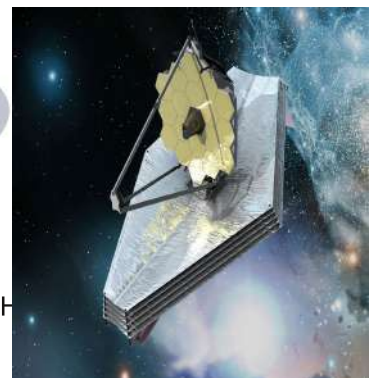
In the standalone view of Jupiter, created from a composite of several images from Webb, auroras extend to high altitudes above both the northern and southern poles of Jupiter. The auroras shine in a filter that is mapped to redder colors, which also highlights light reflected from lower clouds and upper hazes. A different filter, mapped to yellows and greens, shows hazes swirling around the northern and southern poles. A third filter, mapped to blues, showcases light that is reflected from a deeper main cloud.

The Great Red Spot, a famous storm so big it could swallow Earth, appears white in these views, as do other clouds, because they are reflecting a lot of sunlight.

**Farhan Hossain, Std. VII**

## NASA

1. NASA IS A SPACE AGENCY OF THE UNITED STATES.
2. NASA STANDS FOR NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
3. NASA ESTABLISHED ON 29 JULY 1958.
4. IT BEGAN OPERATIONS ON OCTOBER 1, 1958.
5. FROM ITS START, NASA BEGAN TO PLAN FOR HUMAN SPACEFLIGHT.
6. NASA LAUNCHES SPACE MISSION.
7. NASA HEADQUARTERS IS IN WASHINGTON, D.C.
8. THERE ARE 10 NASA CENTERS ACROSS THE UNITED STATES.
9. NASA SATELLITES HELP PEOPLE UNDERSTAND WEATHER PATTERNS ON EARTH.
10. NASA WORKS TO MAKE AIR TRAVEL FASTER AND SAFER.



**Anushka Naskar, Std. V**

# SPACE PROJECTS

## What is Chandrayaan-2?



Chandrayaan-2 is an Indian mission to send an orbiter, lander, and rover to the Moon. The three vehicles launched as one combined spacecraft in July 2019 to lunar orbit, and the lander, carrying the rover, attempted but failed to touch down in the Moon's southern hemisphere. The orbiter continues to study the Moon from above.

Chandrayaan-2 mission is a highly complex mission, which represents a significant technological leap compared to the previous missions of ISRO. It comprised an Orbiter, Lander and Rover to explore the unexplored South Pole of the Moon. The mission is designed to expand the lunar scientific knowledge through detailed study of topography, seismography, mineral identification and distribution, surface chemical composition, thermo-physical characteristics of top soil and composition of the tenuous lunar atmosphere, leading to a new understanding of the origin and evolution of the Moon.

The mission builds on ISRO's Chandrayaan-1 orbiter, which launched in October 2008 and operated for 10 months.

Chandrayaan-2 features improved instruments and new technologies intended for future planetary missions. The orbiter is planned to operate for seven years, while the lander and rover were expected to survive one lunar daytime period had they successfully landed.

The Chandrayaan-2 orbiter hopes to build on the data collected during the Chandrayaan-1 mission using improved instruments.

Science goals include mapping the Moon's topography, investigating surface mineralogy and elemental abundances, studying the lunar exosphere, and looking for signatures of hydroxyl and water ice.

The lander was named Vikram, after Vikram Sarabhai, the founder of India's space program. It would have landed near the Moon's south pole, at a latitude of about 70 degrees south.

## What instruments does the Chandrayaan-2 orbiter have?

**Terrain Mapping Camera 2 (TMC 2):** Used to create a 3D map of the lunar surface, TMC 2 is a miniature version of the Terrain Mapping Camera used onboard the Chandrayaan 1 mission. Its primary objective is mapping the lunar surface in the panchromatic spectral band (0.5-0.8 microns) with a high spatial resolution of 5 meters, on 20-kilometer swaths from orbit.

**Chandrayaan 2 Large Area Soft X-ray Spectrometer (CLASS):** CLASS measures the Moon's X-ray Fluorescence (XRF) spectra to examine the presence of rock-forming elements such as Magnesium, Aluminium, Silicon, Calcium, Titanium, Iron, and Sodium. The XRF technique will detect these elements by measuring the characteristic X-rays they emit when excited by the Sun's rays.

**Solar X-ray Monitor (XSM):** Supports CLASS by observing the X-rays emitted by the Sun and its corona, and measuring the intensity of solar radiation in those rays. Measures the full solar X-ray spectrum every second in the 1-15 keV energy range.

