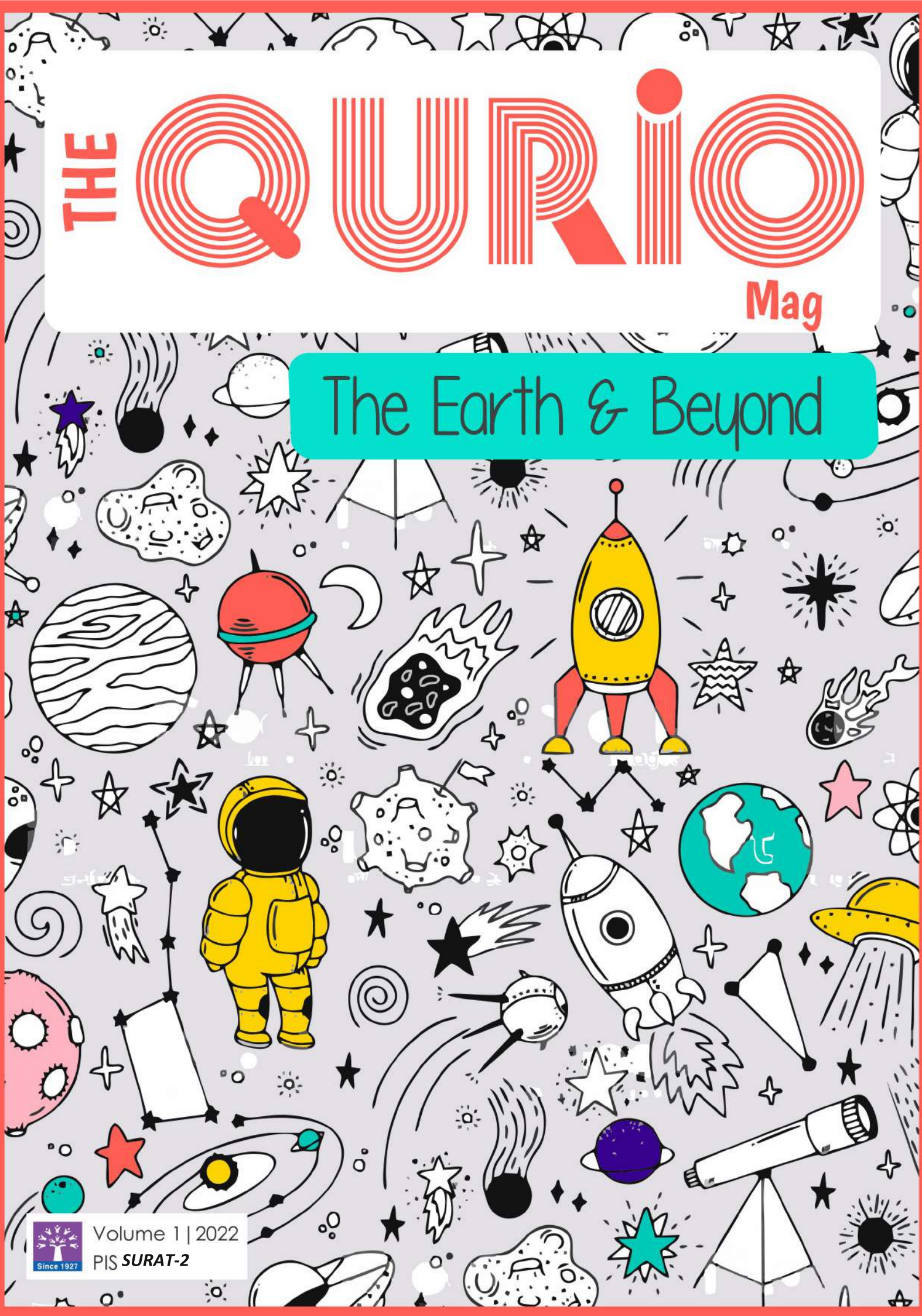
THE QURIO Mag

The Earth & Beyond



Volume 1 | 2022
PIS *SURAT-2*

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FROM THE PRINCIPAL'S DESK

Despite the overwhelming consequences of the pandemic, this global crisis has also been an extraordinary time for learning. We are learning how to become adaptable and resilient. The role of teachers is rapidly evolving in many ways as it has become more accountable than in the past. Technology has been considered the main pillar of school education and has gained unprecedented momentum during the pandemic, Covid- 19. It is being perceived as a panacea to combat all the schooling related issues. I would like to extend my commendation to Staff of Podar International School for adopting new work styles and made virtual classrooms more interactive and innovative.

