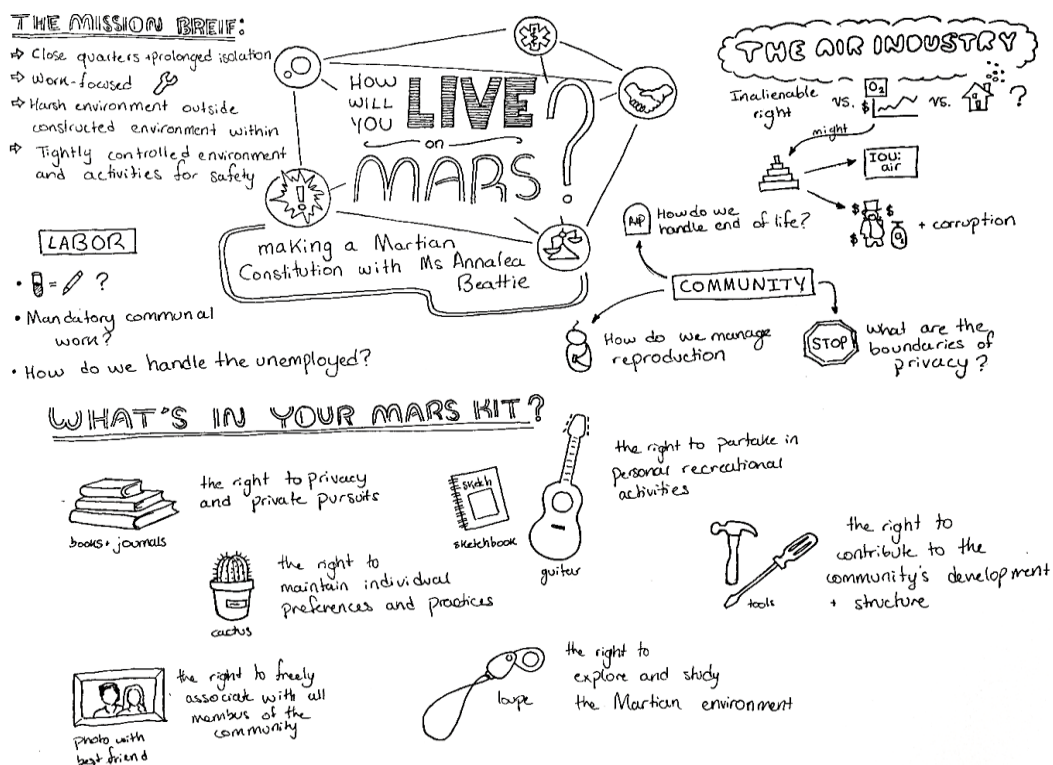


How will you live on Mars?

An artist book by students of Astrobiology



Cover image: 'A sketchnote' by Ariana Patterson.

This booklet was compiled by Annalea Beattie and Cliff Dolliver in Fentonbury, Tasmania in December 2020.

How will we build healthy sustainable communities on Mars? What will it be like for us when we leave Earth to live and die in a place that lacks the most basic physical freedom? How will we understand what we see when we get there? What will we take with us to keep our will to imagine alive?

Drawing helps us ideate. In fact, through any kind of creative work, we can activate a frame of reference that addresses social responsibility for a healthy, extra-terrestrial community of perhaps under a thousand people who are confined in routine-driven surroundings, in prolonged isolation and under continual surveillance on planets like Mars. We can think about the future through art.

This edited collection of images and text is created by students from our Introduction to Astrobiology course, run by Dr. Siddharth Pandey from the Amity Centre of Excellence in Astrobiology, Amity University, India. Our online course introduces the fundamental aspects of astrobiology to a class of almost eight hundred students from fifty-three countries across the world.

To speculate about the rights and privileges of every person living in the future on the fourth planet from the Sun, during my drawing workshop 'The Draft Constitution for Off-Earth Settlement', I invite our class to contribute an image of something that might be important for them when they travel to their new home. This image could be of anything Earth or space-related. It might share a special habit or hobby or interest. It could be an object or an activity or an idea. It might be an imaginary view of space from a window in the future. It might be a memory of someone or something from Earth.

I am delighted by the extraordinary range of creative responses from our workshop. Some people sent me quick sketches they made on the spot during class time. Others sent art or craft that they already constructed at home. Some people sent photos of the night sky or models of life the future. Some asked if they could contribute the work of others—a painting made by a child or a sibling. Other people sent me four, five, six, seven images of their own. Some people wrote about and with their work. Others let the images speak for themselves. From the range of images submitted to our Google classroom, generally I have chosen one image per person for our artist book, though

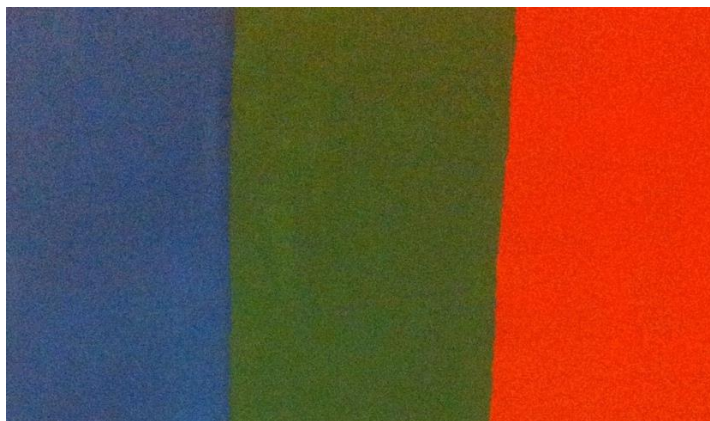
occasionally I break that rule and choose two. I have tried to use titles where they have been given. Where text has been sent, I have edited it as needed. Unfortunately, I am unable to use the images of those students who sent their work in PDF. form. Some terrific images were lost as they would not translate from the word document to PDF format even though I made every effort to include them.

I would like to thank Dr. Siddharth Pandey and Amity University for enabling our series of Astrobiology workshops. He has built a wonderful Astrobiology family from its participants. I also thank my colleagues who worked with me on our course. I gratefully thank my friend and partner Cliff Dolliver for his help and support. To all those who participated, thank you very much and I hope you enjoy this book.

I conclude by respectfully acknowledging the Aborigines of the Big River Nation as I live and work on their unceded land on the foothills of Mt Field in Tasmania. I sincerely offer my respects to their Elders past, present and emerging.

Mars or bust

Dr. Annalea Beattie

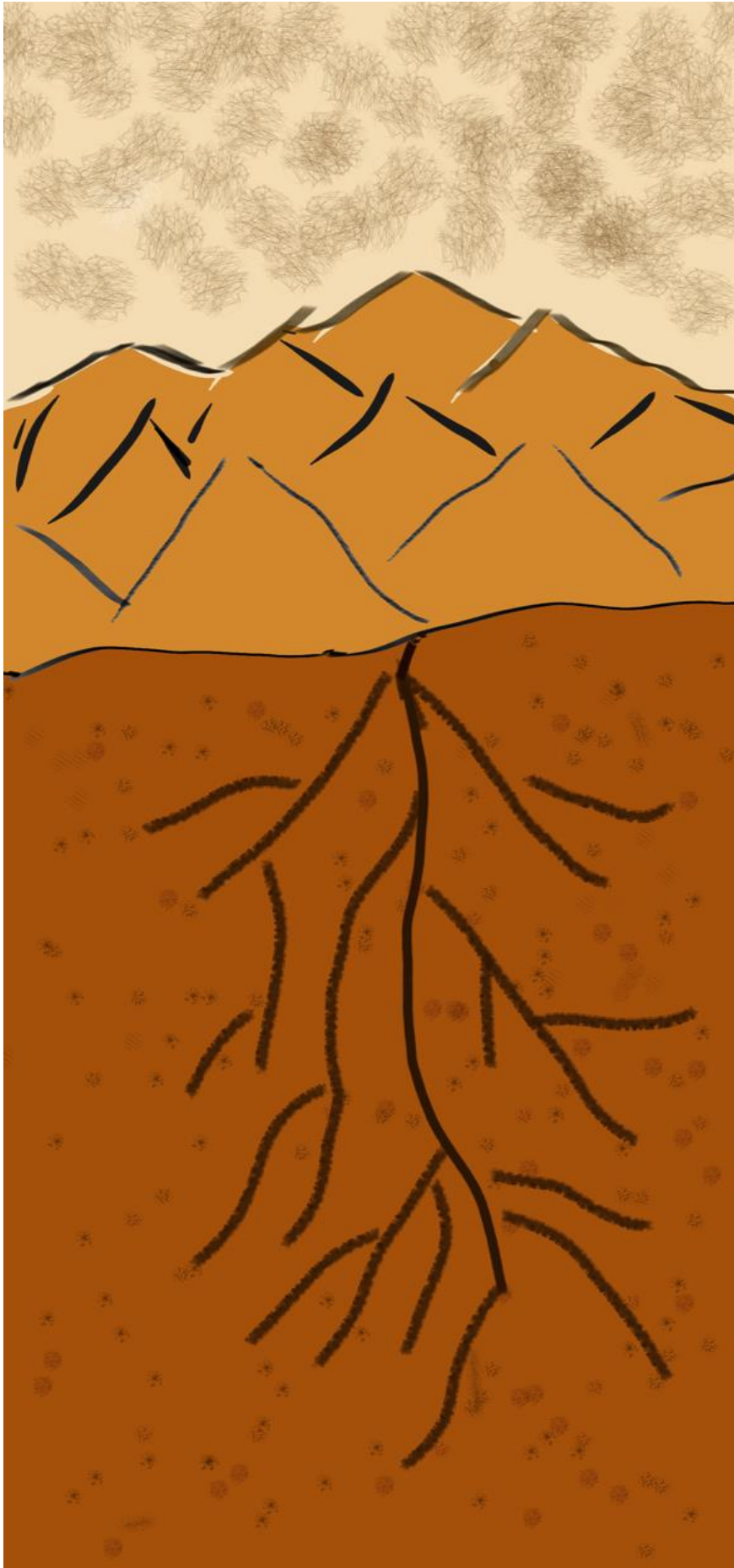




Krishnendu Ghosh (from the world beyond)



'My First Day on Mars' by Priscilla Nowajewski-Barr from Chile.



'Red Shores' by
Sahaj Bharindwal.

Sahaj writes that the
dried canals of Mars
might answer many
important questions
about Mars.



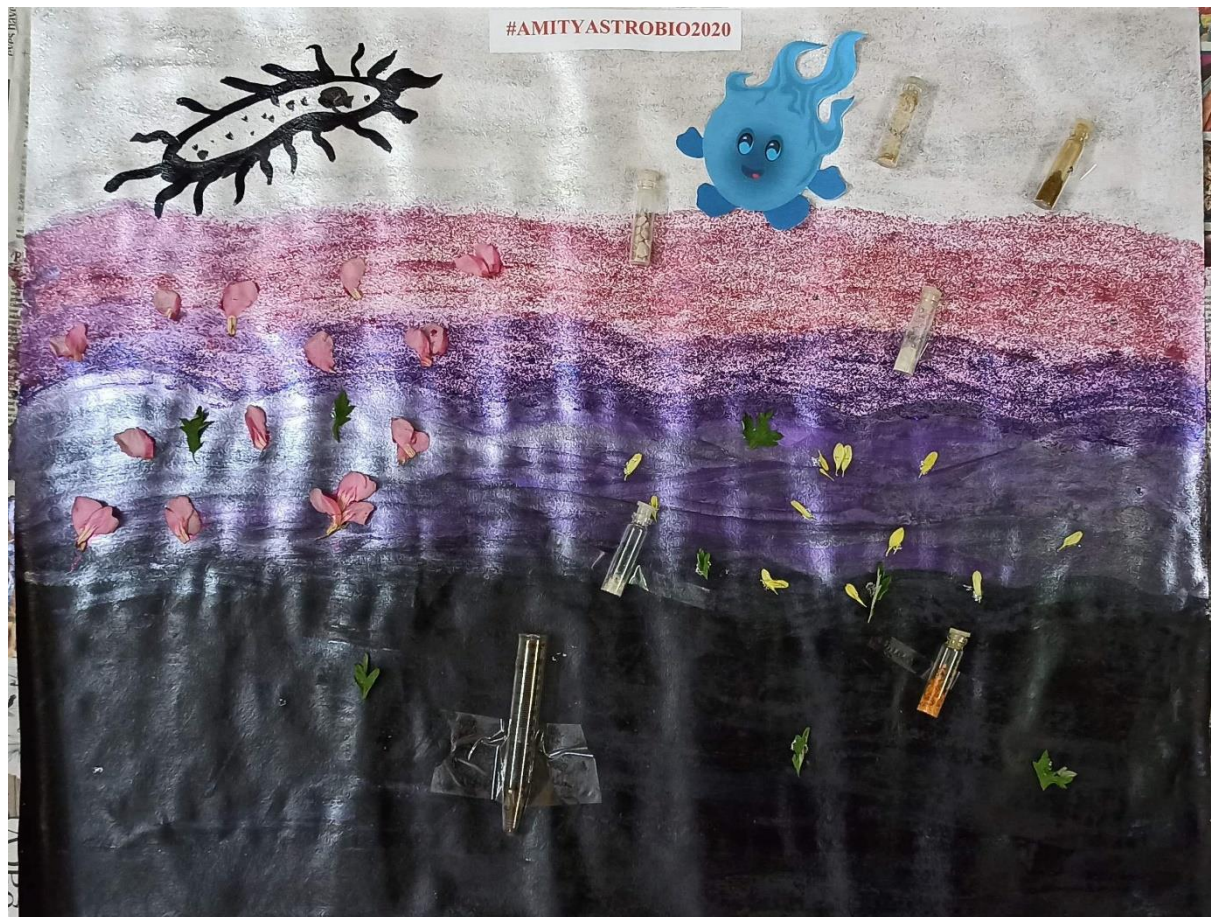
'Into the blackhole' by Anchal Mehrotra.