**Orbiter High Resolution Camera (OHRC):** Captures images of the landing site from two look angles to generating DEMs (Digital Elevation Models) that will be used to search for potential hazards. Post-landing, they will be used for further scientific survey. OHRC images cover an area of 12 x 3 kilometers, and have a resolution of 0.25 meters.

**Synthetic Aperture Radar (SAR):** An L- and S-band radar system used to detect water ice inside permanently shadowed craters, and globally map the thickness and electrical conductivity of the lunar regolith. This will be the first L-band radar mapper to orbit the Moon.

**Imaging Infrared Spectrometer (IIRS):** Characterizes and maps the abundance of hydroxyl (OH) and molecular water in the Moon's polar regions. Sensitive to light with wavelengths between 0.8 and 5 microns.

"India is proud of our scientists!" Modi wrote in a Twitter update shortly after learning of the anomaly. "They've given their best and have always made India proud. These are moments to be courageous, and courageous we will be!"

"We remain hopeful and will continue working hard on our space programme," he added.

Compiled by Ms. Nargish Sultana



# THE UNIVERSE TODAY

Space & Astron



## Astronomers spot two intriguing alien worlds.

The newly discovered planets orbit an ultra-cool dwarf star and one is in the habitable zone, making it a prime target for further investigation. An international team of astronomers has discovered two new super-Earths orbiting a distant ultra-cool dwarf star located 100 light-years away from Earth.

The newly spotted exoplanet orbit the second coolest star ever found with planets around it. The inner planet of the system, designated LP 890-9b, is around 30% larger than Earth and rapidly orbits the dwarf star in just 2.7 Earth days. The second planet, called LP 890-9c, is slightly larger, at around 40% the size of Earth, and completes its orbit in around 8.5 Earth days. Astronomers believe this second planet is in the habitable zone of its star, where it is neither too hot nor too cold to support the existence of liquid water at its surface. The inner planet was originally identified as an exoplanet candidate by the Transiting Exoplanet Survey Satellite (TESS), which spots exoplanets as they cross the face of their stars as seen from Earth, causing a tiny drop in light output. It was then confirmed by telescopes of the Search for Habitable Planets Eclipsing Ultra-cool Stars (SPECULOOS) project operated by the University of Birmingham in the U.K.

The SPECULOOS team then searched the system for additional exoplanets, which revealed the second world that TESS missed. Gillon compared the discovery of these planets around the cool star LP 890-9 to finding the exoplanets of the TRAPPIST-1 system, centered on what is currently the coolest star ever found to have planets orbiting it.

Of the seven known exoplanets around TRAPPIST-1, three are in the habitable zone, which has made the system a prime target for deeper investigation. And the fact that one of these newly discovered worlds occupies the habitable zone of LP 890-9 makes further investigation of the system almost equally enticing.

"This gives us a license to observe more and find out whether the planet has an atmosphere, and if so, to study its content and assess its habitability," Amaury Triaud, an astrophysicist at the University of Birmingham and SPECULOOS working group leader, said.

Next, the scientists hope to study the atmosphere of SPECULOOS-2c, possibly with JWST, which recently detected carbon dioxide in the atmosphere of an exoplanet.

"It is important to detect as many temperate terrestrial worlds as possible to study the diversity of exoplanet climates and eventually to be in a position to measure how frequently biology has emerged in the cosmos," Triaud concluded.

Rifah Tashmia Hasan, Std. VII



# MOVIES AND BOOKS RECOMMENDATIONS

## Movies

### 1. Apollo 13 (1995)

NASA must devise a strategy to return Apollo 13 to Earth safely after the spacecraft undergoes massive internal damage putting the lives of the three astronauts on board in jeopardy.

### 2. The Martian (2015)

An astronaut becomes stranded on Mars after his team assumes him dead, and must rely on his ingenuity to find a way to signal to Earth that he is alive and can survive until a potential rescue.

### 3. Interstellar (2014)

A team of explorers travel through a wormhole in space in an attempt to ensure humanity's survival.

### 4. First Man (2019)

A look at the life of the astronaut, Neil Armstrong, and the legendary space mission that led him to become the first man to walk on the Moon on July 20, 1969.

### 5. Gravity (2013)

Two astronauts work together to survive after an accident leaves them stranded in space.

### 6. Fly Me To The Moon (2009)

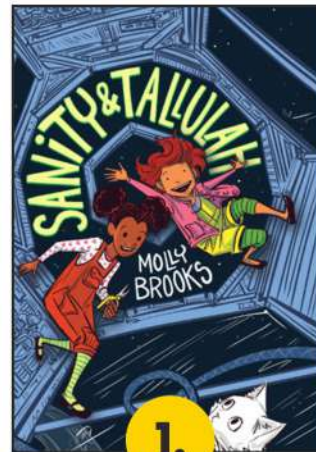
Three young house flies stowaway aboard the Apollo 11 flight to the moon.