Our recently launched digital school magazine, 'The Qurio Mag' Vol-I having its theme as "The Earth & Beyond" is a platform for students to showcase their numerous creative abilities, be it poetry, literature, painting and art skill or any ability hidden in them. It unleashes for the students a wide spectrum of creative skills that also involves designing the magazine.

I convey my best wishes to the Editorial Staff, Member of Teaching staff and students for heartfelt efforts to publish the 1st Edition of the School digital Magazine 'The Qurio mag'. I believe that a magazine of any organisation is its mirror. It will provide glimpse of various academic and non-academic activities accomplished by all stakeholders.

With Best Wishes
Brijesh K Pathak
Principal

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Editor-in-Chief: *Ms. Jigna (Co-Ordinator)* | Student Editor: *Atharva Masal* | Student Editor: *Tanishka Patil*

Visual & Media In-charge: *Ms. Darshna (Event Co-Ordinator)* | Creative Designer: *Ms.Vanitha(Co-Ordinator)*

CHRONICLES OF SPACE

Neil deGrasse Tyson is the leading astrophysicist also director of the Hayden planetarium at the American museum of natural history. In this book Neil deGrasse Tyson appears to be man on space mission, trying to reinvigorate our manned space program for many of the same reason. In one of his interview, he said that space exploration is about kicking us back into gear into a nation that innovates the advances that frontires of science and technology it is all about turning our country back into visionary country.

The book covers various writing related to the history and future of NASA. One of the chapters is a transcript of his attendance as a guest on the Rationally Speaking podcast in 2010, when he explained his justification for spending large amounts of government money on space programs. I like to read books of Neil deGrasse Tyson, as it gives knowledge about space, physics etc.

Neil deGrasse Tyson is a rare breed of astrophysicist, one who can speak as easily and brilliantly with popular audiences as with professional scientists. Now that NASA has put human space flight effectively on hold—with a five- or possibly ten-year delay until the next launch of astronauts from U.S. soil—Tyson's views on the future of space travel and America's role in that future are especially timely and urgent. This book represents the best of Tyson's commentary, including a candid new introductory essay on NASA and partisan politics, giving us an eye-opening manifesto on the importance of space exploration for America's economy, security, and morale. Thanks to Tyson's fresh voice and trademark humor, his insights are as delightful as they are provocative, on topics that range from the missteps that shaped our recent history of space travel to how aliens, if they existed, might go about finding us.

-Madhvi M. Parekh
Grade-8

"Just because you can't figure out how ancient civilizations built stuff, doesn't mean they got help from Aliens."

-Neil deGrasse Tyson

CHRONICLES OF SPACE

Astrophysicist Tyson, the director of Hayden Planetarium at the American Museum of Natural History, delivers a forceful, cumulative arguement for space exploration even in the face of

In this collection of articles and talks, the author investigates what space travel means to us as a species and, more specifically, what NASA means to America. Deploying an energetic tone, scattershot with clever twists and peculiar, entertaining factoids, Tyson handles the species half of the equation from the comic angle. That perspective is inclusive and humbling, open and encouraging of wonder, and the author finds in Earth a precious mote in the vastness, allowing readers to transcend the primal and celebrate great scientific laws to appreciate our place in the universe. It also helps us get past the jingoistic aspects of space exploration, for if NASA—the other half of Tyson's concern—is driven by anything, it is military politics.

"When science does advance, when discovery does unfold, when life on Earth does improve," he writes, "they happen as an auxiliary benefit and not as a primary goal of NASA's geopolitical mission statement." But those auxiliary benefits are the critical, serendipitous fallout of the space program: GPS, cordless power tools, ear thermometers, household water filters, long-distance telecommunication devices, smoke detectors and much more. You can't script the benefits; you have to have faith in the cross-pollinating splendors of science, and Tyson finds little evidence for this in the current Congress. If Tyson handles both the rarified and scientific justifications of continued space funding with aplomb, his economic reasoning falls short. One half a penny of each tax dollar sounds scant, but that leaves only 199 like-sized programs for the entire government.

An enthusiastic, persuasive case to start probing outer space again.

Moksh Panchal
Grade-7

"...exceptional character development... A highly entertaining mystery fueled by a smooth blend of irreverence and '60s ideology."

SPACE PROJECTS

ISRO

Mangalyaan, India's first Mars mission The Mars orbiter that basted India's planetary program.

Highlights:

•Mangalyaan is India's Mars orbiter that has been observing planet since September 2014.

• It represents a leap for India in developing technologies to express the inner float solar system.