‘Life on Mars’ by Anchal Mehrotra.

Anchal writes:

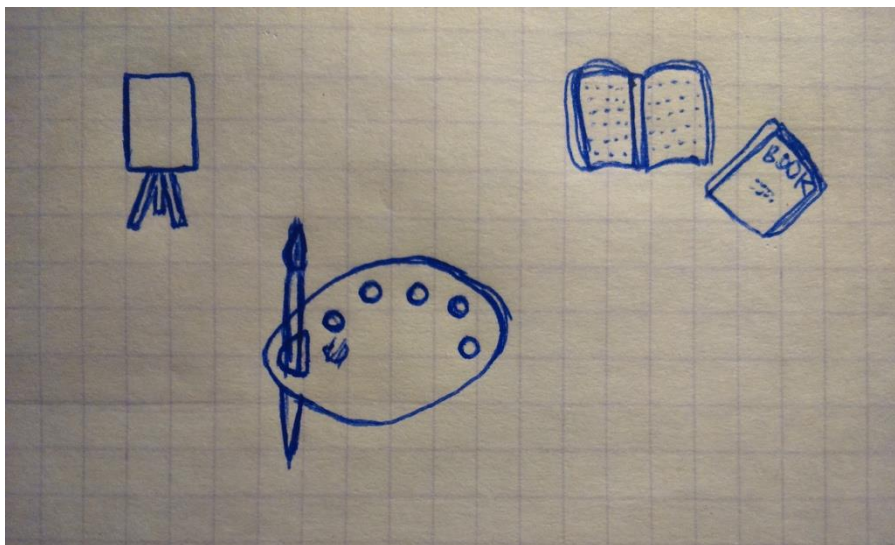
‘Art making is a kind of meditation that will help me live on Mars. I will take my sketch book and pencils wherever I go. I think it would be lovely to see humans and artificial intelligence working together away from Earth in a search for life.’



'Everything is made of Stardust!' by Srividya Subramanian.

Margarita Kruichkova writes:

'During the space mission in such harsh environments like the Mars surface /subsurface, this means also living with other people in quite a small place for a long time. Each person should have small but private place where he/she can be alone. The possibility for self-realization is very important e.g. art, reading, singing, dancing, theatre (staging performances). As for me, I prefer sewing small cutie toys.'



From our icy home,
Loretta Sanjines

Bandares paints colour in a new kind of landscape.

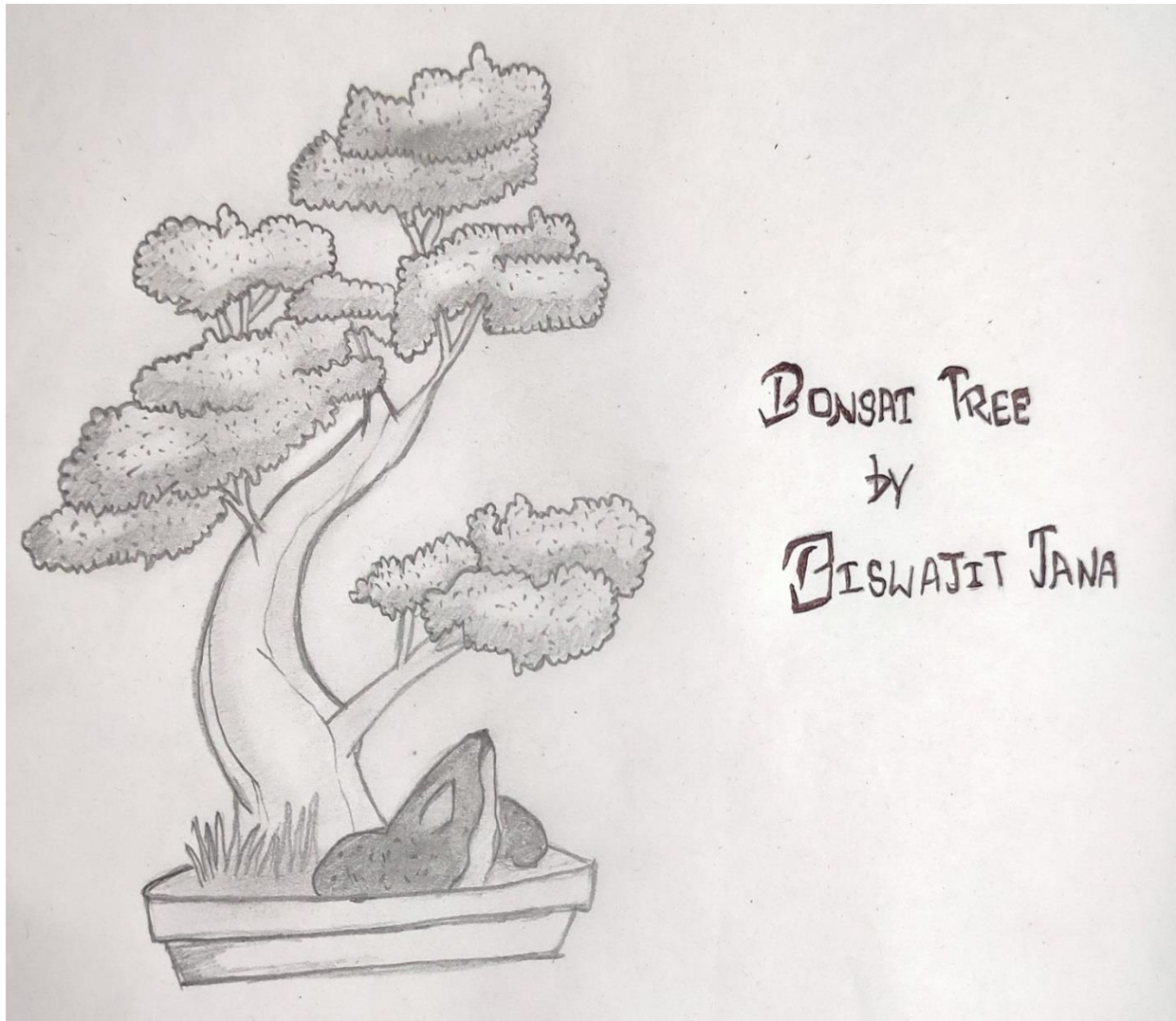




By Matúš Miklovič.



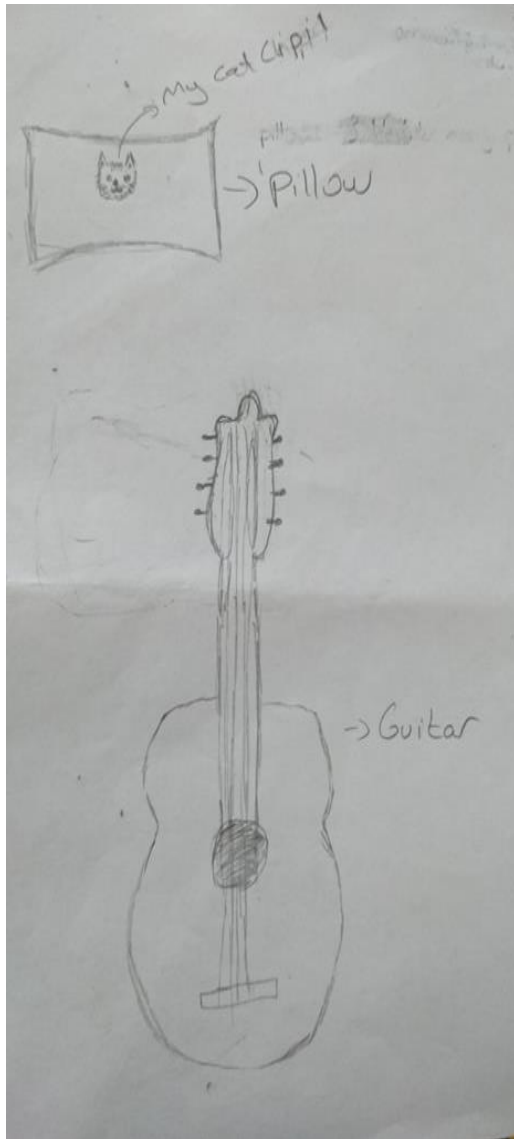
Yojana Waychal references the Moon with her handmade copper wire jewellery.



Biswajit Jana says that if he has a chance to go to another planet he will take a long living bonsai with him to grow other trees from regular root stock and seed. He writes:

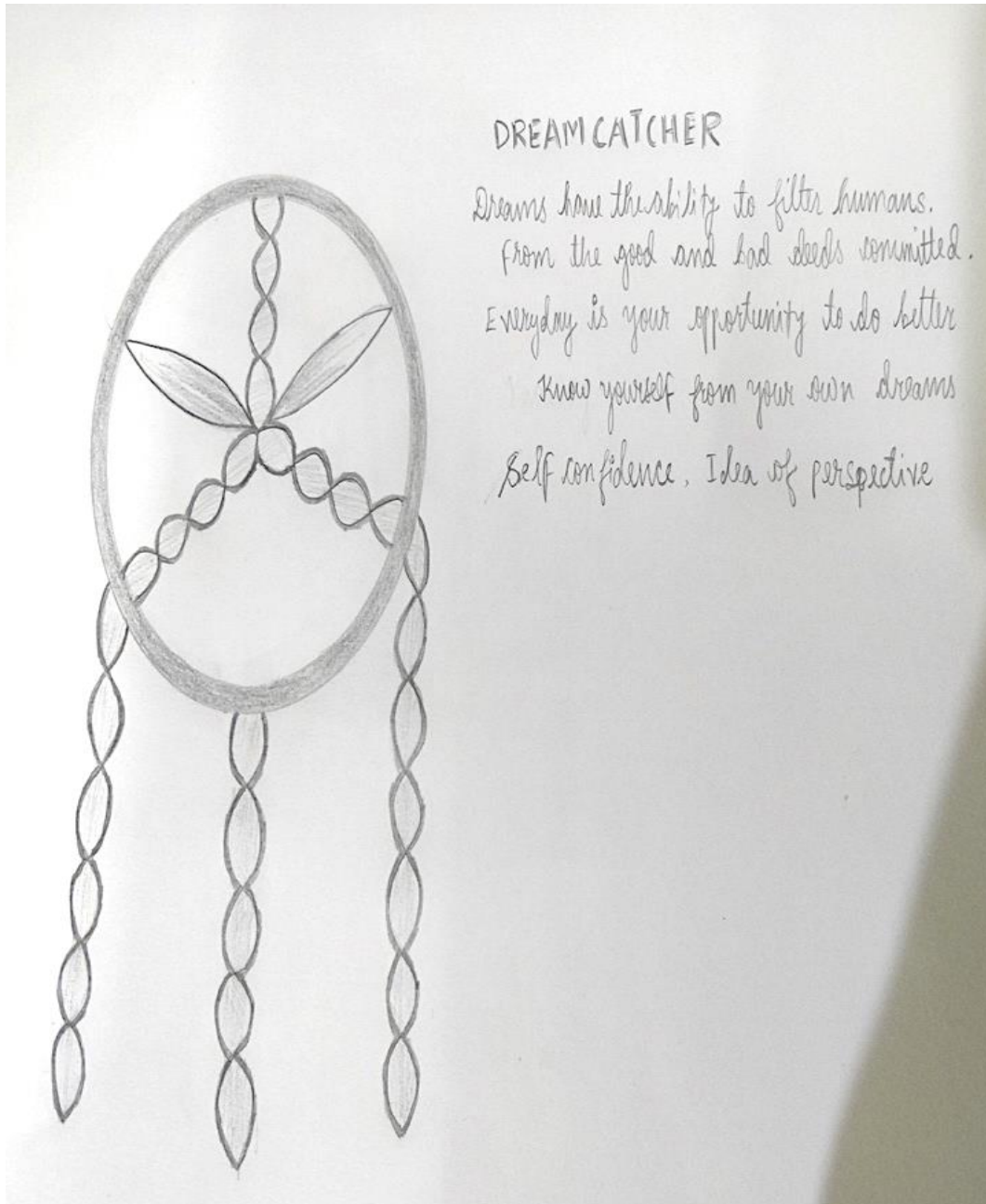
‘Trees play an indispensable role in helping humans create a better future. But for all the tangible benefits that trees offer us, the most useful thing they provide may be a lesson: how to work together. Trees, rational as they are, realise that helping one another is the best way to achieve their own health and well-being. By taking care of their fellow trees, they ensure they also will be taken care of. This sort of reciprocity and co-operation must be an essential part of human life.’

