

ACHIEVEMENTS OF CONTEMPORARY BHARAT



सत्यमेव जयते

MINISTRY
OF EDUCATION
Government of India

CHANDRAYAAN UTSAV

CODE
1.2P



SPECIAL MODULE

विद्यया ऽ मृतमश्नुते



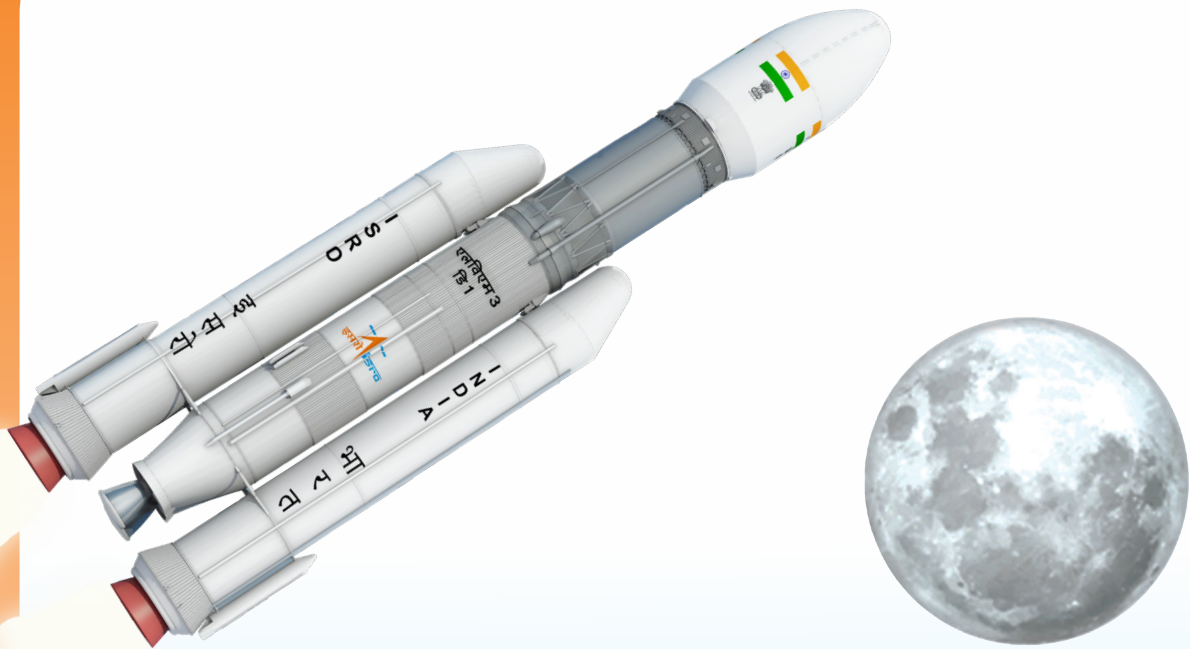
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Mera Pyara Chanda

Rani ki Khoj

Preparatory Stage

There was a girl named Rani who lived in a village. She was very curious and used to ask many questions to her family members, teachers and friends. She always wondered about the mysteries of the world.

“Why is the sky blue?

Where does the Sun go in the night?

Why the flowers are of different colours” etc.

One evening, Rani heard her mother singing a song, “*Chanda re chanda re kabhi to yehan pe aa, baithenge baatein karenge.*” Hearing this, Rani asked her mother Veena, “Amma, can the Moon come down to Earth” and mother laughs. Then Rani asks, “Can I go to the Moon? Amma, I want to go, I really want to go!”

Veena said “No Rani, the Moon is in the sky and is too far”.

Rani kept thinking about how far the Moon is from her or if she can go to the Moon.



To know more about the Moon, Rani went to her elder brother Pratik who is studying in Class V and asked him “How can we go to the Moon?”. Pratik laughed and said, “No one can reach the Moon, it is just too far”.

The next morning Rani woke up hearing the voice of Pratik “come Rani, come”. Rani could see Pratik was watching T.V. Looking at Rani, Pratik shouted again, “Look Rani, Bharat is on the Moon”. She gave a confused look to Pratik. Rani could hear the announcement on Bharat’s Chandrayaan Mission. The scientists were talking about Chandrayaan Mission and their success experiences. She was happy hearing the news of landing on the Moon. But she was still confused and started asking Pratik questions on who has reached the Moon. He said that his friend Vivaan’s mother Nandini Aunty is a scientist and they can get more information from her. Both the brother and sister decided to visit their house.