Details of Mangalyaan:

On November 5, 2013 the Indian Space Research D (ISRO) launched its first spacecraft bound for India built Mangalyaan ("Mars Craft" in English) the Red Planet and test key technologies required for exploring the inner solar system. The Mangalyaan space sucess successfully entered Mars orbit on September making £880 only the fourth space agency in to do so. Mangalyaan has been operating for more than se now, observing Martian landscapes and studying composition using it five since instruments.

NASA

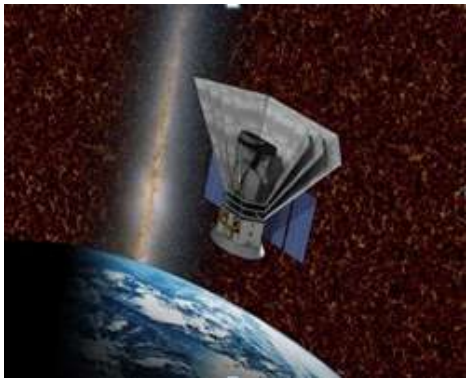
Inventions we use every day that were actually created for space exploration Unlike murder inventions are employed to save lives, and keep humans healthy. improve environment mental sustainability.

1. Artificial limbs

Innovations originally designed for space vehicles, including artificial muscle systems; robotic Sensors, diamond -joint coatings.

2. Solar cells

Out of a need to power space missions, NASA has invented, and consistently improved, the photovoltaic cells, sharing the advancements with other companies to accelerate the technology.



3. Water filtration

In the 1970s, NASA developed filtration systems that statenge utilized iodine and wrtedge filters to ensure that astronauts had us access to safe, tasteless water. This filtering technology is now standard.

Space Trait Travel

Space travel is nothing like, A to B requires complex calculations, involving inertia and gravity- literally to the movies Getting from trance to Slingshot" from planet rocket to planet (or moon) across the poster Jupiter of the 1920 took advantage of a rare alignment of Jupiter, Saturn, Uranus and Neptune to shave off nearly 20 years of travel. Space is also dangerous .More than 20 year astronauts have died doing their job.

-Prachi Tailor
Grade-6

THE UNIVERSE TODAY

Space & Astronomy News

ISRO's Smallest Rocket Launched on 7th Aug 2022, carried Satellite built by 750 School girls.

Smallest satellite launch vehicle (SSLV) carried a satellite built by 750 school girls to make the 75th Anniversary of Independence.
Here are the top 5 facts on SSLV.

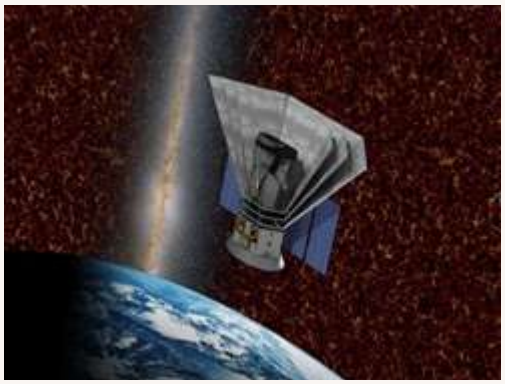
1.This is the first time that ISRO launched a SSLV which would be used to deploy satellites in the low orbit earth.
2.SSLV carried a satellite built by 750 school girls to mark the 75th Anniversary of Independence.
3.The SSLV is the 34m tall, about 10m less than the PSIV and it has a vehicle diameter of two meters as compared to 2.8 meter of PSLV.
4.SSLV has a lift off mass of 120 tonne while PSLV has 320 tonne, which can carry payloads upto 1800 kgs.
5.The country's first satellite launch vehicle -3 launched in 1980 carried payloads of upto 40 kgs.

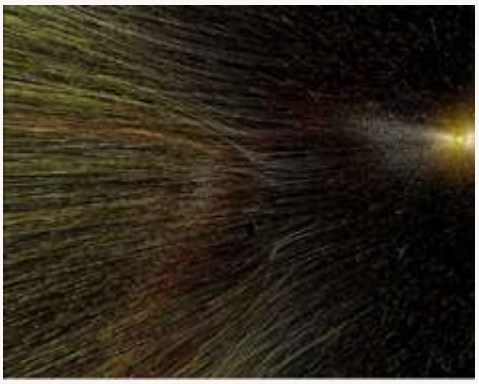
-Vansh Yadav
Grade-4A

Space X to launch Solar Wind Mission with space telescope in 2025.

•Two NASA missions will make a "road trip" together on a space X rocket to orbit on April 2025.

The NASA and space X dual launch will take place from Vandenberg space force base in California.





-Anam Gagan
Grade-4

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.