For Biswajit, the bonsai will be his best friend on Mars, reminding him of home—and how human and other life evolved.

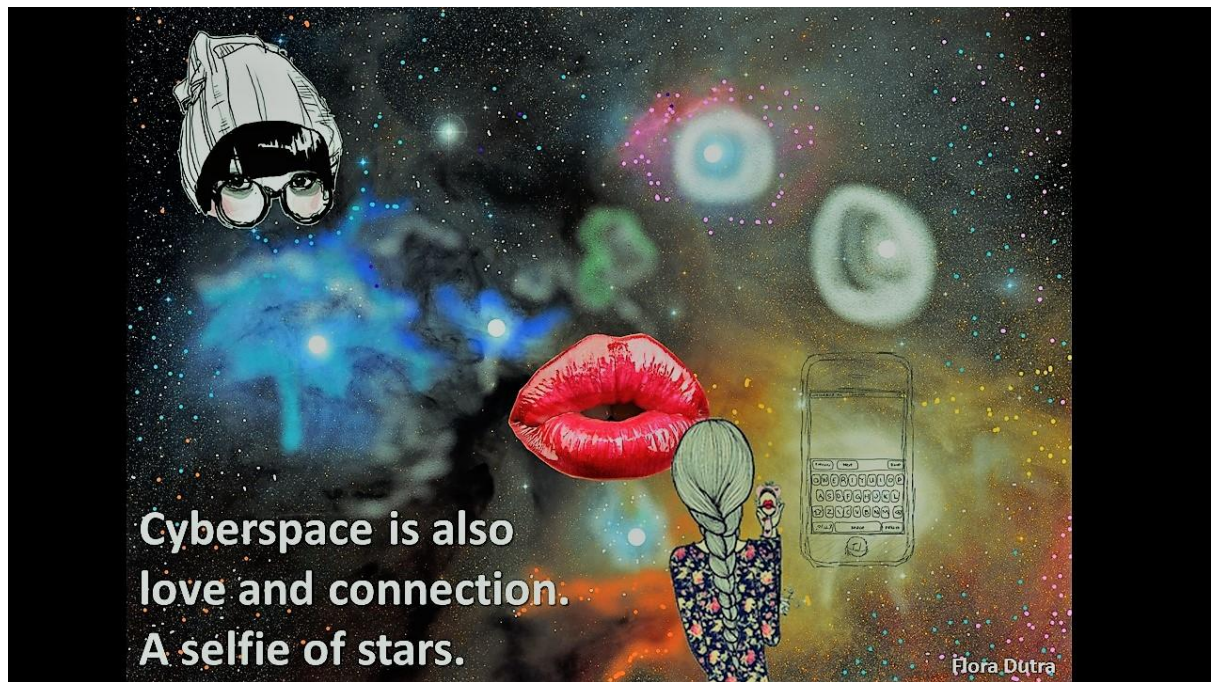


Ayse Celen Celebi writes about what she would take to Mars:

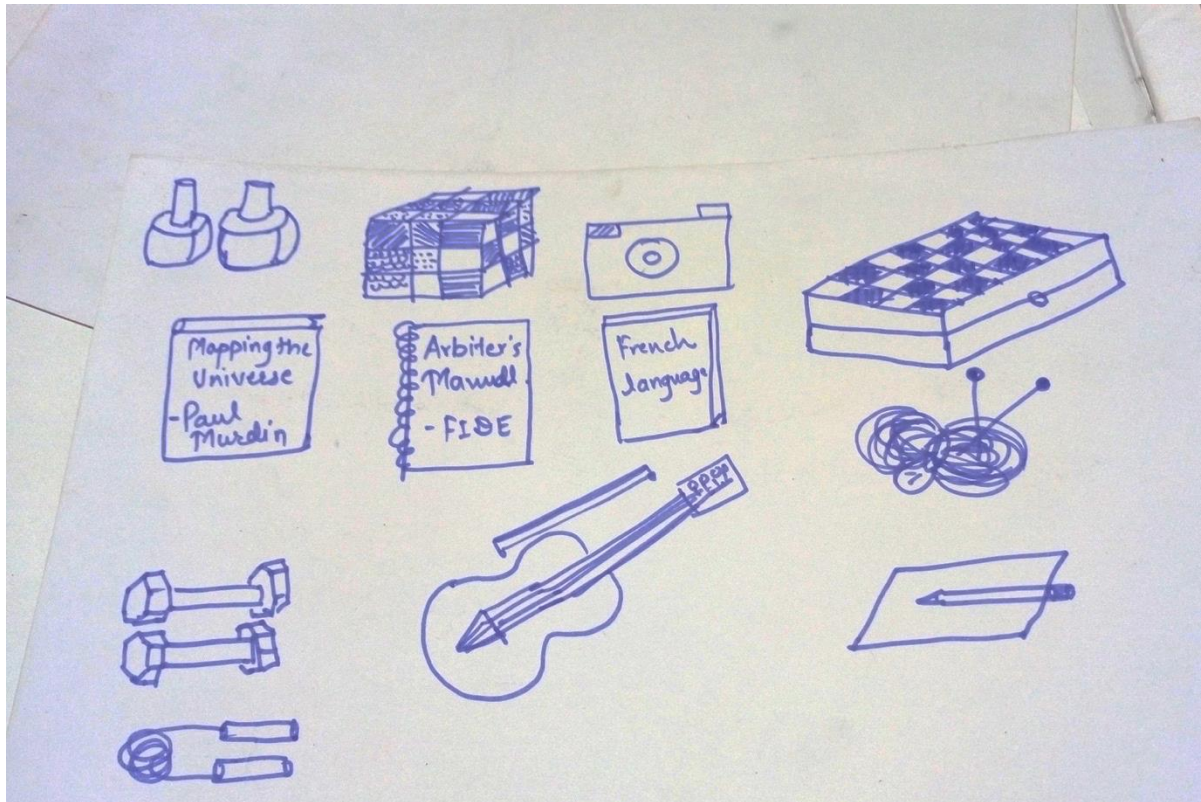
'I think everyone should take their own pillow with them. Because quality sleep is an important factor affecting psychology and some people cannot be comfortable with every pillow. On Mars of course, people will miss their homes and the world, and a pillow they bring from their homes will remind them of the world. Another important point is that when people longing, they hug their pillows while they sleep, and I think it would help. Music also has always had a relaxing effect on me. In addition, research shows that music is good for people's psychology, relaxes them and allows them to reflect their emotions. So classical guitar would be nice. People wouldn't be bored, they can have fun with it. For better music, a few guitarists can come together and create a new piece. This is not something that ends, it is something that develops. While choosing two things to take with me, I tried to choose things that were impossible to end. Because what is consumed there on Mars can lead to greater destruction in humans when they are exhausted.'



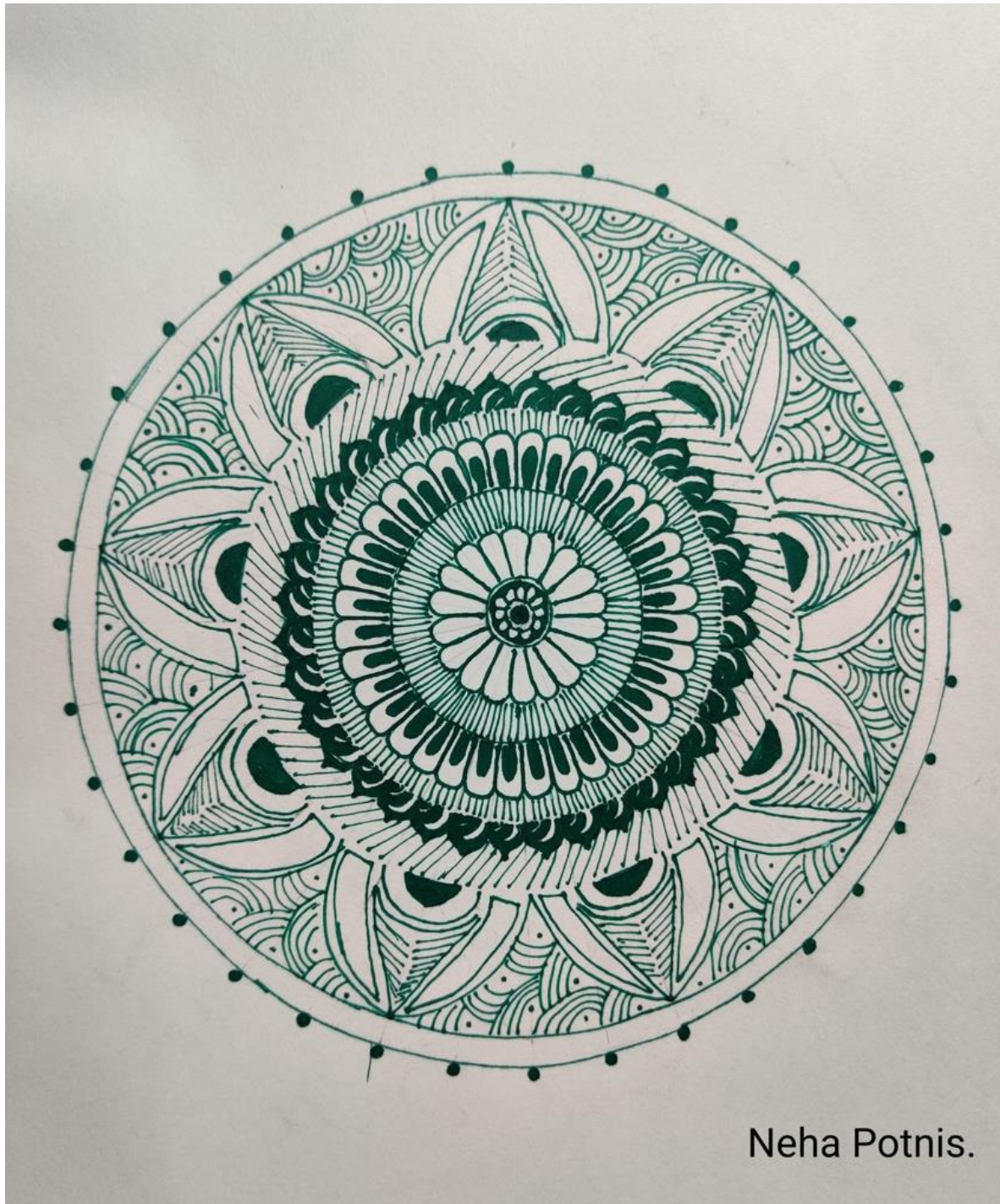
Chiranth CR draws to process his thoughts.



By Flora Duncan.



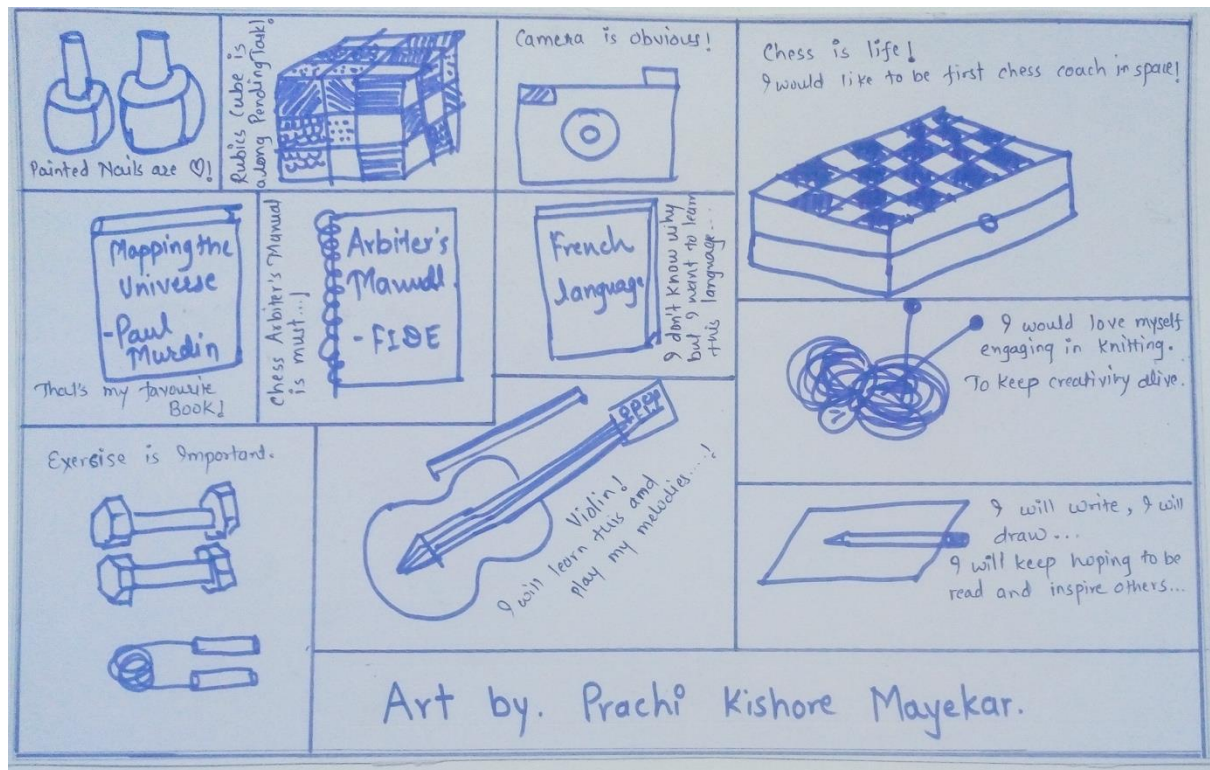
Prachi Mayekar draws how she will create personal space on Mars with her own objects.