Vivaan and his mother welcomed them to their house. Rani could see many models and photographs of rockets in their house as decorative items. Rani was so fascinated and started asking questions such as “How can we go to the Moon, what is Chandrayaan mission” etc.

Nandini said “Rani, drink *sharbat* first, I will explain about the journey to the Moon in detail”. The children enjoyed drinking *sharbat*. Nandini asked “Do you know which vehicle is used to go to the Moon”? Pratik immediately said “I know aunty, it is rocket, rocket”. Nandini appreciated Pratik. Pratik said “I had seen it on the T. V”. Rani pointed to the models and photos of Rocket in the room.” Nandini said, “Very Good, Yes, Rockets are used to travel to the Moon”.



Activity 1

Collect any Newspaper/Magazine clippings related to Chandrayaan Mission and prepare a Collage.

The kids were excited to know more about reaching out to the Moon.

Nandini said, “Do you know, our country is the fourth one to land on the Moon”. Rani immediately asked, “Which are the other countries before Bharat?”. Nandini replied, “US, Russia and China also landed on the Moon and the exploration is called lunar mission. The name given to lunar mission of Bharat is Chandrayaan. She explained that *Chandra* means Moon and *Yaan* means Vehicle”.

Do you know how many Chandrayaan Missions have been launched in Bharat? All the kids looked at each other. Pratik said 4, Vivaan said 5. Rani guessed “it was written Chandrayaan-3 on T.V, so it might be three”.

Nandini appreciated Rani for her wise guess and further explained that Chandrayaan-1 was launched on October 22 2008, the first mission of Bharat to the Moon. She added that Chandrayaan-1, 2 and 3 all of them were launched from the Satish Dhawan Space Centre (SDSC) located in Sriharikota, Andhra Pradesh.

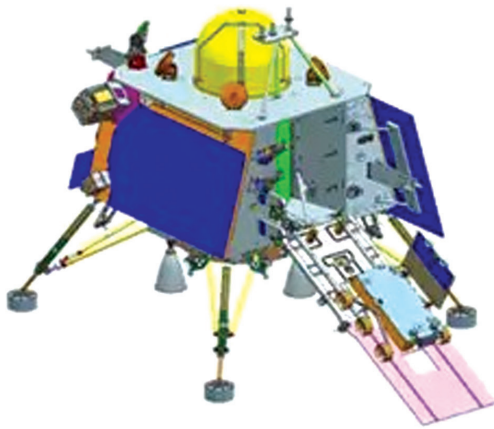
Nandini asked, “do you know this rocket has two major parts—one is Rover and the other is Lander which send us information about the Moon. This Lander landed at a given place on the Moon and the Rover will move on the surface of Moon and collect information”.

Rani asked, “Aunty, what kind of information? Do people live on the Moon?”

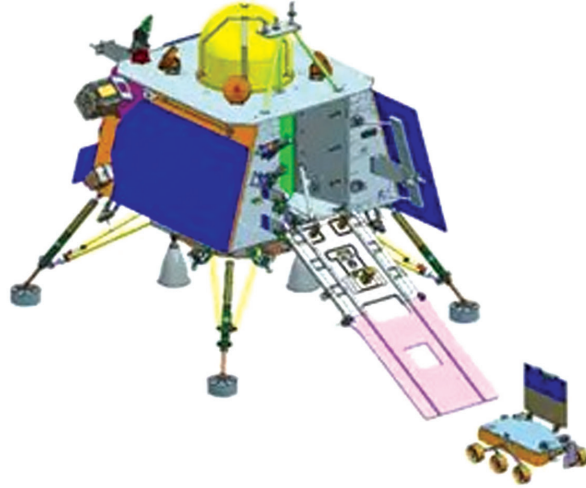
Nandini said, “Very good question Rani! It collects information whether there is water on the Moon, whether the Moon has substances that people like on Earth, structure of the Moon and so on”. Pratik asked, “so Rover takes pictures and sends to Earth?”. Nandini said “Yes Pratik”. Nandini showed one of the pictures of the Rover and the Lander from the website of ISRO.