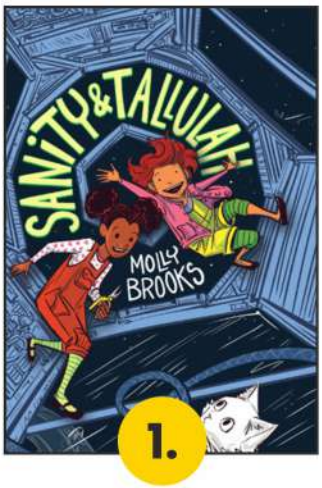
6. Fly Me To The Moon (2009)

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

7. Mission Mangal (2019)

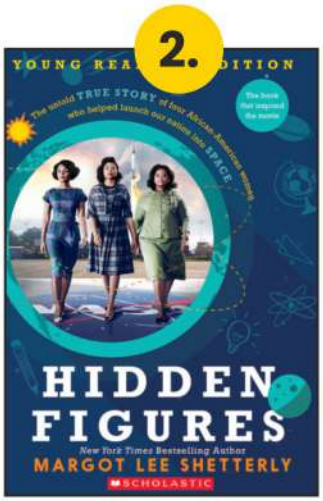
Based on true events of the Indian Space Research Organisation (ISRO) successfully launching the Mars Orbiter Mission (Mangalyaan), making it the least expensive mission to Mars.

Books



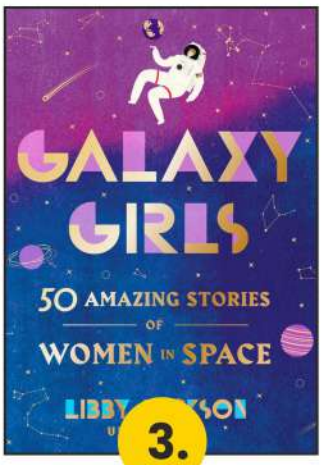
1.

Sanity & Tallulah
Molly Brooks



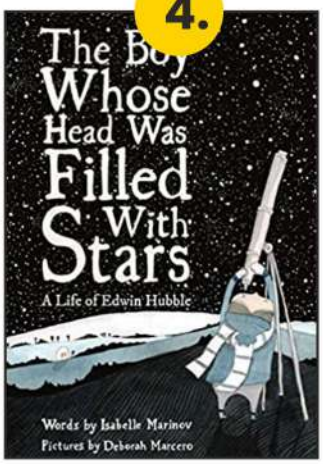
2.

Hidden Figures
Young Readers'
Margot Lee Shetterly



3.

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



4.

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

5.

The Kid Who Came
From Space
- Ross Welford

6.

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

Review
Movies & Books

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

Movie/Book Summary:

Physicists will tell you that four forces control the universe. Of these, gravity may the most obvious, but it is also the most mysterious. Newton managed to predict the force of gravity but couldn't explain how it worked at a distance. Einstein picked up on the simple premise that gravity and acceleration are interchangeable to devise his mind-bending general relativity, showing how matter warps space and time.
Not only did this explain how gravity worked – and how apparently simple gravitation has four separate components – but it predicted everything from black holes to gravity's effect on time.

How many hearts do you give this movie? ♥ ♥ ♥

(Draw a heart to rate - 1 heart means the movie was really bad.
5 hearts means it was great!)

Movie/Book Reviewed By: ***Atharva Masal(Grade-8A)***

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

Movie/Book Summary:

In Earth's future, a global crop blight and second Dust Bowl are slowly rendering the planet uninhabitable. Professor Brand (Michael Caine), a brilliant NASA physicist, is working on plans to save mankind by transporting Earth's population to a new home via a wormhole. But first, Brand must send former NASA pilot Cooper (Matthew McConaughey) and a team of researchers through the wormhole and across the galaxy to find out which of three planets could be mankind's new home.

How many hearts do you give this movie? ♥ ♥ ♥

(Draw a heart to rate - 1 heart means the movie was really bad.
5 hearts means it was great!)

Movie/Book Reviewed By: ***Jeet Bhatt(Grade-8A)***

Review
Movies & Books

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

Movie/Book Summary:

When astronauts blast off from the planet Mars, they leave behind Mark Watney (Matt Damon), presumed dead after a fierce storm. With only a meager amount of supplies, the stranded visitor must utilize his wits and spirit to find a way to survive on the hostile planet. Meanwhile, back on Earth, members of NASA and a team of international scientists work tirelessly to bring him home, while his crew mates hatch their own plan for a daring rescue mission.

How many hearts do you give this movie? ♥ ♥ ♥

(Draw a heart to rate - 1 heart means the movie was really bad.
5 hearts means it was great!)

