

## mini Science Newsletter

nature india



## Hello young scientists!

#### Welcome to the 5th MINI

(acronym for Macmillan Education India and Nature India)
Science Newsletter!

Here, you'll find exciting discoveries happening right now in India's science. Think of this as a fun way to go beyond your school science books, which do a great job of teaching you the fundamentals.

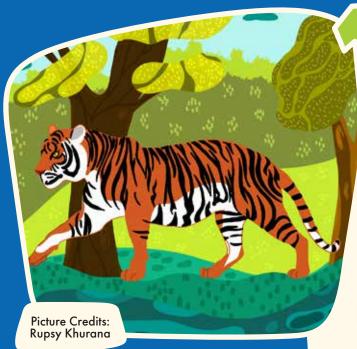
Science is happening all around you every day. This newsletter will help you discover how Indian scientists are making new inventions, solving big problems, and exploring the world in ways that can change our future. The newsletter also brings to you the latest news concerning India's science and scientists.

In this issue, we feature the growing numbers of India's big wild cats, AI tools that can understand different languages and India's new space adventure on the Axiom-4 mission.





### India's tiger conservation is a roaring success



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India's tiger numbers are bouncing back

India is now home to nearly
three-fourths of the world's wild
tigers. From 2008 to 2016, the
big cat numbers doubled. But
tigers still face dangers like
habitat loss, deforestation, climate
change and illegal hunting.
India's love and respect for
nature have helped people near
forests and tigers share space and
live peacefully. Thanks to this, the
tigers have made a strong
comeback to the forests of India.



# Chandrayaan-3 is digging up more moon secrets



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Chandrayaan-3 site is ideal for sampling sulphur-rich ancient materials

India's Chandrayaan-3
landed near the Moon's south
pole in August 2023. It has
now found that there is much
more sulphur in the soil than
previously concluded by other
space missions like the US
Apollo mission. Scientists think
these old rocks could hold
secrets to how the Moon was
formed. Using the Pragyan
rover, they found clues that
could rewrite what we know
about our Moon's history.



### Can India grow more genetically modified plants?



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India must develop a
GM crop plan based
on science

India is putting together a smart plan for using genetically modified (GM) crops. This plan will include voices from scientists, farmers, and the public. The idea is to use science to help grow food better. Long ago, the Green Revolution worked because the whole country believed in science. Now, with climate change making farming harder, it is time to come together again and ask: how can we grow food smarter, based on scientific evidence. together?



# Axiom-4 is India's new space adventure



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In microgravity,
even simple
experiments can
reveal big insights

The Axiom-4 is a space mission bringing countries together to explore and learn. On the mission scheduled for June 2025. Shubhanshu Shukla, an Indian Air Force pilot turned astronaut, will do some serious science experiments in space. He will study tiny microbes called cyanobacteria that can make oxygen, super helpful for long space journeys. He will also test how floating in space (microgravity) affects astronauts' thinking and screen reading. These experiments will help us build smarter spaceships and get ready for India's forthcoming crewed space mission Gaganyaan.



# AI tools that speak your language



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As AI giants duel, the Global South builds its own brain power While the US and China race to build the smartest AI tools, something amazing is happening around the world. In Africa, Asia and the Middle East, researchers are creating their own special AI models. These models can understand local languages and know about the culture, making them super easy for everyone to use. Do read about e-vikrAI, India's first government-backed AI initiative that can generate written and audio descriptions for commercial products in local languages.





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#### **Fun Fact**

There's a huge diamond in space – 10 billion trillion trillion carats in size – called Lucy. It is the largest natural diamond mostly made of crystallized carbon floating among the stars.



Thanks to everyone who sent in their guesses to the question in the last issue.

#### Question

Do you know there are animals in the ocean that can heal their wounds super fast, thanks to their extraordinary immune system?

#### Answer

For sea animals like sharks and rays, healing cuts quickly is important to stay safe and keep swimming. Sharks and rays are really good at this because their unique immune system not just helps heal injuries but protects them against microflora in water.

Whether you nailed it or not, keep exploring interesting science facts like these!

## Do you have a fun fact to share or perhaps you are working on a cool science project? We want to hear from you.



#### What are you curious about?

If there is something you are curious about, ping us at

https://macmillaneducation.in/

We will try to include it in the next issue!

For more science news, views, opinions, research highlights and podcasts, head to Nature India <a href="www.nature.com/natindia">www.nature.com/natindia</a>

Content and Tiger illustration: Rupsy Khurana Editors: Subhra Priyadarshini and Sahana Ghosh