They looked at the pictures closely and got excited seeing them.

Nandini explained that “Like you all have your names, Rover and Lander also have their names.



Rover on Ramp



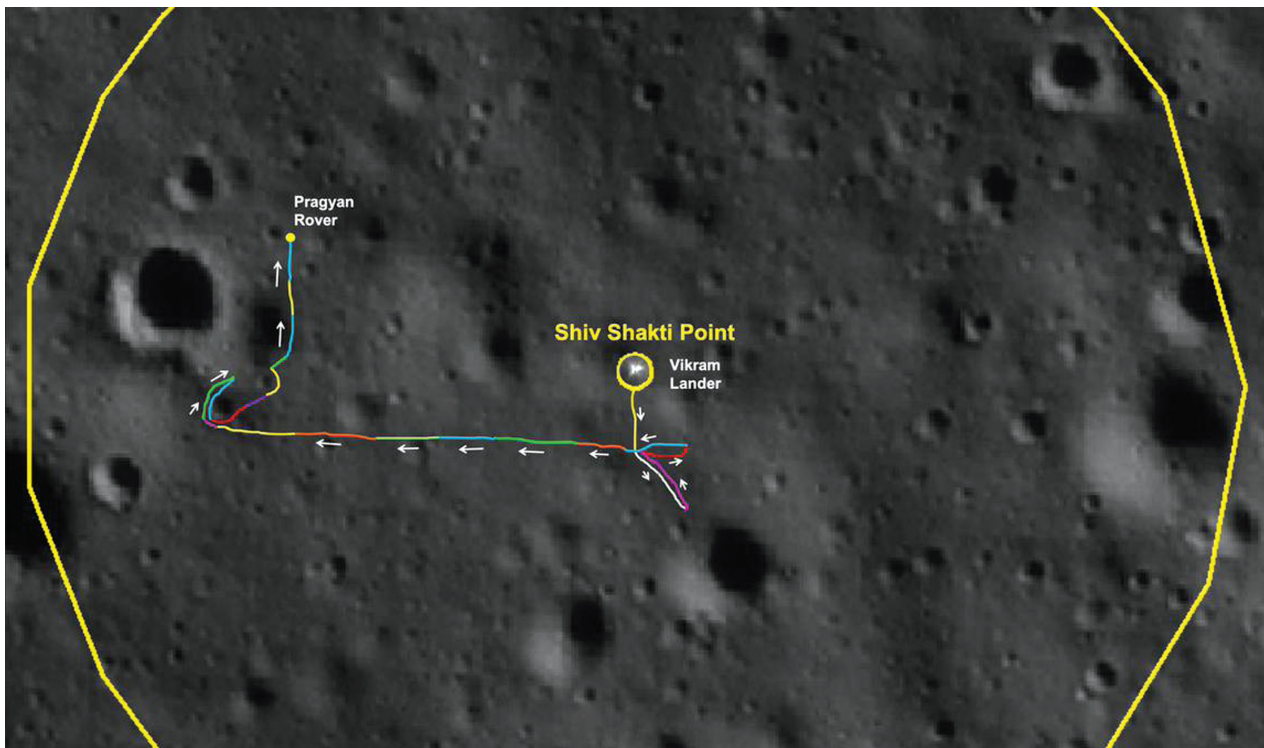
Rover Deployed from Lander

The name of this Rover is *Pragyan* and the Lander is *Vikram*. Do you know why were these names given? Pratik said, “Just as Rani is the princess of our house, so the name Rani”. All of them laughed together hearing Pratik. Nandini said : *Pragyan* means ‘wisdom’ and *Vikram* is given as a tribute to one of the famous Scientists of our country, Vikram Sarabhai.”

Nandini explained that on July 14 2023, Bharat marked an eagerly awaited significant milestone and made a history in the world of space exploration by launching Chandrayaan-3. Our country became the first nation to successfully land close to the lunar south pole on August 23 2023, and the fourth nation to soft-land on the Moon with the lander and rover.

Rani asked, “Aunty, was it very heavy?” Nandini said “Yes, the Chandrayaan-3 weighed 3900 Kg. Pratik expressed his surprise saying I am only 30 kg, I checked my weight in Doctor uncle’s clinic last month. Wow, Chandrayaan is so heavy!!!”