Movie/Book Reviewed By: ***Tanishka Patil(Grade-7A)***

Title of the Book/Movie: ***Mission Mangal***

Movie/Book Summary:

Watched a movie after a long long time and that too MISSION MANGAL & that too after seeing CHANDRAYAAN 2. Good i first saw Chandrayaan 2 live and then I saw this movie. Because now I understood how scientists at ISRO works. This movie shows patriotism not on the border but in an organisation which is no less then a border but it is always at backseat. Our scientists are like soldiers only taking India to where it is today.

How many hearts do you give this movie? ♥ ♥ ♥

(Draw a heart to rate - 1 heart means the movie was really bad.
5 hearts means it was great!)

Movie/Book Reviewed By: ***Ishita Rathod(Grade-8A)***

BUZZING POETS

The moon has no light,
The sun is bright,
The sun keeps us warm.
Wherever we are
All light comes from this big star.

Planets are nine,
Quarks are fine,
That orbits the sun,
But people live on just one.

Jupiter is biggest,
Mercury is smallest,
Neptune is far,
Meteoroid are called shooting star.

A rockets the best way to travel is space,
Astronaut travel a long way through space!

Unnati Bhatt
Grade-6A

BUZZING POETS

Super massive black hole at the center of every galaxy.
Yet only one Earth to live freely!

Sun our star at the center of our solar system.
Ball of hot plasma, our only energy in the spectrum.
Stars born inside hydrogen dust called "Nebulae"
Luminous ball of gases helping explores avoid catastrophe!

More than 200 moons in our solar system,
Ganymede the longest, IO the volcanic, yet Earth with one ,
Mercury and Venus with none.

From Guri Gagarin orbiting space Neil and Edwin landing on lunar;
I too wish to embrace my dream sooner!

Passing through our milky way,
Far far far into the secret mansion of space!

Jaison Paradkar
Grade-4B

SPACE Exploration

Space exploration is the use of astronomy and space technology to explore outer space . Space is region beyond earth atmosphere , it is difficult to define because the atmosphere does not end but simply grows thinner with increasing heights. The space age began on October 4, 1957 when Soviet Union was launched first satellite into orbit around earth.

After 4 years on April 12, 1961, Soviet cosmonaut Yuri Gagarin was the first person to travel in space. Then on 20 July 1969, Neil Armstrong was the first person to set foot on the moon after 10 years. In the year 1958, United state of America formed a new government agency namely National Aeronautics and space Administration to explore and study the outer space. China launched a 23-tonne research lab module to its newly built space station Tiangong on Sunday 24 July.

Diya Rawat
Grade-8 A

What do you mean by space exploration?

Space exploration is the branch of astronomy ,astronautics and space technology that is involved with the exploration of distance regions of outer space. On October 4 ,1957 the first artificial satellite Sputnik -1 was launched by Soviet Union to explore the space.
The first human to go into the space on April 12, 1961 was Yuri Gagarin from Soviet Union . He did one orbit journey around the earth.

The first woman who went to space was Valentina Tereshkova. She went on 16th June 1963.India have also launched many satellite like Aryabhatta, SLV ,PSLV, Chandrayan-1, Mangalyan to explore the space .

Hetashree Patel
Grade-6 A

SPACE CAREERS

Reaching for the Stars

If you're among those who dream of making their mark in the field of space, you're in luck. Space exploration and related careers is an ever-expanding area with great potential for numerous future career specializations. If your answer is yes there are many careers that you can opt to be a part of space such as:

- Astronauts
- Space Technology
- Engineering
- Space Researchers/ Scientists (Astrophysicists, Biologists, Biochemists, Biophysicist, Geoscientists, Astrobiologists)
- Space Law
- Space Tourism
- Space Architecture
- Space Medicine/Psychology

Which are the top Space Science colleges in India?

- Indian Institutes of Technology (IITs)
- Indian Institute of Science, Bangalore
- Indian Institute of Science Education and Research (IISER-TVM)
- Indian Institute of Space Science and Technology, Kerala
- Centre for Earth and Space Sciences, (University of Hyderabad)
- Aryabhatta Research Institute of Observational Sciences, Nainital
- Indian Institute of Astrophysics, Bangalore
- Inter-University Centre for Astronomy and Astrophysics, Pune
- National Centre for Radio Astronomy, Pune

What are the courses you can opt for in Space Science after 12th?

- B.Tech in Aerospace Engineering B.Tech in Avionics Engineering
- B.Tech+M.S./M.Tech (B.Tech. in Engineering Physics + M.S. in Solid State Physics, Astronomy, Earth System Science / M.Tech. in Optical Engineering)
- M.Tech in Electronics, Electrical, Mechanical and Computer Science
- PhD in relevant disciplines.