### 7. Mission Mangal (2019)

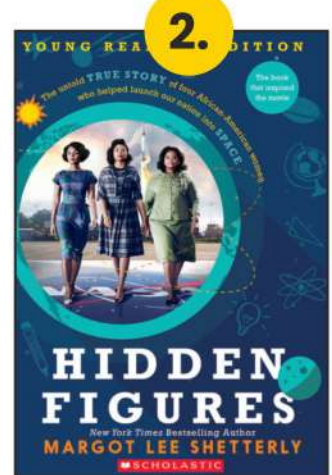
Based on true events of the Indian Space Research Organisation (ISRO) successfully launching the Mars Orbiter Mission (Mangalyaan), making it the least expensive mission to Mars.



## Books



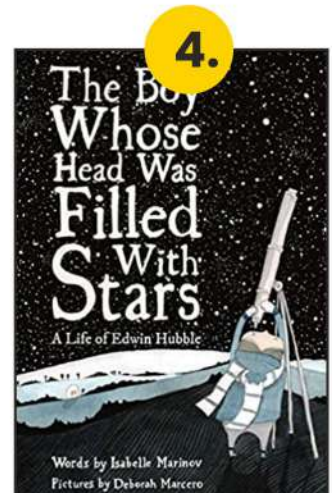
Sanity & Tallulah  
Molly Brooks



Hidden Figures  
Young Readers'  
Margot Lee Shetterly



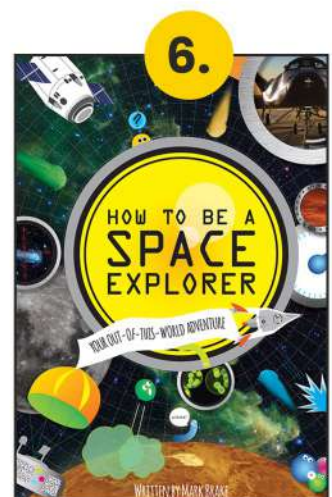
Galaxy Girls: 50 Amazing  
Stories of Women  
In Space  
Libby Jackson



The Boy Whose Head  
Was Filled with Stars:  
A Life of Edwin Hubble



The Kid Who Came  
From Space  
- Ross Welford



How To Be A Spcae Explorer:  
Your Out Of This World  
Adventure By -  
Lonely Planet Kids





# Review

## Movies & Books

Title of the Book/Movie: **Interstellar**

Movie/Book Summary:



This 2014 movie is a brain child of academy award winning director Christopher Nolan. The movie starts in the scenario of 2067, when an ex-Nasa pilot cooper works at his own farm to make the earth habitable as the climate of the earth is worsen by frequent dust storm and cyclones. His daughter Murph informs him about a ghost in her room who communicates through the book self. After a dust storm cooper finds some significant lines in Murph's room made of dust. By spending overnight in that room, cooper finally becomes able to decipher the binary codes made of dust that leads them to a secret place where other scientists are planning to find a planet similar to the earth as this planet becomes inhabitable day by day. They offers cooper to join their mission through worm holes (which connects one galaxy to another). Cooper readily accepts the proposal.

He pilots a shuttle named Endurance carrying other scientists to the mission. Their shuttle passes through the worm hole to a different galaxy. They visit different planets of different conditions. The journey of cooper and other scientists is full of breathtaking adventure. The movie ends with Cooper setting for the journey to find Amelia, one of the scientists who stuck in a planet which is similar to earth.

Nolan did a complete justice to the movie with smooth Visual effects and sound. The plot depends on Einstein's theory of relativity and ideas of black hole and worm holes are taken from it. All the actors played their role very well, especially Matthew conaughy and Anne Hathaway. Overall the entire movie is brainstorming and it is worth of five stars.



Movie Reviewed By: **Ms. Esha Naskar**



Title of the Book/Movie:

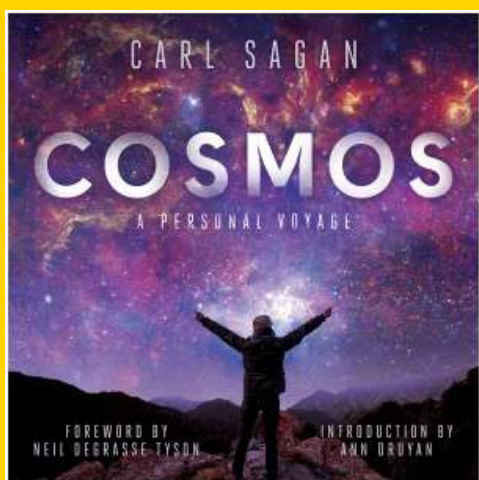
**Cosmos – A Personal Voyage**

Movie/Book Summary:

**Title:** Cosmos – A Personal Voyage

**Author:** Carl Sagan

**Category:** Non-fiction, Science



Cosmos is a popular science book written by astronomer and Pulitzer Prize-winning author Carl Sagan. It was published in 1980 as a companion piece to the PBS mini-series Cosmos: A Personal Voyage with which it was co-developed and intended to compliment.