Vivaan asked “Mumma, *Shiv Shakti* is the name of the rocket?” Nandini said “No beta, *Shiv Shakti* is the name given by our Honourable Prime Minister to the spot of the Moon where Chandrayaan-3 landed of and ‘Tiranga Point’ is the name given to the spot where Chandrayaan-2 landed.



Activity 2

Match the two columns related to Chandrayaan Mission

Column A	Column B
Landing Spot of Chandrayaan-2	<i>Pragyan</i>
Rover	<i>Vikram</i>
Lander	<i>Shiv Shakti</i>
Landing Spot of Chandrayaan-3	Tiranga Point

Nandini continued, “Do you know, our Prime Minister went to congratulate the chief of ISRO Dr. S. Somanath and his team of scientists of ISRO, Indian Space Research Organisation who worked hard day and night for many years to make the Chandrayaan-3 mission a success. Rani said “How happy the Scientists would have been! They must have been really excited”.

Nandini said “Yes of course! All of them were excited and the whole country celebrated Chandrayaan-3’s mission success”. Prime Minister

Narendra Modi, declared August 23 as the **National Space Day** to commemorate the remarkable achievement of Chandrayaan-3's landing on the Moon. She added, "Children, success doesn't come easily. Do you know Chandrayaan-2 could not achieve its targets completely due to some minor error. Chandrayaan-2 was launched on 22nd July 2019, designed to study the South pole of the Moon, that was not explored ever by any country. However, Chandrayaan-2 ended as the communication to the spacecraft lost as the Vikram lander failed to make a smooth soft-landing. Scientists were disappointed to such an extent that then Chairperson of ISRO Dr. K. Sivan cried at the shoulder of our Prime Minister.



The whole country stood up with the scientists in the challenging time backed up by the Prime Minister. Our Honourable Prime Minister motivated the Scientists. "Learnings from today will make us stronger and better; there will be a new dawn.", he said. He had shown faith on the potential of Indian Scientists and success of Chandrayaan-3 is the result of the vision of eminent leadership of our country and commitment and hard work of Scientists community. When Chandrayaan-3 reached near the Chandrayaan-2 Orbiter, it formally welcomed Chandrayaan-3 Lander *Vikram* through a message "Welcome buddy".

Let us Share

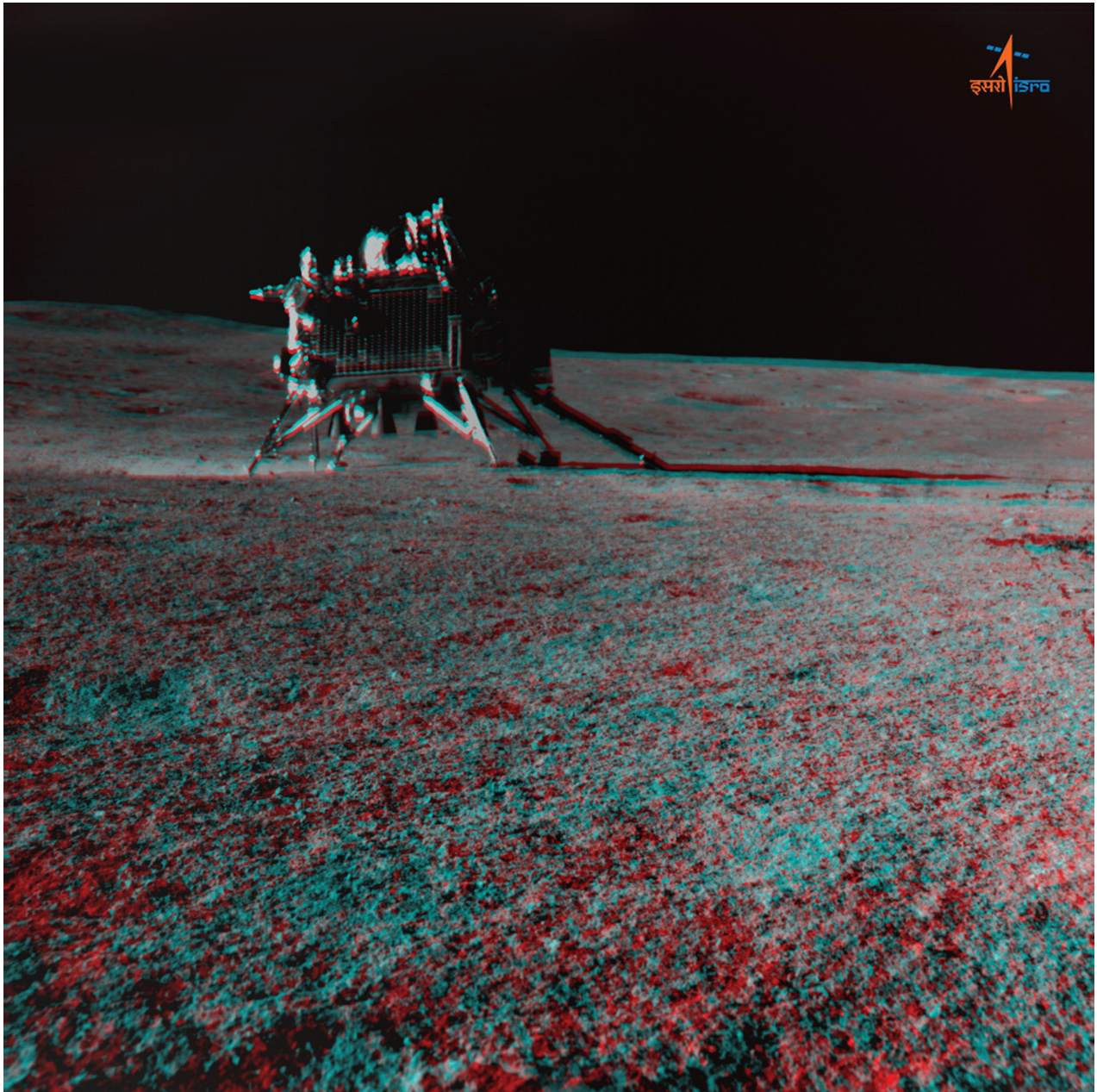
When your friend is not happy, how do you feel and what do you do?