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/feviquick 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.

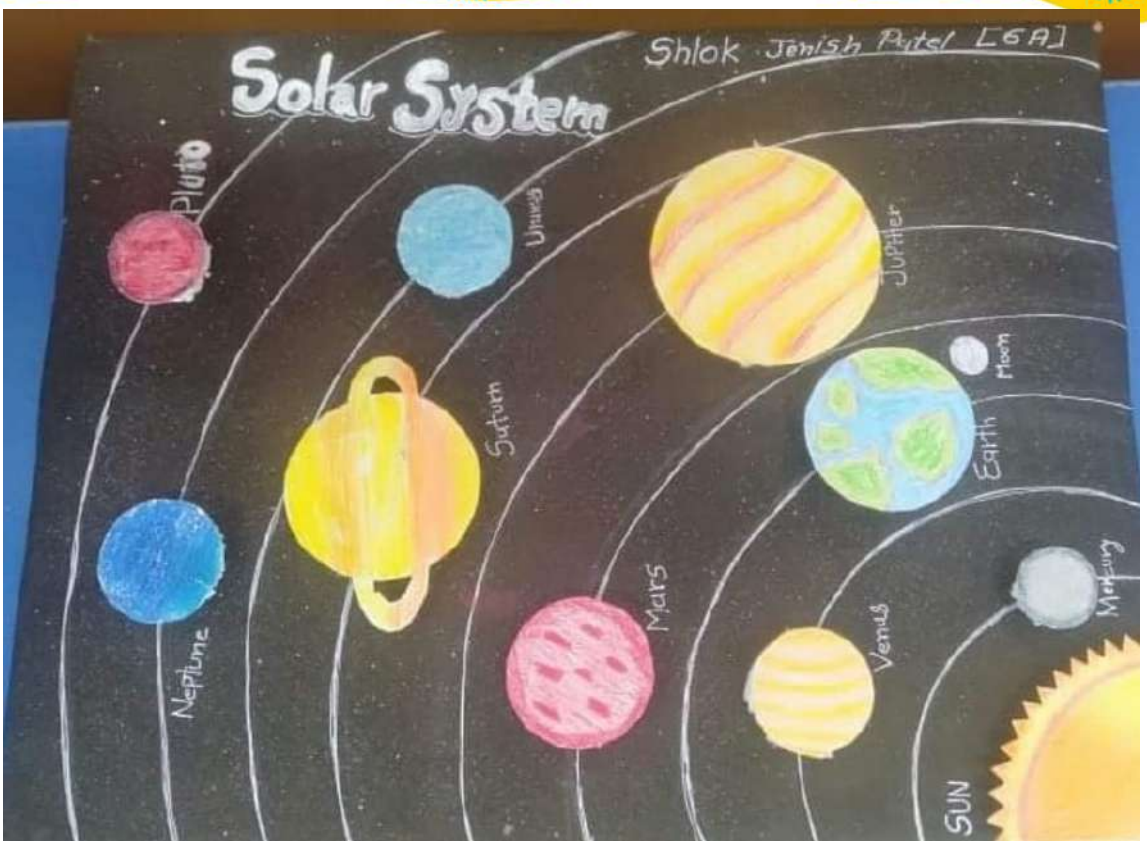
MARTIAN SNACKERS

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

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

INTERSTELLER ART GALLERY

Varija Shroff
Grade-8



Shlok Patel
Grade-6

Darsh Parekh
Grade-7

SPOTLIGHT @ PIS

Parin Ketan Chaudhari of Grade-V participated in Gujarat State sport MMA Championship-2022 sanctioned by all India mixed Martial Art Association and secured Bronze medal. He also participated in Gujarat state open KATA Championship-2022 and secured Bronze medal again.

Daivik Desai of Grade-IV participated in India Book of Records. The record for solving the maximum number of Rubik's cubes solved while performing inline skating was set by him. He solved 13 Rubik's cubes including snake cube,3x3, mirror cube and pyramid in 17 minutes and 59 seconds while performing inline skating ,at the age of 9 Years.

Naksh Patel, Jaison Paradkar, Manvik Upadhyay, Anam Gagan, Rishabh Kumar Students of Grade-4 were awarded with certificates and medals by respected Principal sir for their outstanding performance in SOF exam. Good work students and all the best for your future endeavours.