Neha Potnis.

Neha writes:

'The picture is of a mandala. A mandala is essentially a diagram/ geometric structure that represents spirituality, meditation. It reminds me of who we are, where we come from, what lies within and beyond us, and, if I ever travel to space, I would love to continue the habit of drawing mandalas to be aware of the above fact as well as keeping spirituality close to my heart.'



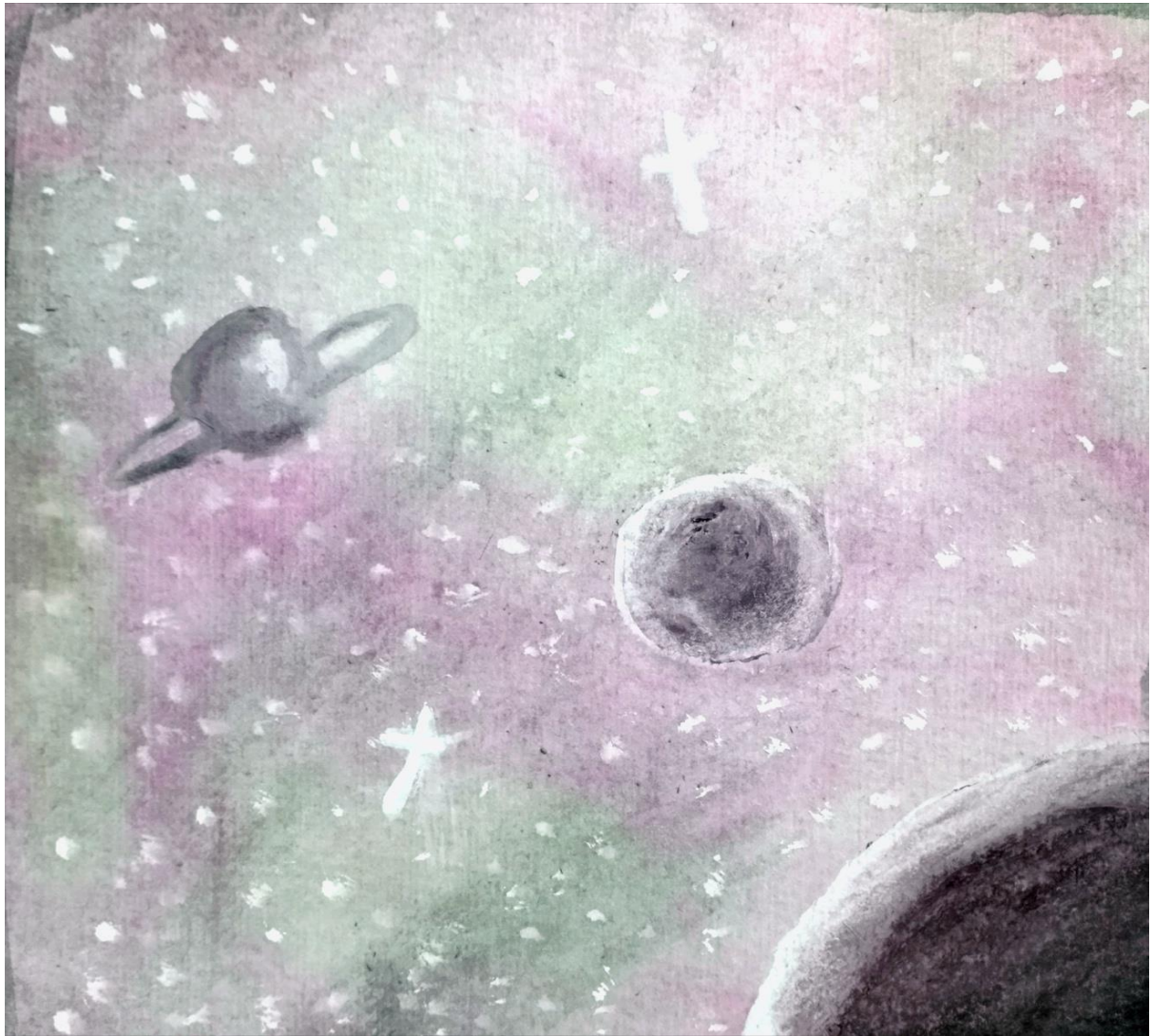
By Prachi Kishore Mayekar.



'Aaaaaaaaaaaaaa' by Nipun Dulitha.



Our Astrobiology Instructor Afshin Khan enjoys the daily creativity of gardening.



'A Scene from the Mind Galaxy' by Melek Kaya.



When I left home for the first time to go to abroad for internship, my mom made this amigurumi doll to be a companion for me.. It's been 4 years and now I'm far away from home again.. I brought my companion with me to South Korea. And whenever I think about Space Missions or Living on Mars , I know it's the only thing I wanna bring to there. It reminds me Mom, my home..

Let's go to Mars together!

-Dilara KILICARSLAN

*Let's
Go to
Mars
together!*



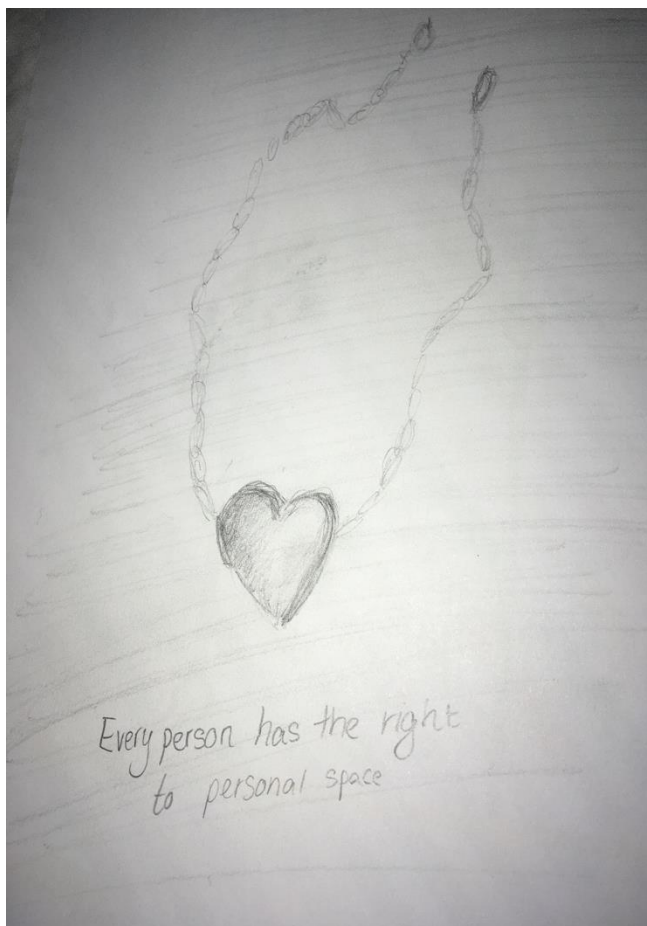
*My
Sleep Friend
from
Mom ♥*

Dilara KILICARSLAN

'My Sleep Friend from Mom' by Dilara Kılıçarslan.



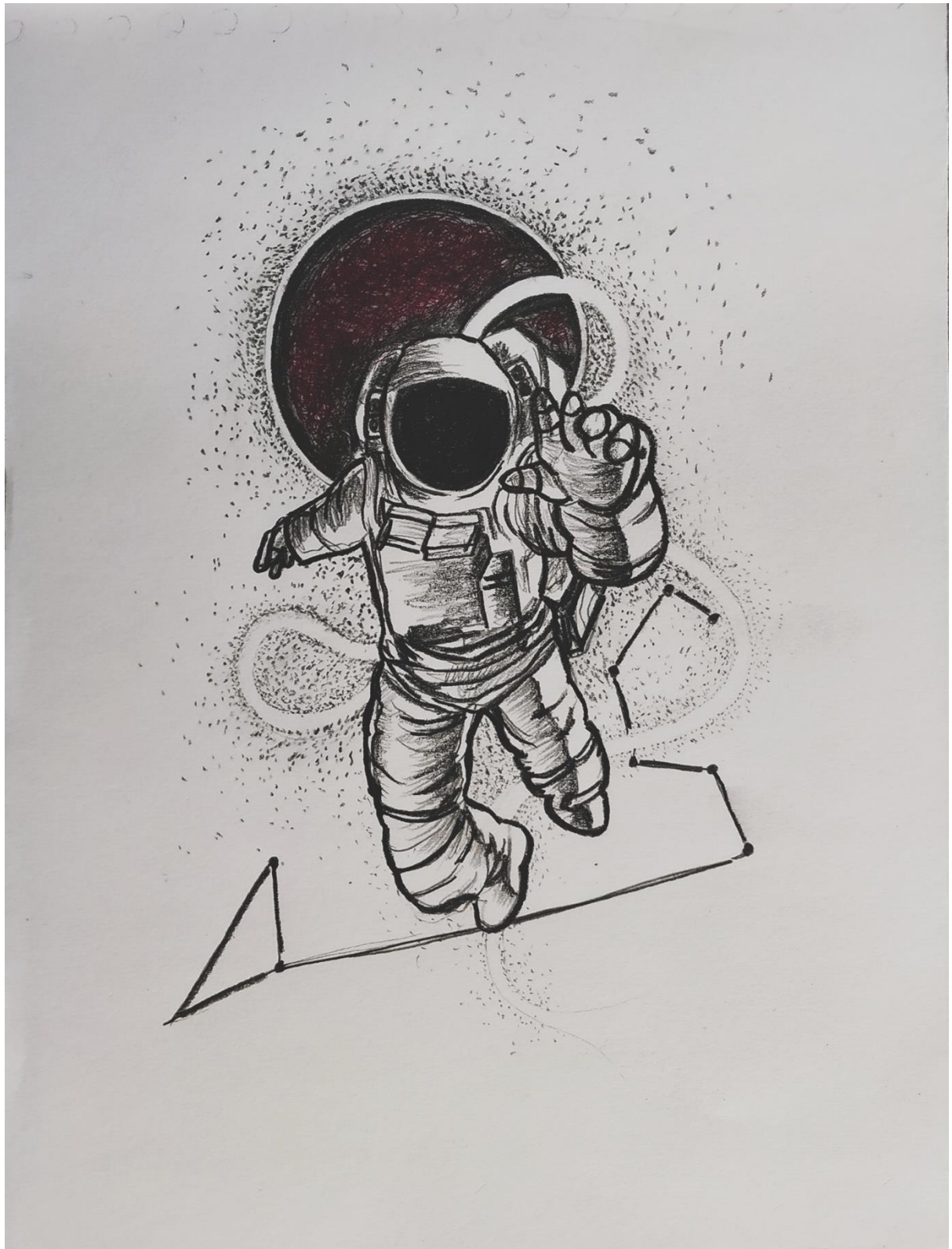
'Living on Mars- A dream of everyone!' by Prerana Jain.



Gaby believes that everyone on Mars has the right to choose their own form of expression.



'Me in 6 parts' by Andrea Collantes Biggio.



By Deshrai Deepak Kapoor.