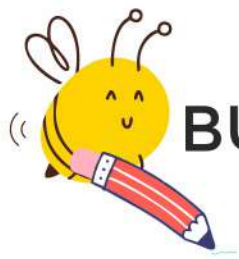
Cosmos is a book about the Universe. It aims to help us understand the vast and complex world we live in. In this book, Sagan tells us about the way the Universe appeared and evolved, how the human species evolved and what we may achieve in the future.

I think that Sagan wrote a wonderful book that covers many topics in an interesting way. In this book we learn about the stars in the sky, the cells in our bodies and the data in our brains. He manages to share so much without making us feel overwhelmed. I think that everyone should read this book and ponder on our common history and our responsibility to protect life on Earth and, maybe, to take it to other places in the Universe.



**Book Reviewed By:**

**Ms. Nargish Sultana**



# BUZZING POETS

## THE MOON

Shining bright,  
In the night.  
Up in the sky, the moon,  
A tiny little planet,

Like the earth was given a boon.  
Now humans have plans,  
On staying there, very soon.

Shining bright  
In the night  
A tiny little planet,  
Us humans call- "The Moon".

## Ventus House

Srijeeta Das, Meghmalhar Bhowmick, Jay Italiya,  
Shamya

## Space

We are nothing but  
Space dust,  
Trying to find its way  
Back to the star.

An Astronaut took a trip to space  
He flew like he was in a race.  
He went to moon,  
Ate his lunch at noon,  
Then disappeared without a trace.

Sohid Sardar, Std. V

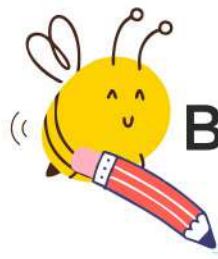
## The Glowing Night

The night is glowing in the light of the moon,  
Just like the Sun reflects on a spoon.  
Everywhere everyplace the brightness of  
moon,  
Helps us go through the darkness of the wood.  
Don't forget to see the moon before the Sun  
comes soon.

## Ignis House

Ritsika Ghosh, Sara Imam, Aftav Nabi,  
Anushka Dhanaki





# BUZZING POETS

## Star World

I believe I can fly,  
High in the sky.  
I believe I can touch  
The stars in the space,  
High above the sky.

I wish I can bring  
The stars in  
My home and I could,  
Hang it in the Wall of my room.  
So that my cat Cookie,  
Can play with it.

I wish I could  
Color the sky,  
And the cloud.  
I wish I can  
Paint this star.

## Aqua House

**Sohid Sardar, Subhana Sahid,  
Anchal Dhar, Pratiksha Paul**

## My Dream

I want to touch the stars ,  
And fly high above the sky.

Along with my brown cat ,who is very fat,  
And loves to sit on the mat.

Stars twinkling in the sky,  
It looks like diamond twinkling in the sky.

I love to fly with my magical wand,  
In my hand ,in the exosphere ,

And go have a chat,  
With my Granny there...

## Terra House

**Shubhank Dubey, Rishu Garg,  
Aliya Zaffar, Rifah Tashmia Hasan**

# SPACE Exploration



## Space Exploration

The exploration of space is among the most fascinating ventures of modern times. When you look up at the sky you can see many things like stars, moon and also, the sun during the day. The area outside the earth is the space. In space, there are various celestial objects like planets, meteors, stars etc. The space age began on October 4, 1957, when the Soviet Union successfully launched the first artificial satellite, Sputnik 1, into orbit around Earth. Less than four years later, on April 12, 1961, Soviet cosmonaut Yuri Gagarin became the first human being to travel in space, as he orbited Earth aboard the Vostok 1 spacecraft. Within less than 10 years of Gagarin's voyage, U.S. astronaut Neil Armstrong became the first person to set foot on the Moon, on July 20, 1969. These journeys were a climax to centuries of speculation and study and to decades of work on the practical problems of space exploration. They were also a prelude to several thousands of missions, both manned and unmanned, to investigate the reaches of space beyond Earth's atmosphere. Clearly, for humans and their machines space is a hostile environment. Great ingenuity and lavish expenditure of time, talent, and money are required to permit them to survive there.