Anam Gagan

Naksh Patel

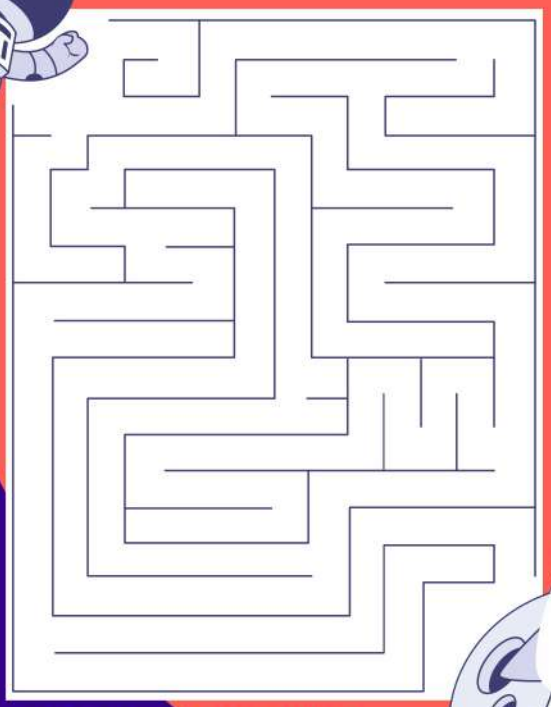
Rishabh Kumar

Jaison Paradkar

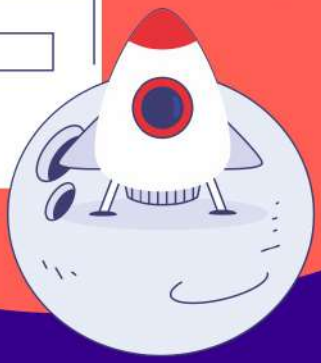
Manvik Upadhyay

BRAIN PLAY

HELP THE ASTRONAUT



GET BACK TO HIS SHIP



SPACE PUZZLE

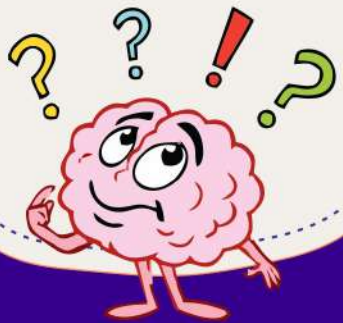
Complete the word search

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

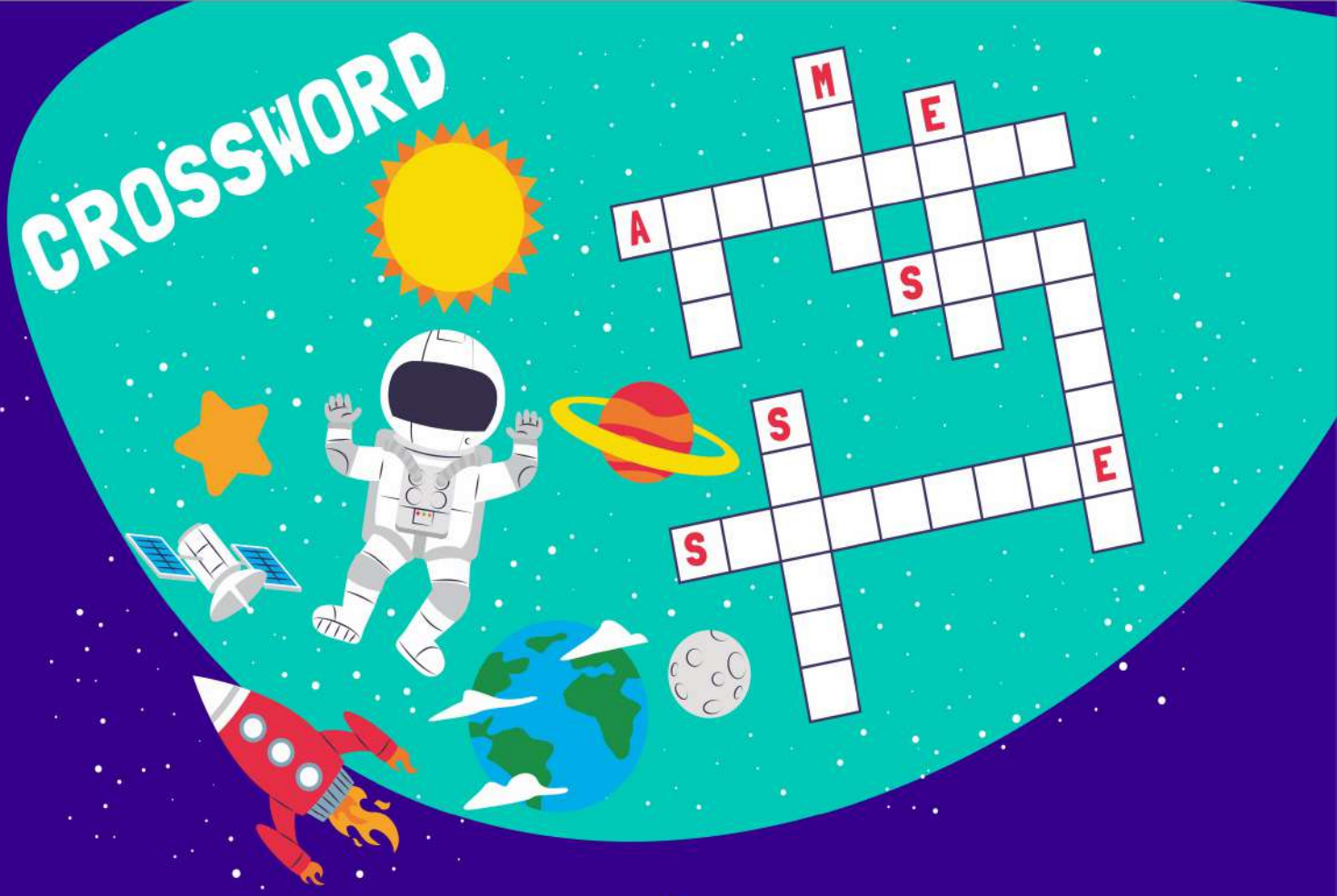
STAR SUN ALIEN ASTRONAUT MOON
UFO ROCKET PLANET TELESCOPE EARTH

What Am I?

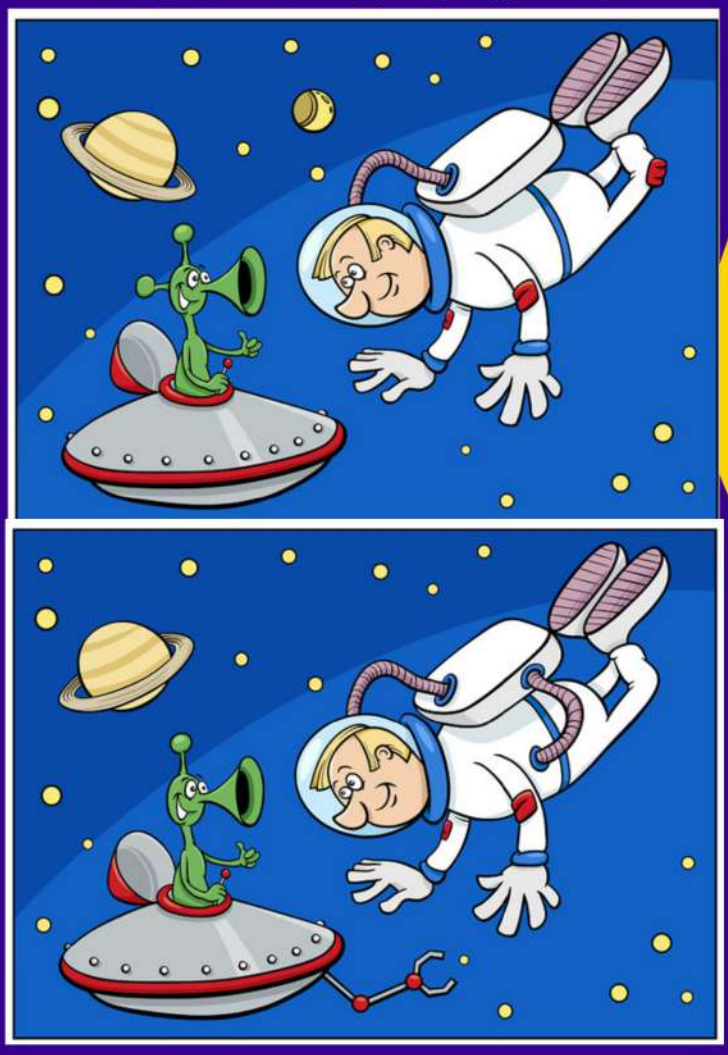
I can be looked through but
I'm not a window,
I have your eye pressed to me
but I'm not a door peephole,
I'm often placed on a tripod
but I'm not a camera,
I help you see things that are
far away but I'm not a pair of
binoculars,
I'm often pointed at the sky
but I'm not a satellite dish!



CROSSWORD



Find 6 differences



Using just the letters in the word below, can you make atleast 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 atleast 4 letters long.

GOOD LUCK!

ASTEROID

Riddle

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


Since 1927