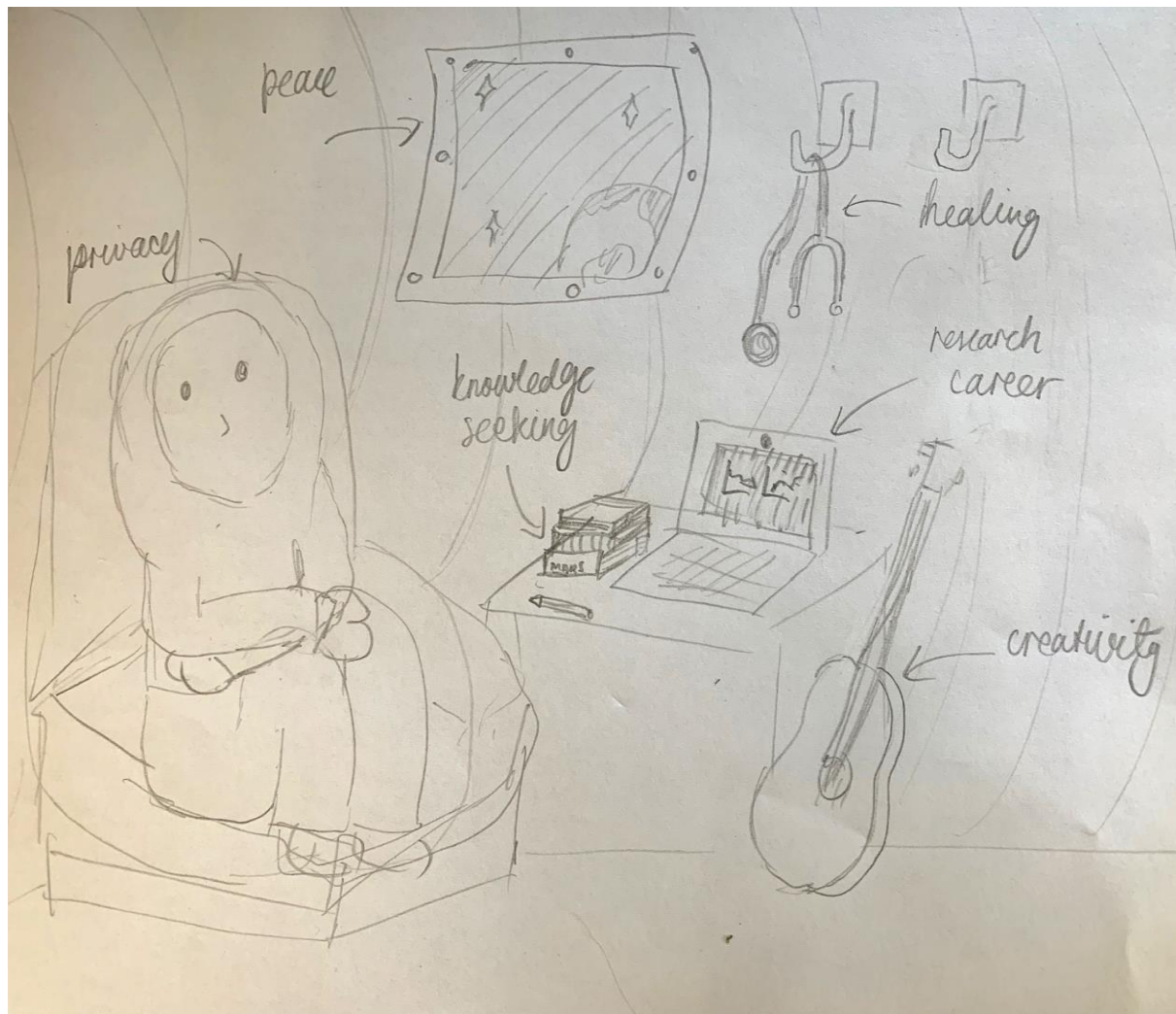


'The Planet Medley' by Sai Arun Dharmik.



Ethan writes:

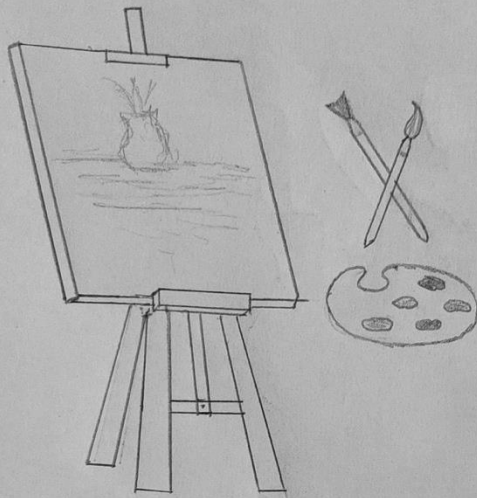
‘As for the principle, I feel every person (on Mars, here, or anywhere) has a right to their own space to be their authentic self, away from expectation and deliverables. As inherent explorers, we must access that space to tap into the creativity, vulnerability, and passion that allow us to take the risks leading to big rewards. Guitar and nature are my most valued avenues for this.’



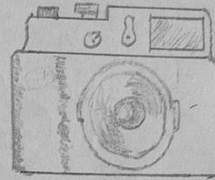
Vi Tran has a room on a Martian space station which contains all the things she needs.



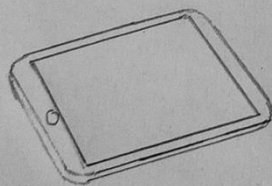
Nawang Sherpa draws about freedom in a small confined space.



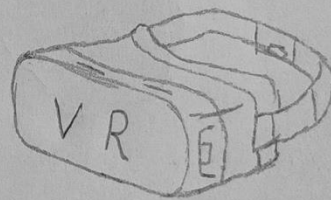
DRAWING BOARD & COLOURS
{ MY FAVOURITE STRESS-BUSTER }



CAMERA
{ TO CAPTURE BEAUTIFUL
LANDSCAPES ON MARS }



TABLET WITH
EBOOKS

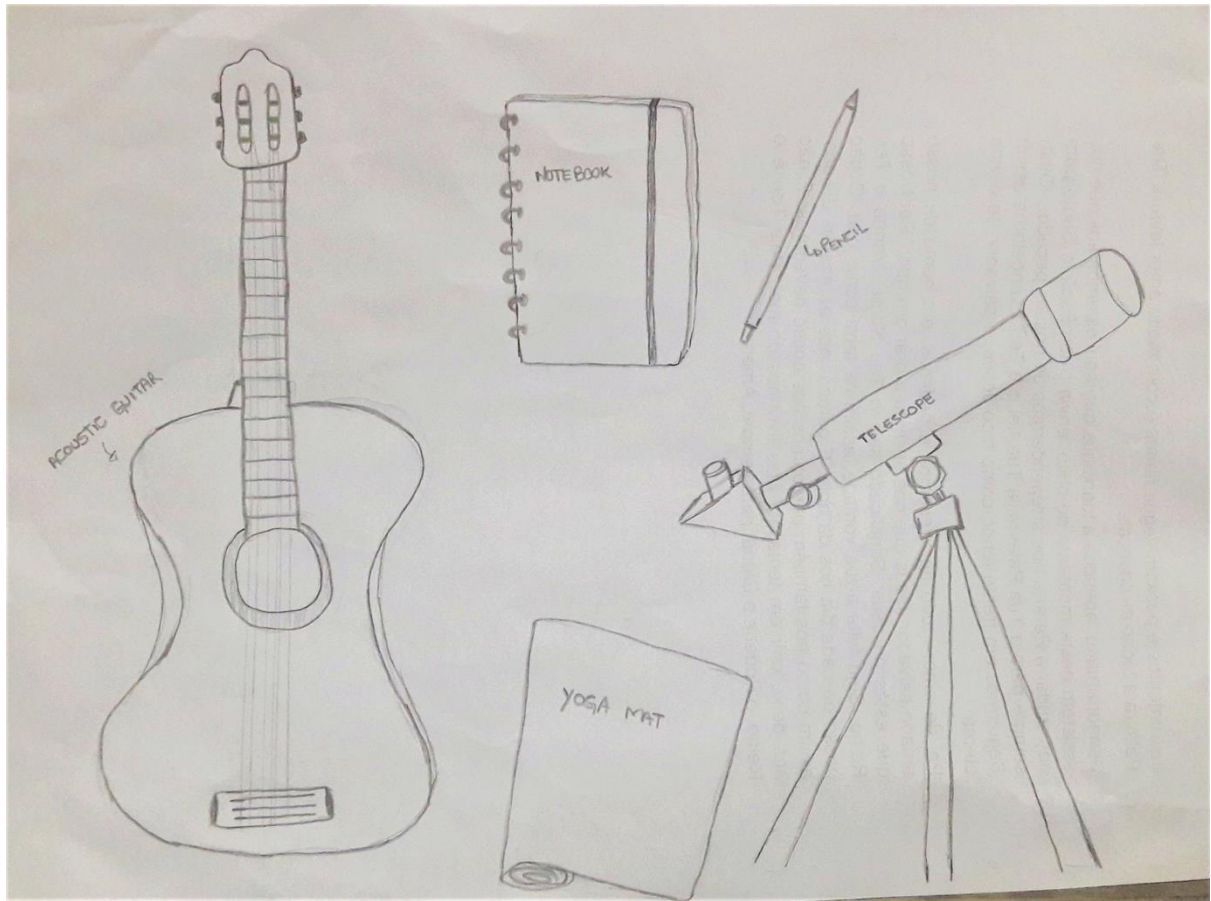


V.R. GOGGLES
{ FOR WATCHING VIDEOS
FROM EARTH, ITS LIFE
MOUNTAINS, RIVERS, PEOPLE,
FESTIVALS, ANIMALS AND
MUCH MORE }

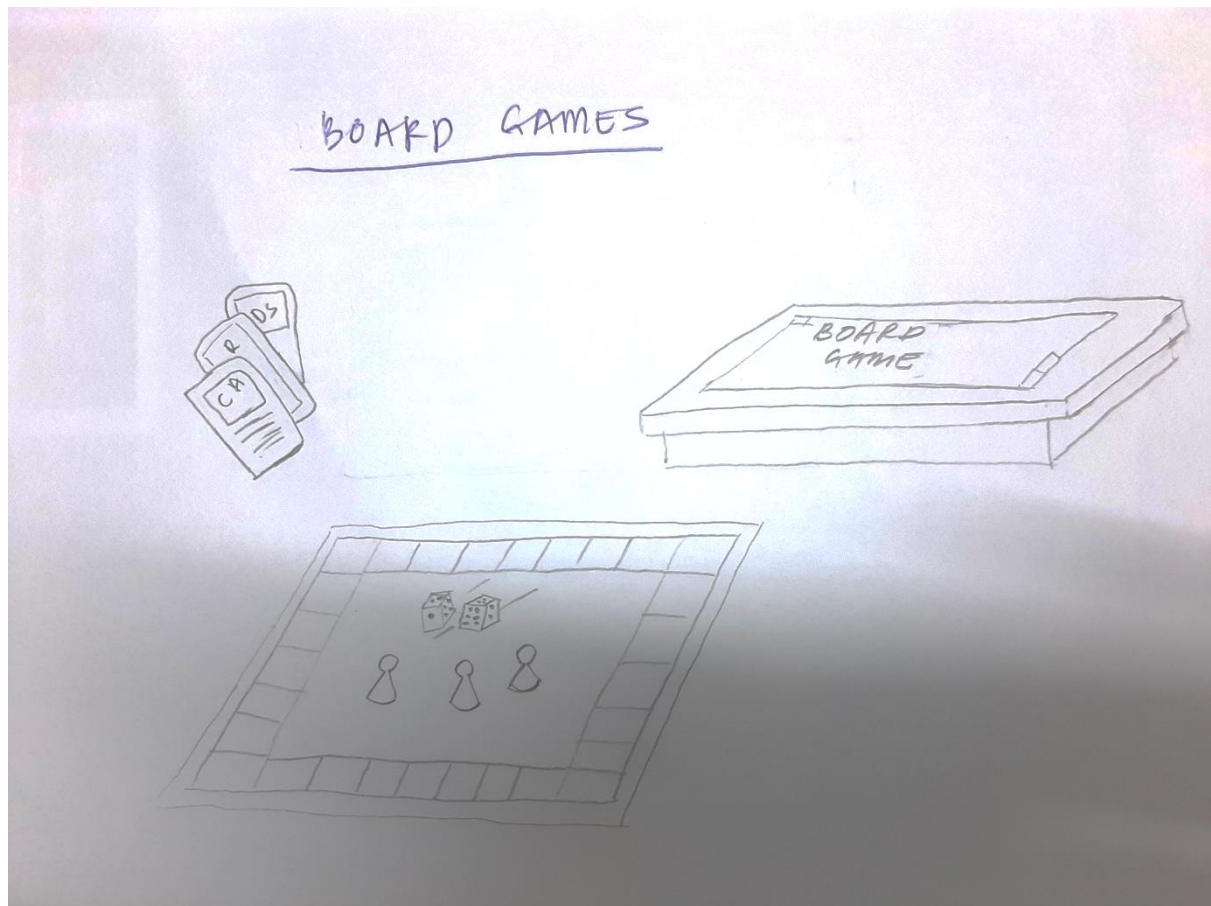
By Deepanshu Mathur.