Space exploration is beyond our wildest dreams. Overcrowding stars, planets and mysteries in the open universe is unapparent and discovering everything that forms our world would be nearly impossible. To some people space exploration allows us to solve the wonders and understand a broader view of our universe we live in today. NASA's mission to travel to Mars and investigate it is slated to take place in the future, most likely around the year 2020. If this mission is successful, our scientists will be able to learn more about Mars and perhaps discover the presence of life on another planet similar to our own. Our scientists have been working on this project from the beginning, and it is a fantastic mission that will take place in the future. India's space achievements have also been spectacular. It has taken long strides in space research. The first Indian satellite was launched in April 1975. It was named Aryabhata. Since then India has launched many INSAT satellites successfully. The prestigious Polar Satellite Launch Vehicle (PSLV) was launched recently on 29 September 1997. The vehicle placed the IRS-ID satellite in the orbit successfully. The most spectacular achievement of India was achieved in the year 2008 when the moon mission Chandrayan-1 was successfully launched.

India has plans to send a manned mission to the moon in near future. In addition to a number of weather and communication satellites, India has in the space many other types of satellites, including one meant for surveillance. Now, the space exploration has begun on the surface of the planet Mars with the landing of America's unmanned probe vehicle. The future holds many space wonders and achievements. Now, we can expect space travel from one planet to another in future.

**- Anushka Dhanaki (Class VII)**

Source: [kids.britannica.com/](http://kids.britannica.com/)





# SPACE



## Exploration

### Space Exploration



Humans have always looked at the heavens and wondered about the nature of the objects seen in the night sky. With the development of rockets and the advances in electronics and other technologies in the 20th century, it became possible to send machines and animals and then people above Earth's atmosphere into outer space. Well before technology made these achievements possible, however, space exploration had already captured the minds of many people, not only aircraft pilots and scientists but also writers and artists. The intangible desire to explore and challenge the boundaries of what we know and where we have been has provided benefits to our society for centuries.

Human space exploration helps to address fundamental questions about our place in the Universe and the history of our solar system.

### Why is space travel important?

Space exploration is the future. It satisfies the human urge to explore and to travel, and in the years and decades to come it could even provide our species with new places to call home – especially relevant now, as Earth becomes increasingly crowded

### What is Space Exploration?

Since the dawn of human civilization, humans have looked to the sky with wonder and dreamt of exploring the cosmos just as they explored the land and oceans of Earth. Questions about the nature of the universe and the stars that shine down upon society have vexed countless generations, with different societies giving different explanations for what exists beyond our home planet. The dream of space exploration, or using spacecraft and knowledge of astronomy to explore beyond Earth's atmosphere, became a reality in the 20th century.

On 12th April 1961, Soviet cosmonaut Yuri Gagarin became the first human to fly in space. His single orbit of the Earth ushered in a new age of human space travel. Following the flight, Gagarin became a cultural hero in the Soviet Union. Even today, more than six decades after the historic flight, Gagarin is widely celebrated in Russian space museums, with numerous artifacts, busts and statues displayed in his honor.

Neil Armstrong, who stepped off the Apollo lunar lander on 20 July 1969 with the famous words "That's one small step for a man, one giant leap for mankind", took this shot of fellow astronaut Buzz Aldrin walking on the lunar surface shortly afterwards.

Compiled by Ms. Nargish Sultana



# SCIENCE FUN

— @Home —

## Let's make a Hovercraft



### Materials:

- An old CD
- HOT GLUE gun/fevikwik
- Thumbtack/ pin
- Bottle cap
- Balloon

## Steps to make a Hovercraft :

- Make holes in the plastic bottle top.
- Use a hot glue gun/fevikwik and fix the bottle top over the hole of the CD. *(Please Note: Students can take help of adults while handling the fevikwik and pins.)*
- Blow up the balloon.
- Twist the neck of the balloon to keep it inflated and pull the lip of the balloon over the edges of the bottle cap.
- Let it Go – Set on a flat surface like a counter top or floor. Release the balloon and watch it glide along without any effort just over the surface.





# ASTRO SNACKS



## FRUIT ROCKETS

All you need to make these easy-to-assemble Fruit Rockets are:

- watermelon
- banana
- kiwi
- strawberries
- cantaloupe
- skewers

### FUN FACT

Some foods like bread, fruits and nuts stay the same in space. Other foods have to be vacuum packed to keep their shape and save space.