All children were so involved in Nandini's description. Suddenly Pratik said "*Mera Desh Mahaan*". All loudly screamed- "*Hamara Desh Mahaan*". Nandini said, "ISRO announced the successful landing on the Moon by a message "I reached my destination and you too!" and so the success is of every Indian. We should be proud of our country."

Rani was overjoyed listening to the whole process of Chandrayaan Mission.



Pratik and Rani thanked Nandini aunty for explaining the Chandrayaan Mission so beautifully. Even after reaching home, Rani kept on thinking about it and finally she fell asleep. During her sleep, she had a dream in which she saw herself as a scientist. She explored the Moon in her dream and saw her putting a 'Tiranga' on the site she had landed on.



*Chandrayaan-3 Lander on the Moon
August 30, 2023*

The next day Rani woke up with a big smile on her face. She explained about her dream to her family and said, “I will study hard to become a scientist one day and I will make my country proud”. She started running holding the *Tiranga* kept at home that was bought for ‘*Har Ghar Tiranga Campaign*’ of the Government of Bharat as part of Independence Day celebration while celebrating ‘*Azadi ka Amrit Mahotsav*’. She could see her

Chandrayaan Utsav

'selfie with *Tiranga*' photograph hanging on the wall and felt so proud of being a *Bharatiya*. The next day she went to her school and explained her friends and teachers about the Chandrayaan Mission. Her teachers and friends felt so happy and proud of listening to Rani.

Activity 3

- With your friends, enact by becoming different parts of the Chandrayaan.
- Prepare a model of Rocket with the help of teachers.
- Create and sing a poem on 'Chandrayaan'.