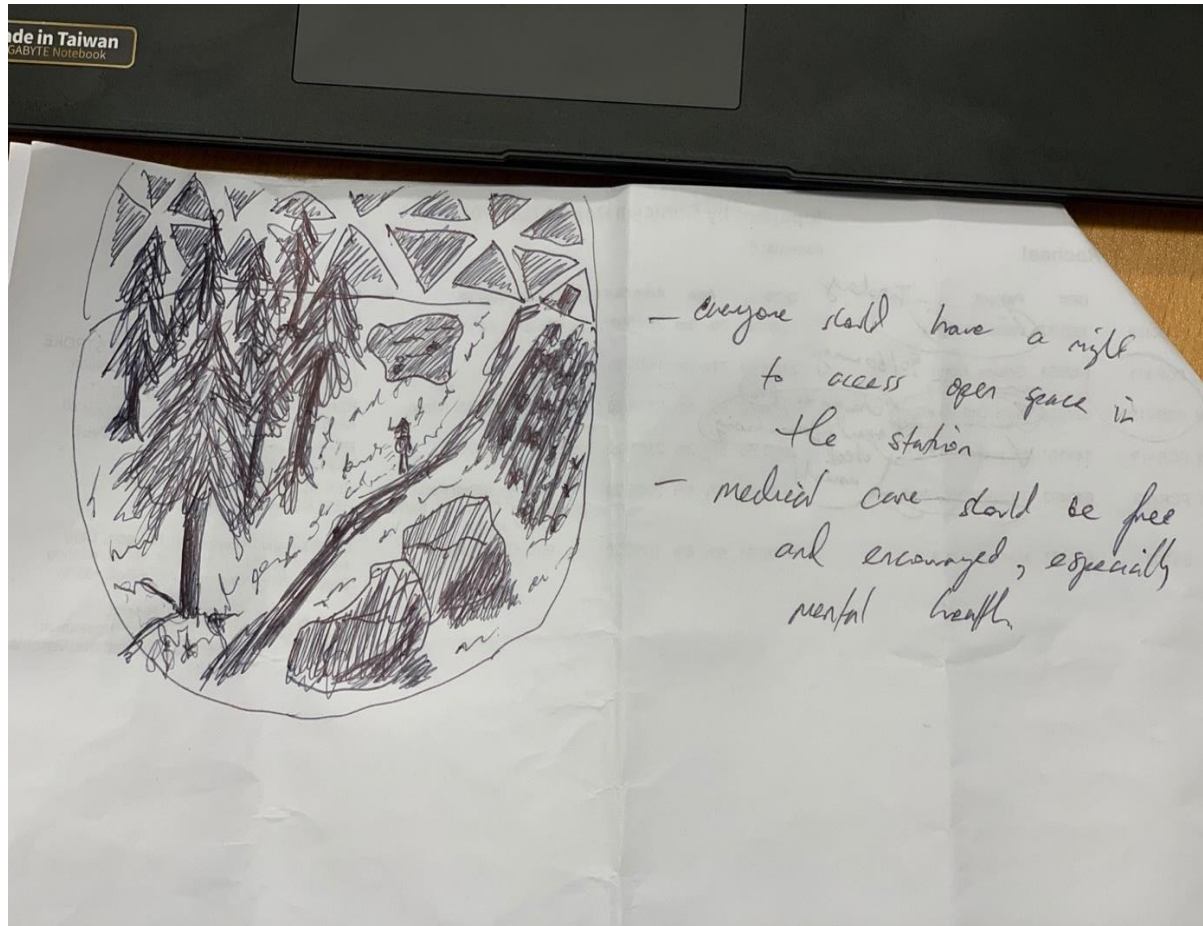
By Sakshi Rane.



By Maiara Hartwig Bessa.



'All work and no play makes Jack a dull boy' by Sathesh Raj.



James Kurrie believes open space and medical care is essential for every person living in the future on Mars.



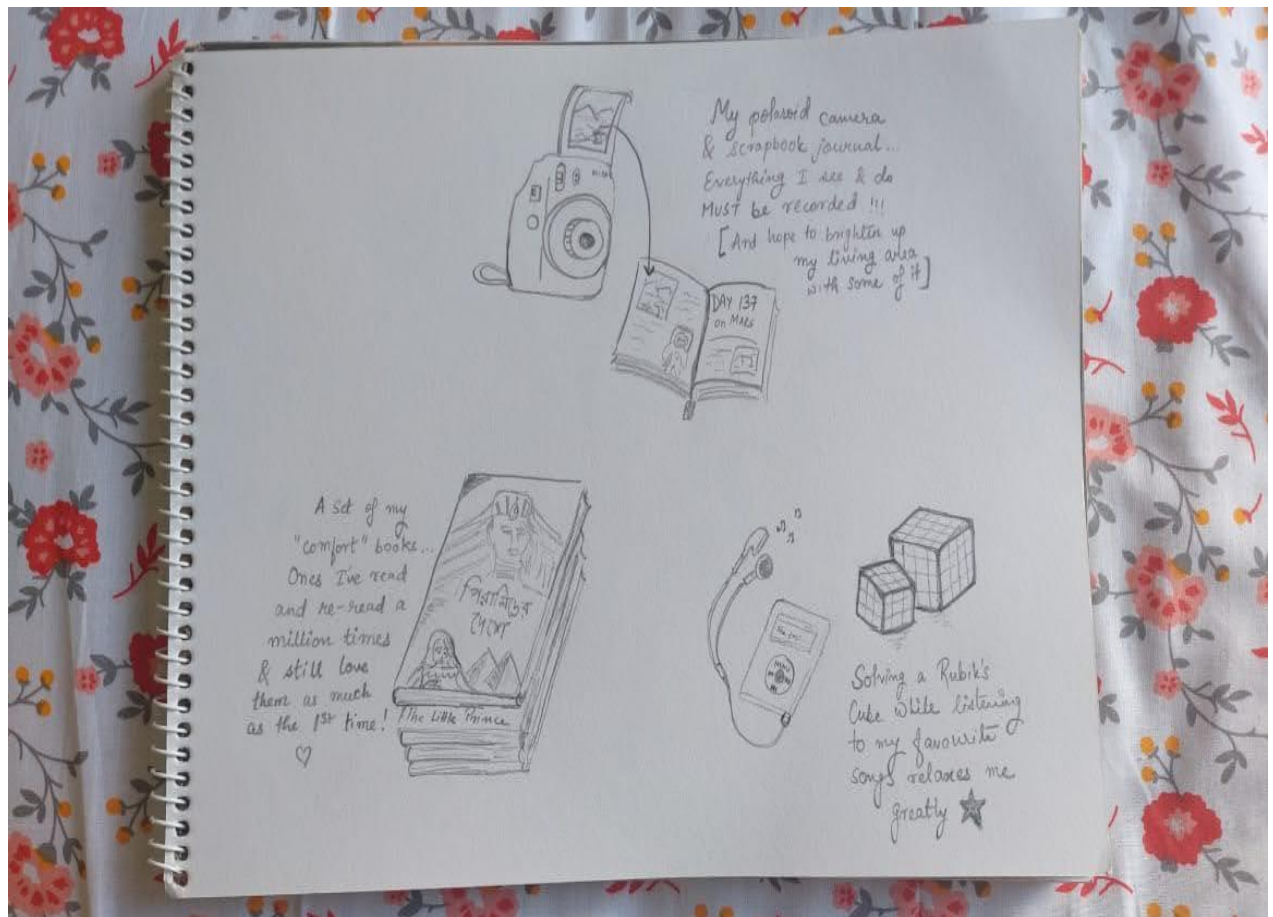
'Human thought makes the spirit grow' by Juan Rivas Santisteban.

'Mars through my telescope' by Juan Jose Gomez.

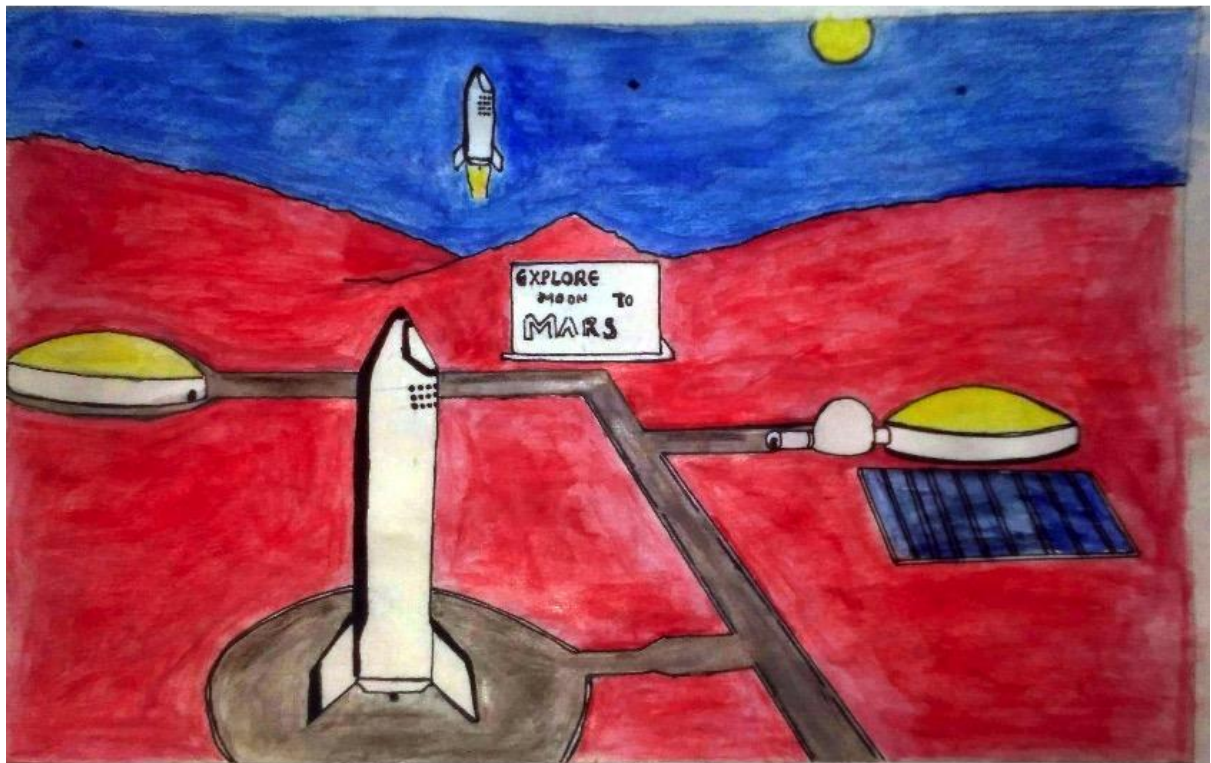




'Snapshot of Life, Watercolour camera' by Christina Arancibia Evans.



'Living on Mars', a sketch by Rwitika Chatterjee.



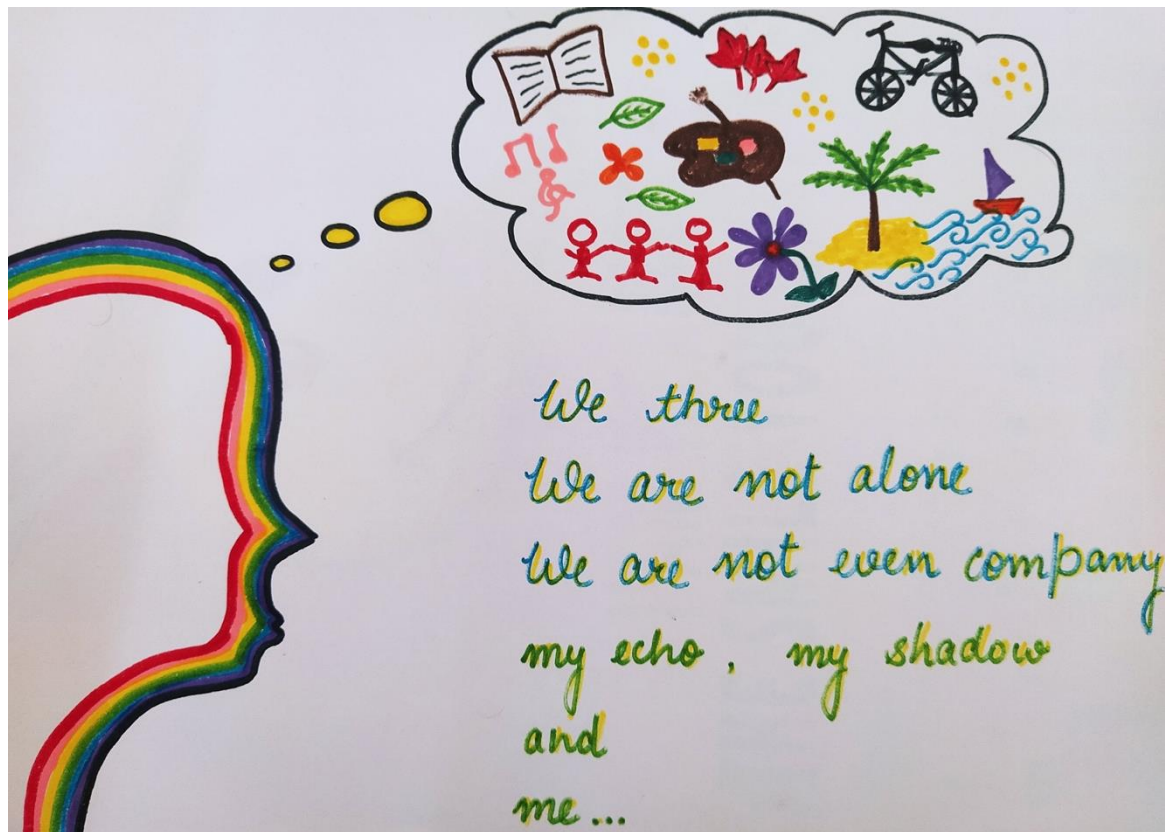
By Unknown (?).



'Starman' by Neha Maanju.