All you need to make these easy-to-assemble Martian snackers are:

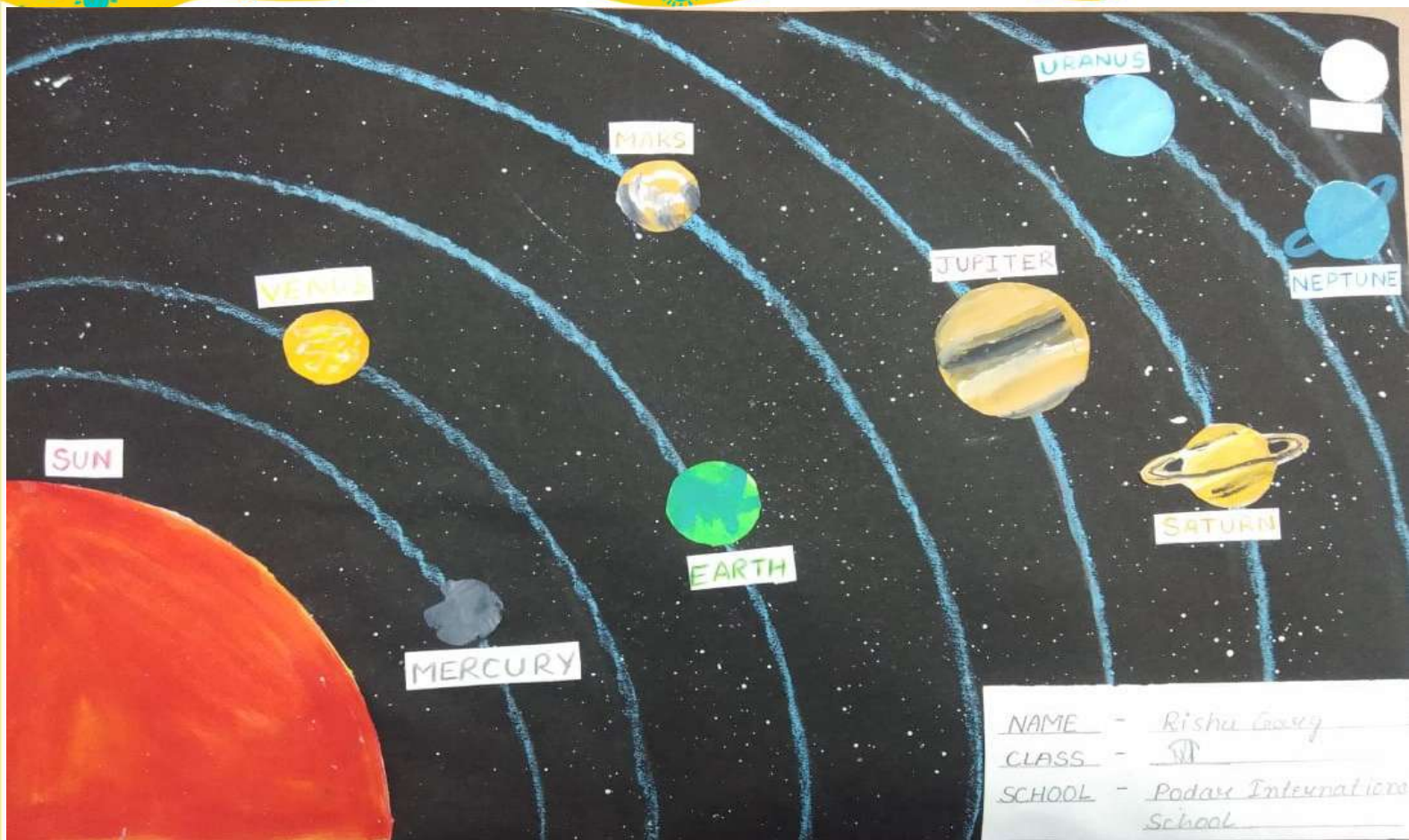
- Monaco biscuits
- Cherry tomatoes
- Cucumber
- Cheese
- Mayonnaise or Tomato sauce