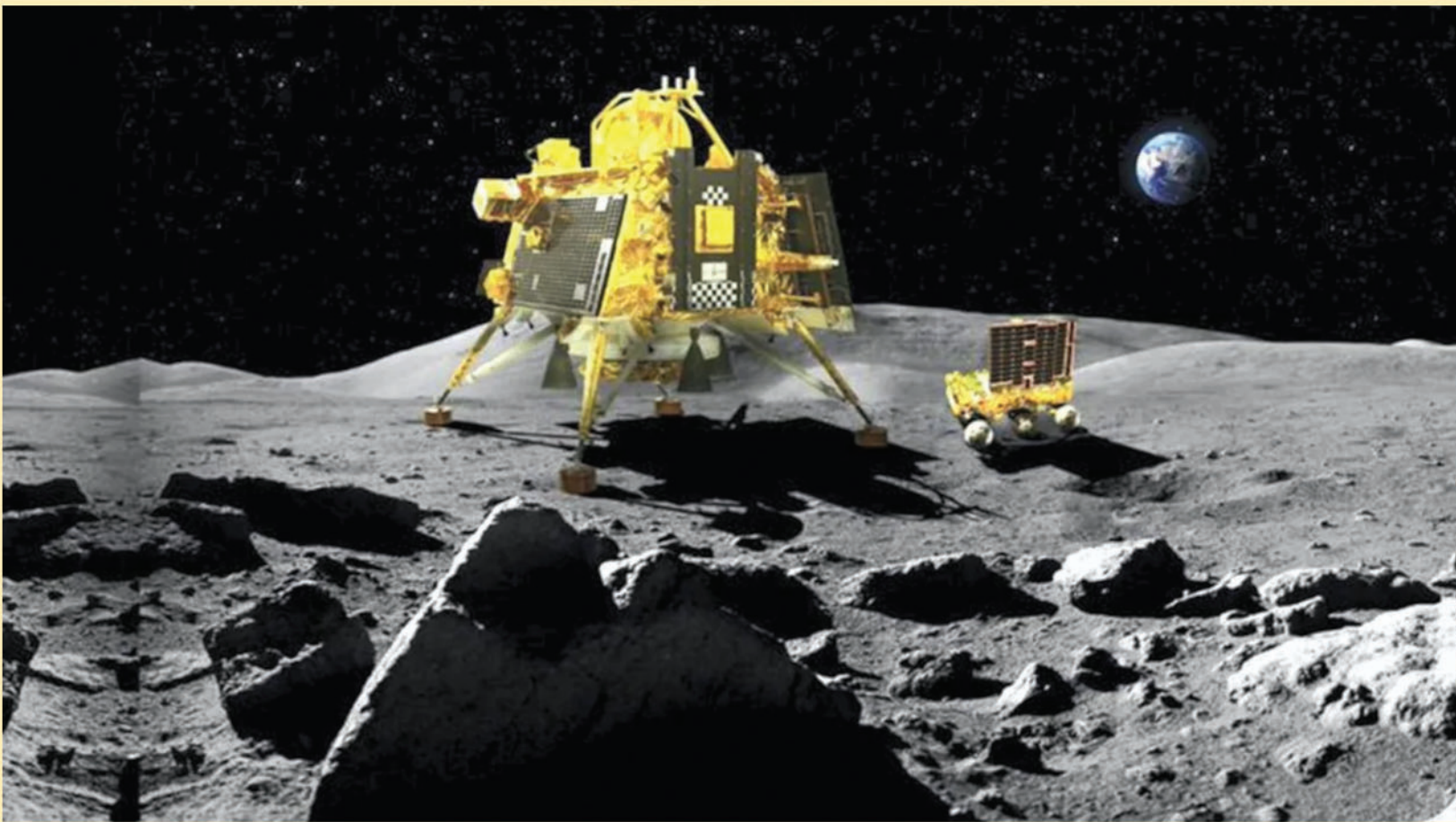


Theme 1.0 Chandrayaan Utsav

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|------|----|--|
| 1.1 | F | हमारा चंद्रयान
Our Chandrayaan |
| 1.2 | P | <i>Mera Pyara Chanda: Rani ki Khoj</i> |
| 1.3 | M | Chandrayaan Mission: Bharat's Expedition to the Moon |
| 1.4 | S | Chandrayaan: Journey Towards the Moon |
| 1.5 | S | Exploring the Moon Mission of Bharat |
| 1.6 | S | Towards Moon and Beyond |
| 1.7 | S | Exploring Chandrayaan-3: Bharat's Lunar Mission |
| 1.8 | HS | Bharat on the Moon |
| 1.9 | HS | Bharat Space Mission: The Chandrayaan Mission |
| 1.10 | HS | Physics of Chandrayaan-3 |

For participation in the activities related to Apna Chandrayaan:
Visit : www.bharatonthemoon.ncert.gov.in

For more information:
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PMeVIDYA IVRS: 8800440559



An image of Rover *Pragyan* with Lander *Vikram*

विद्यया ऽ मृतमश्नुते



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राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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