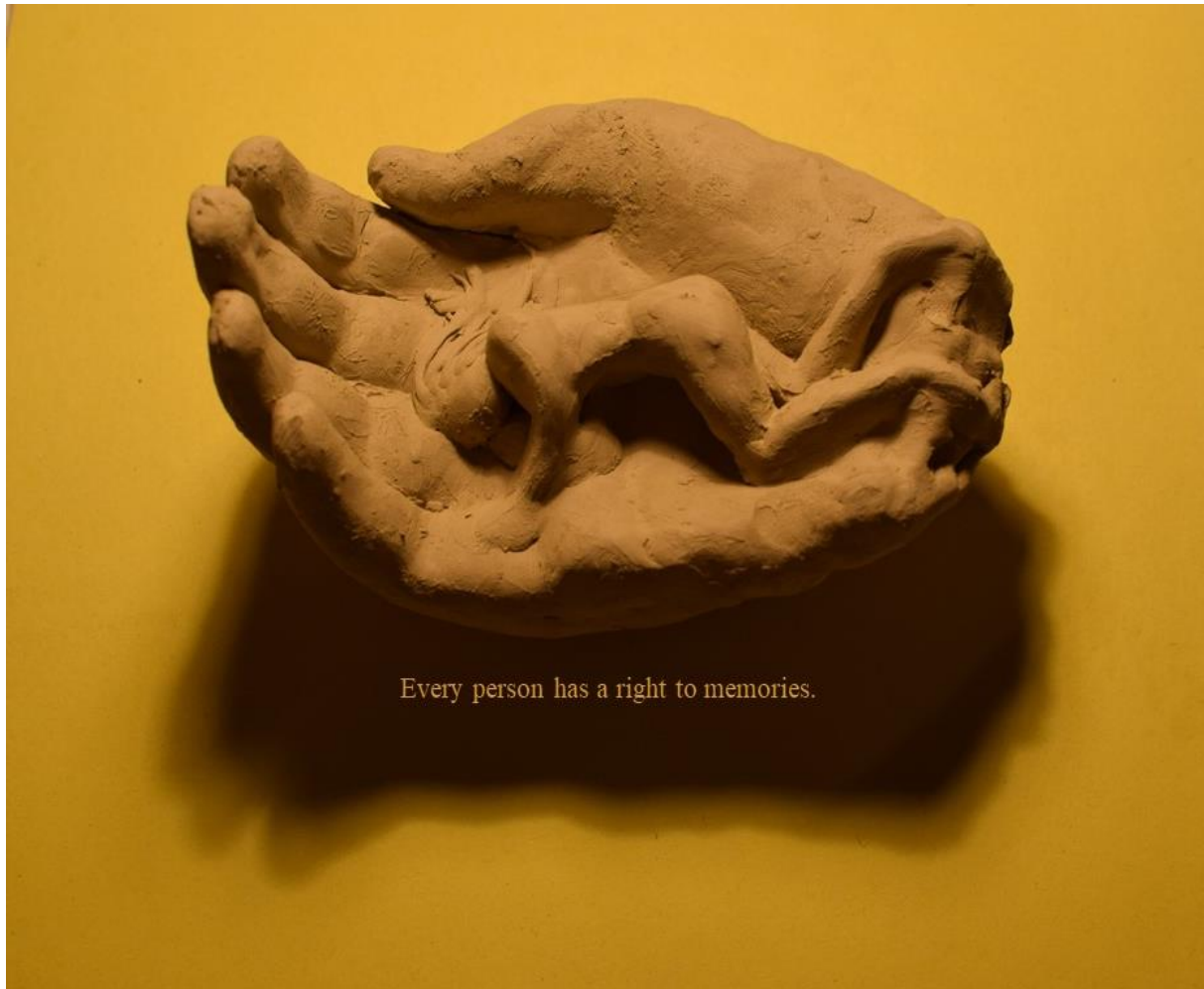
'Step out' by Anurup Mohanty.



By Swapnil Singh.



By Priyanka D.



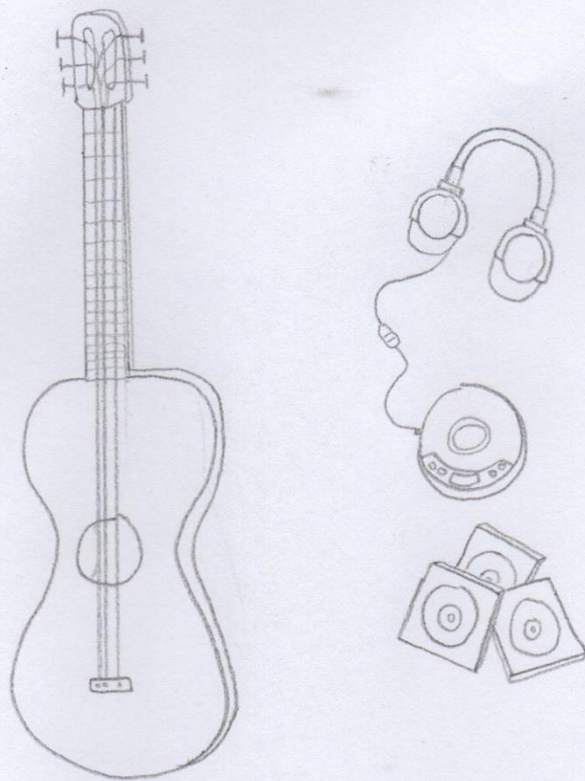
'Home' by Iva Šutevski. Iva writes:

I attached one of my sculptures made of clay. I enjoy sculpting very much because it makes me calm, peaceful and it's also loads of fun. I could make jewellery or little figures for other members of the new habitat, that would remind them of Earth, home or loved ones. I think that clay might be an ideal material to bring with us to another planet since it can be repurposed just by adding water.



'Mental peace#loveforsketch' by Pratiksha Dhotare.

Art liberates
the Soul 🎵



Support the
Artists!

'Support Extraterrestrial Art!' by Federico Granados Unger.



Books should be held and loved, and physical books are always better for this.
Books from home will help us to remember from where we came.
New books written on Mars will help us to understand how we have changed.

'Words from home' by Invisibelle.



Manasi Sawant draws the future of our planet.

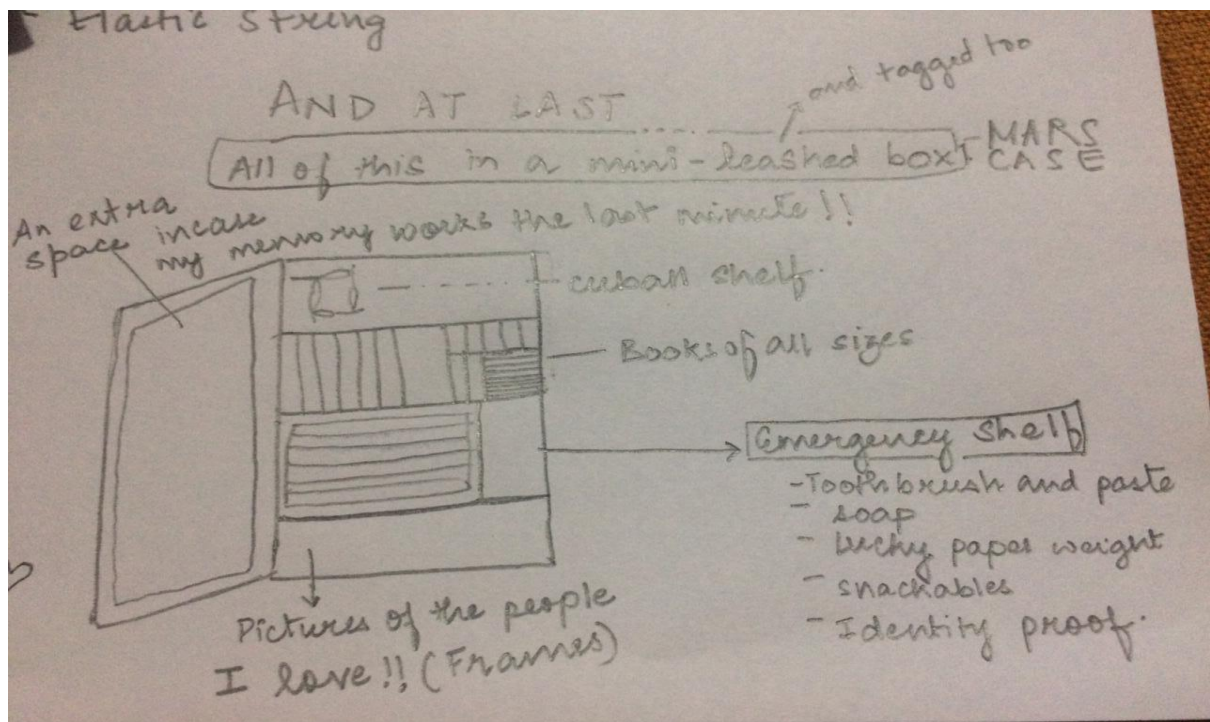
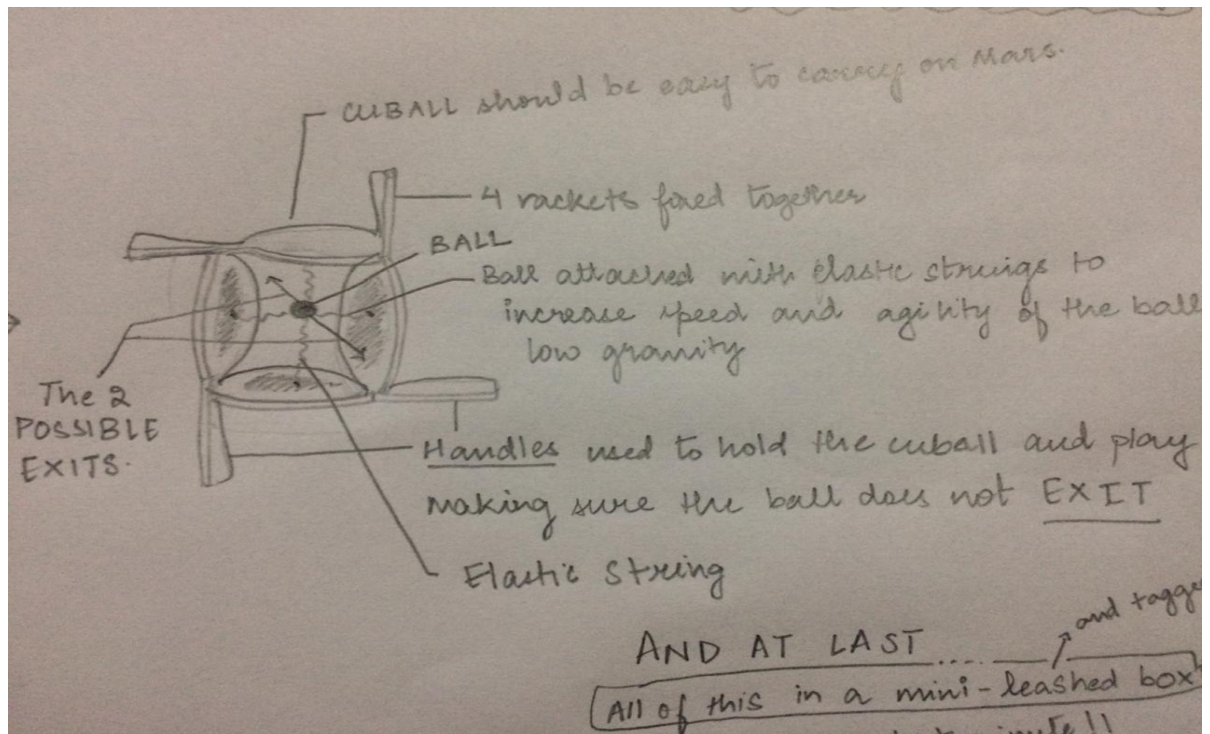


'Some love from Mexico' by Iliana Suarez.

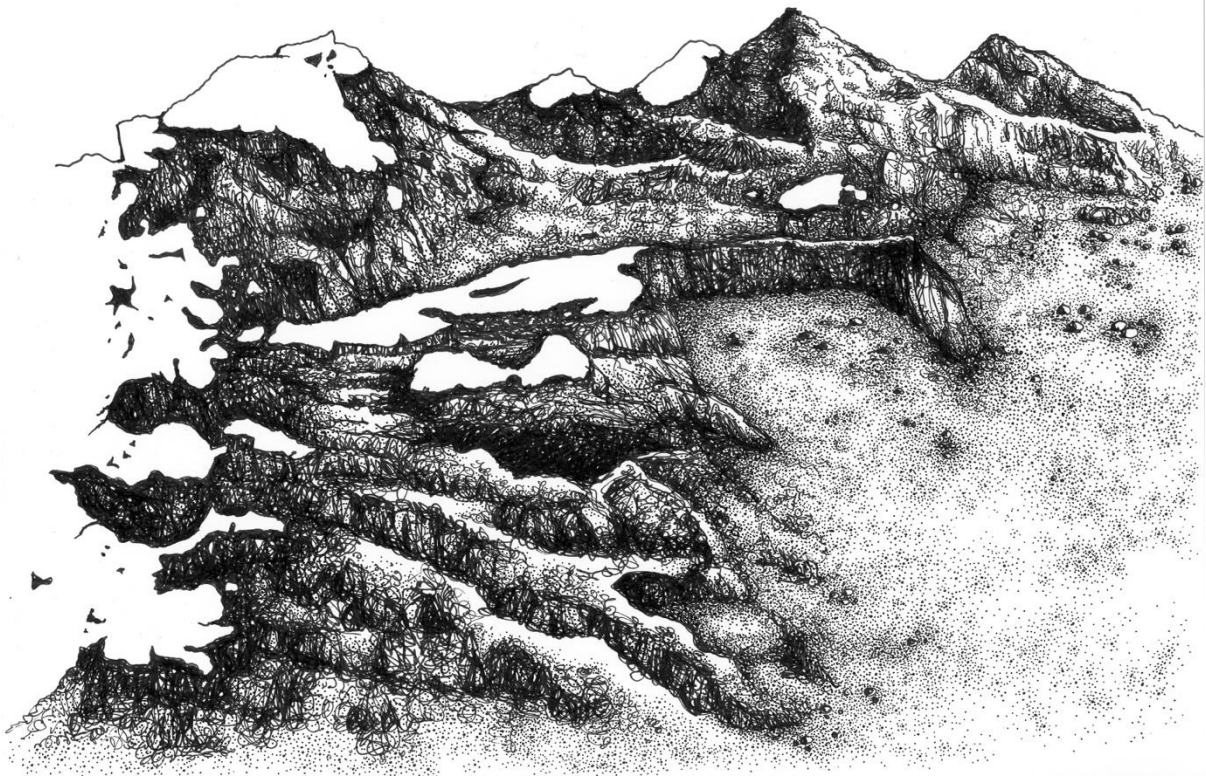
Rashmi writes:

I don't usually draw (☺) but after seeing everyone's artwork, I felt like submitting mine too. I made it one day thinking about a girl with the telescope observing the moon, and after that thought, I went to changing the colour of the moon, making stars colourful and big, living with ghosts (lil guy on scope), robots (orange guy with red flag) and animals (hahah, I tried to make a dog but then it turned into a zebra or something), plants and flowers and of course the annoying clouds which coming from behind to ruin the sky (it's always cloudy whenever I wanna stargaze or do some Astrophotography☺).