## MARTIAN SNACKERS





# INTERSTELLER ART GALLERY





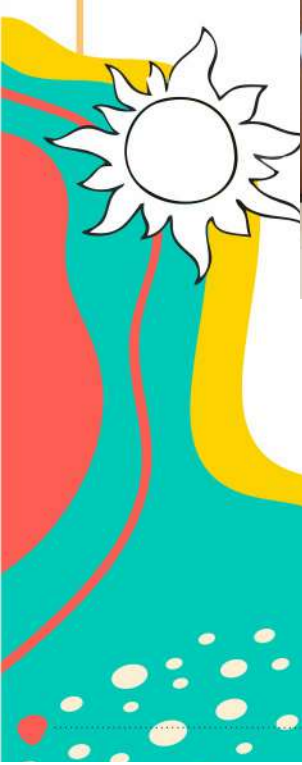




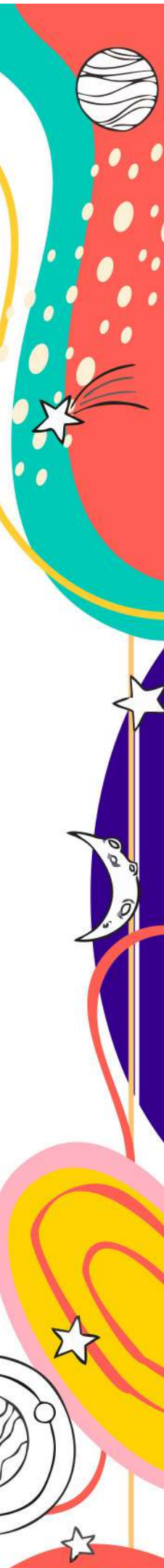


# SPOTLIGHT @ PIS

Organic vegetables grown by students at PIS Muzaffarpur



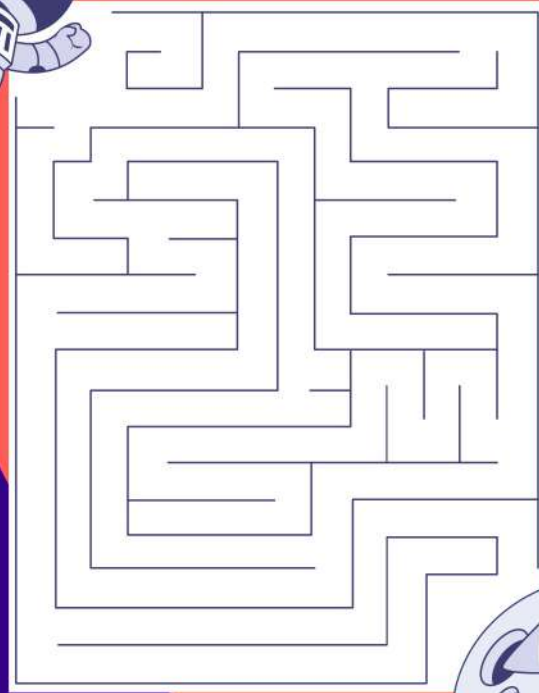




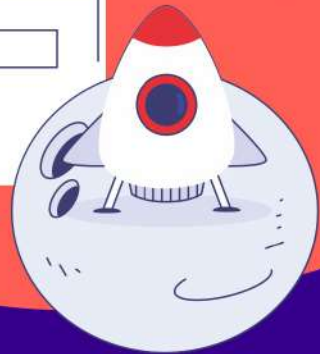


HELP THE ASTRONAUT

# BRAIN PLAY



GET BACK TO HIS SHIP



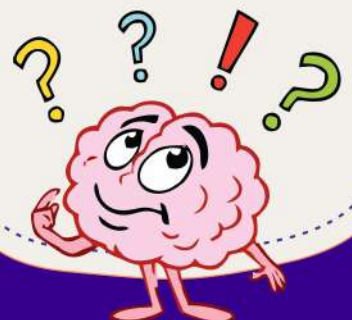
## SPACE PUZZLE

Complete the word search

Y	W	A	Z	X	H	D	G	U	F	O
X	E	G	S	T	A	R	J	Z	W	Y
A	A	Y	T	A	G	M	A	B	R	Y
S	R	H	Y	P	Y	G	Y	S	U	N
T	T	B	U	L	P	K	M	L	G	Z
R	H	D	Y	A	L	I	E	N	X	R
O	M	O	O	N	H	B	V	U	T	O
N	X	U	V	E	W	N	Z	P	J	C
A	R	H	J	T	X	R	G	X	J	K
U	N	T	E	L	E	S	C	O	P	E
T	O	G	T	W	X	Y	E	H	D	T

What Am I?

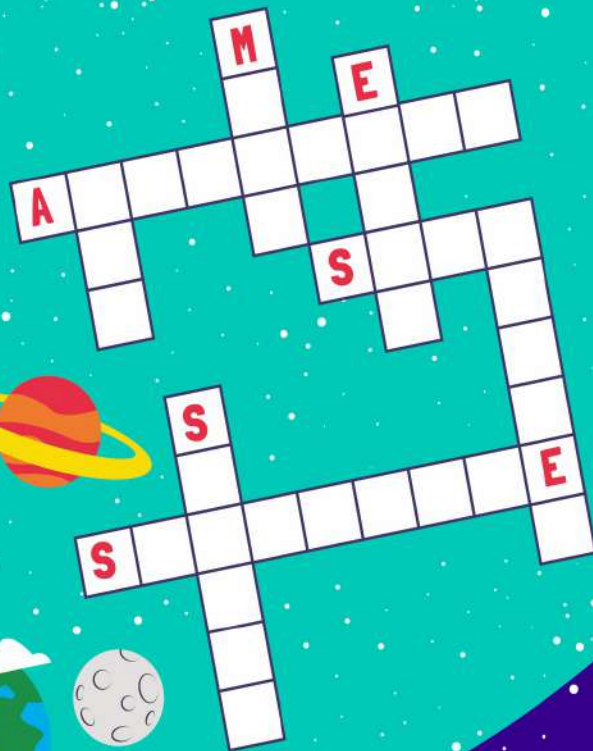
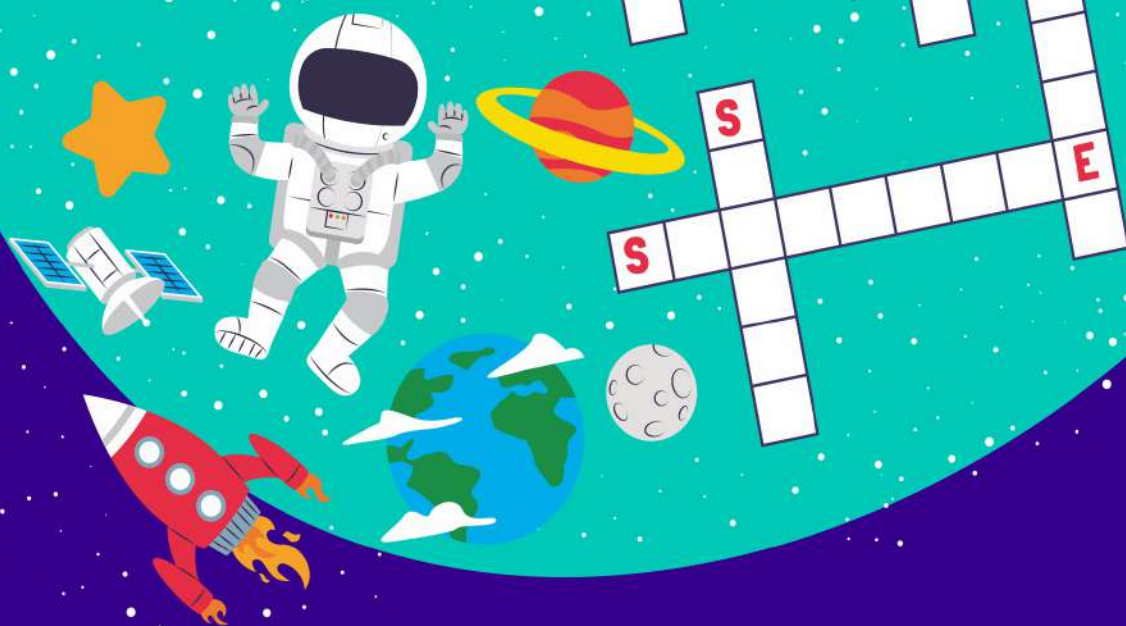
I can be looked through but  
I'm not a window,  
I have your eye pressed to me  
but I'm not a door peephole,  
I'm often placed on a tripod  
but I'm not a camera,  
I help you see things that are  
far away but I'm not a pair of  
binoculars,  
I'm often pointed at the sky  
but I'm not a satellite dish!



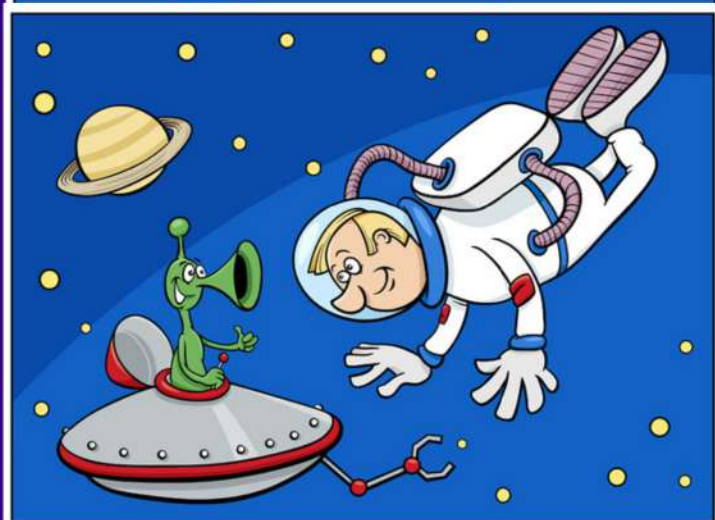
STAR UFO SUN ROCKET ALIEN PLANET ASTRONAUT TELESCOPE MOON EARTH



# CROSSWORD



## Find 6 differences



Using just the letters in the word below, can you make at least 12 new words?

**RULES:** You may only use a letter as many times as it is shown in the key word. Each word must be at least 4 letters long.

**GOOD LUCK!**

## ASTEROID

## Riddle

I am bigger than Venus  
but smaller than Uranus.  
I am a living rock.  
What am I??