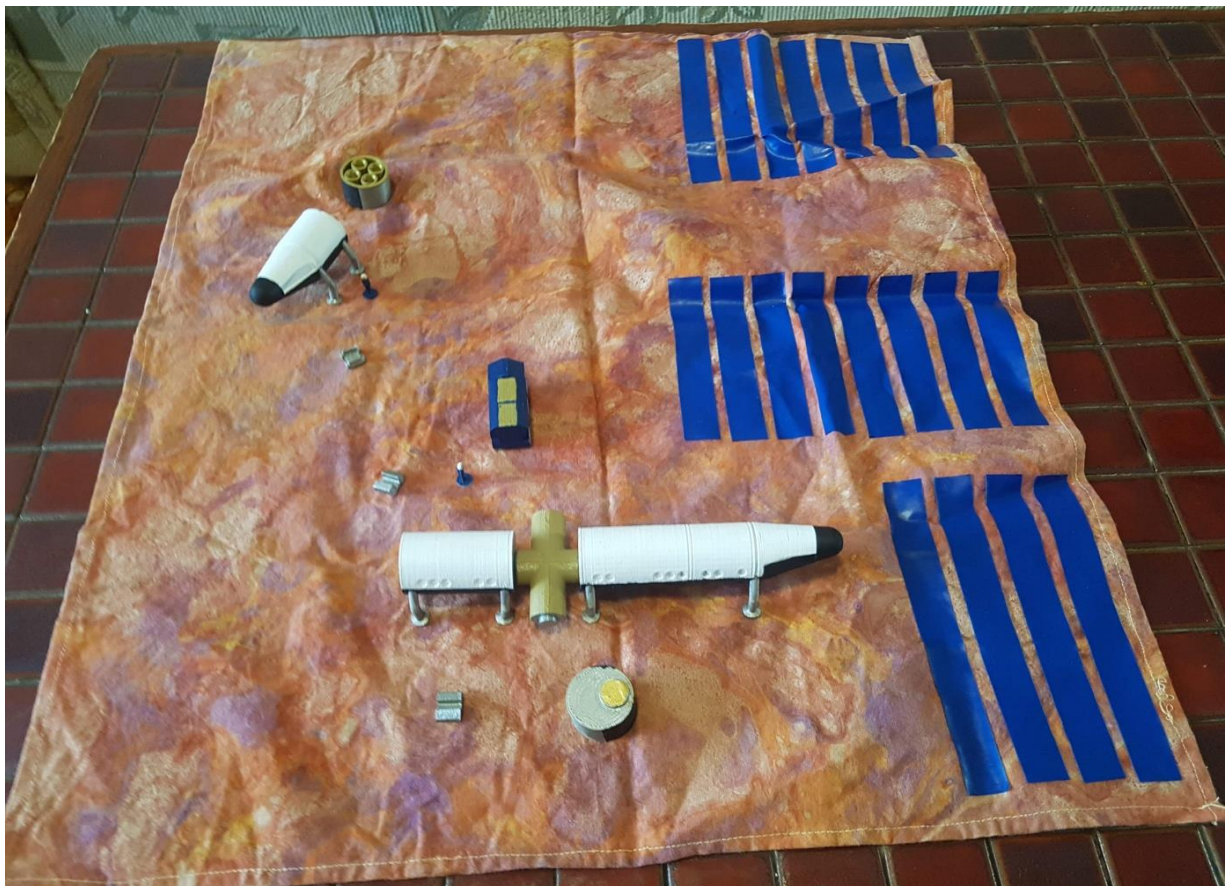


WhatsApp Images 2020-10-22 at 9.05.13 AM by Hitankshi Mohanty.



'Landscape on Comet 67p' by Christine Mizzi.

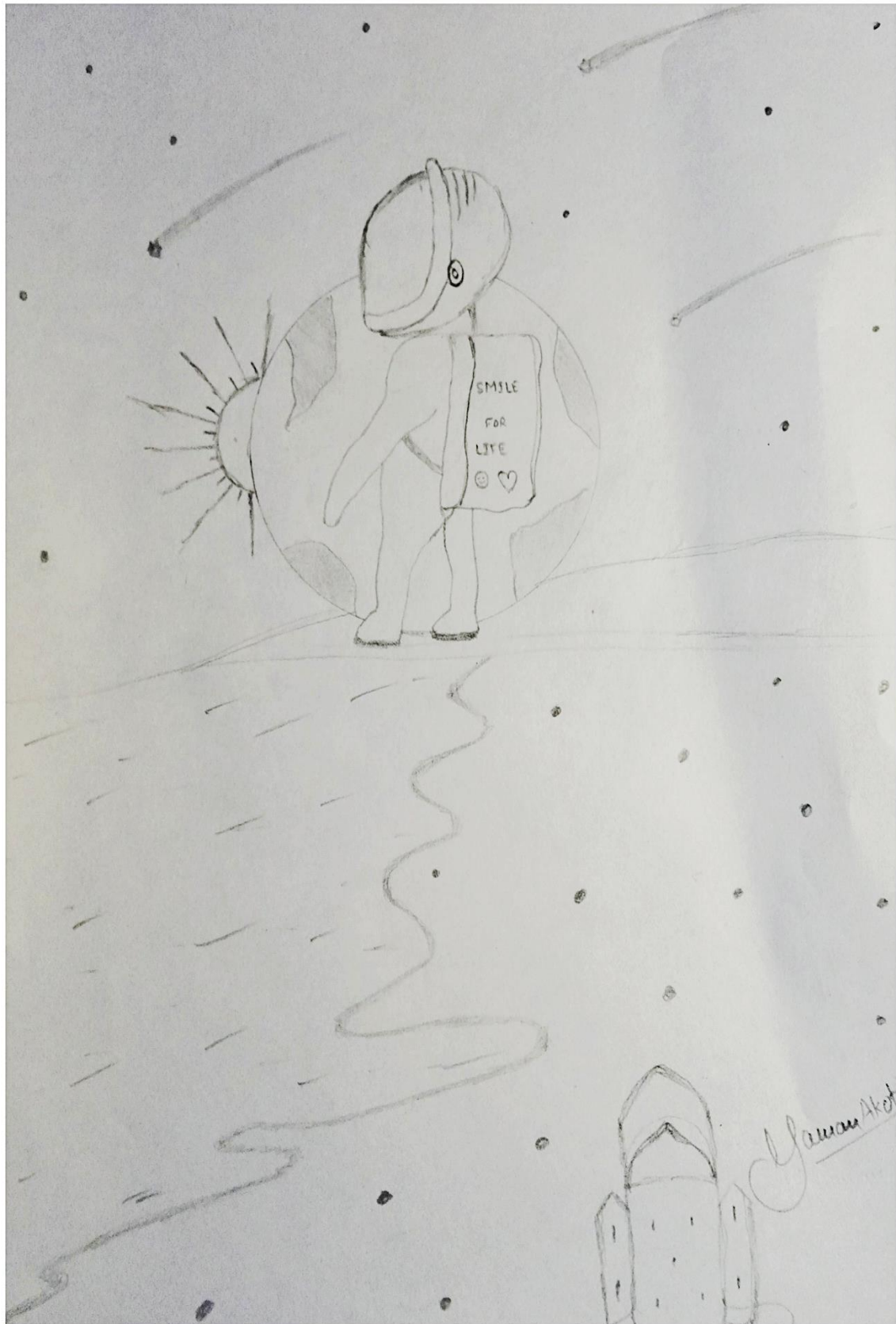
Our instructor Jon Clarke, President of Mars Society Australia has been building models for our proposed MSA habitat, Mars OZ, in the Australian desert.

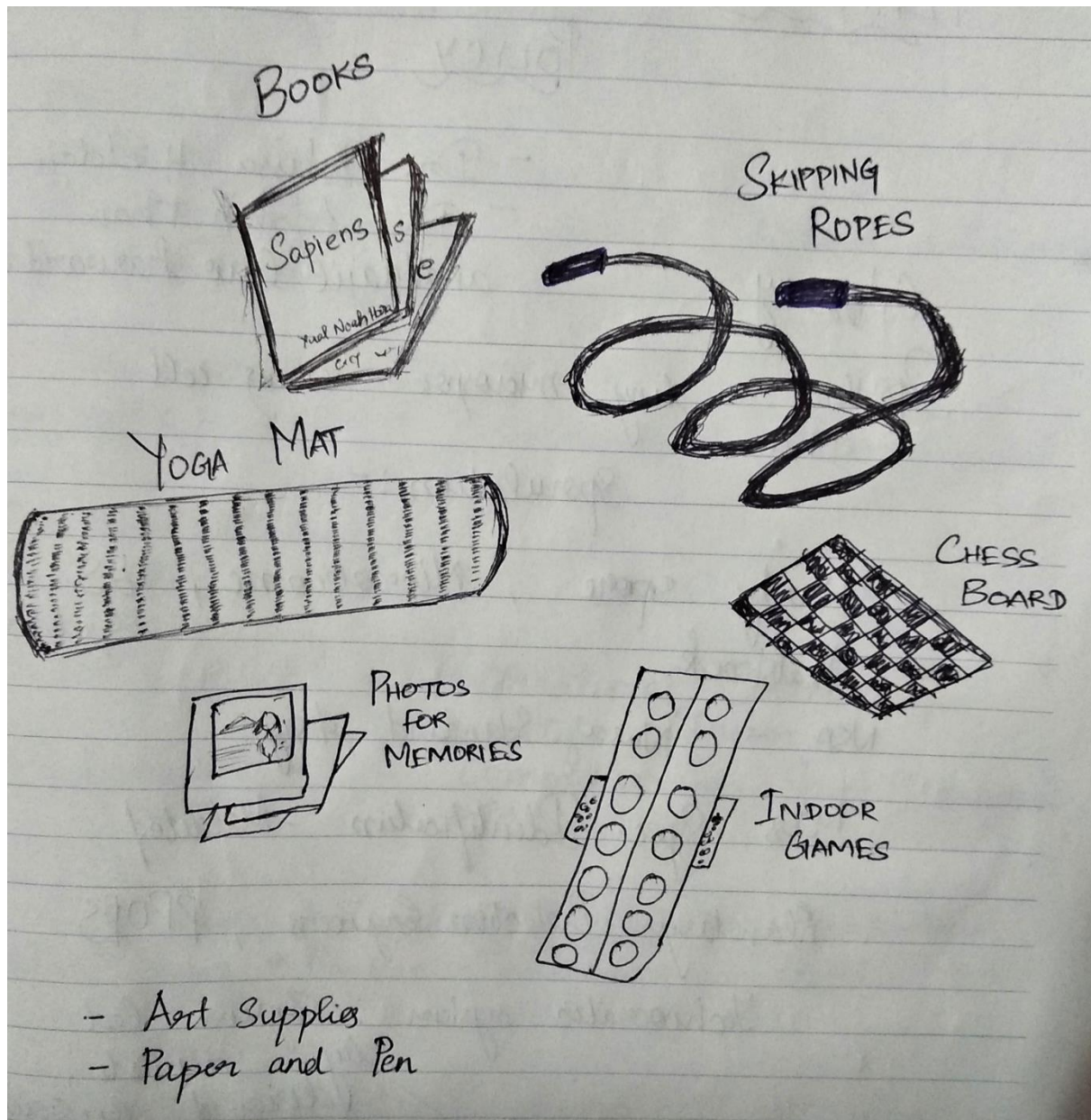


Jon also has an interest in rockets. This is his model of the Mars Excursion Module designed by North American Rockwell in 1968.



‘SMILE FOR LIFE’ by Yaman Akot.

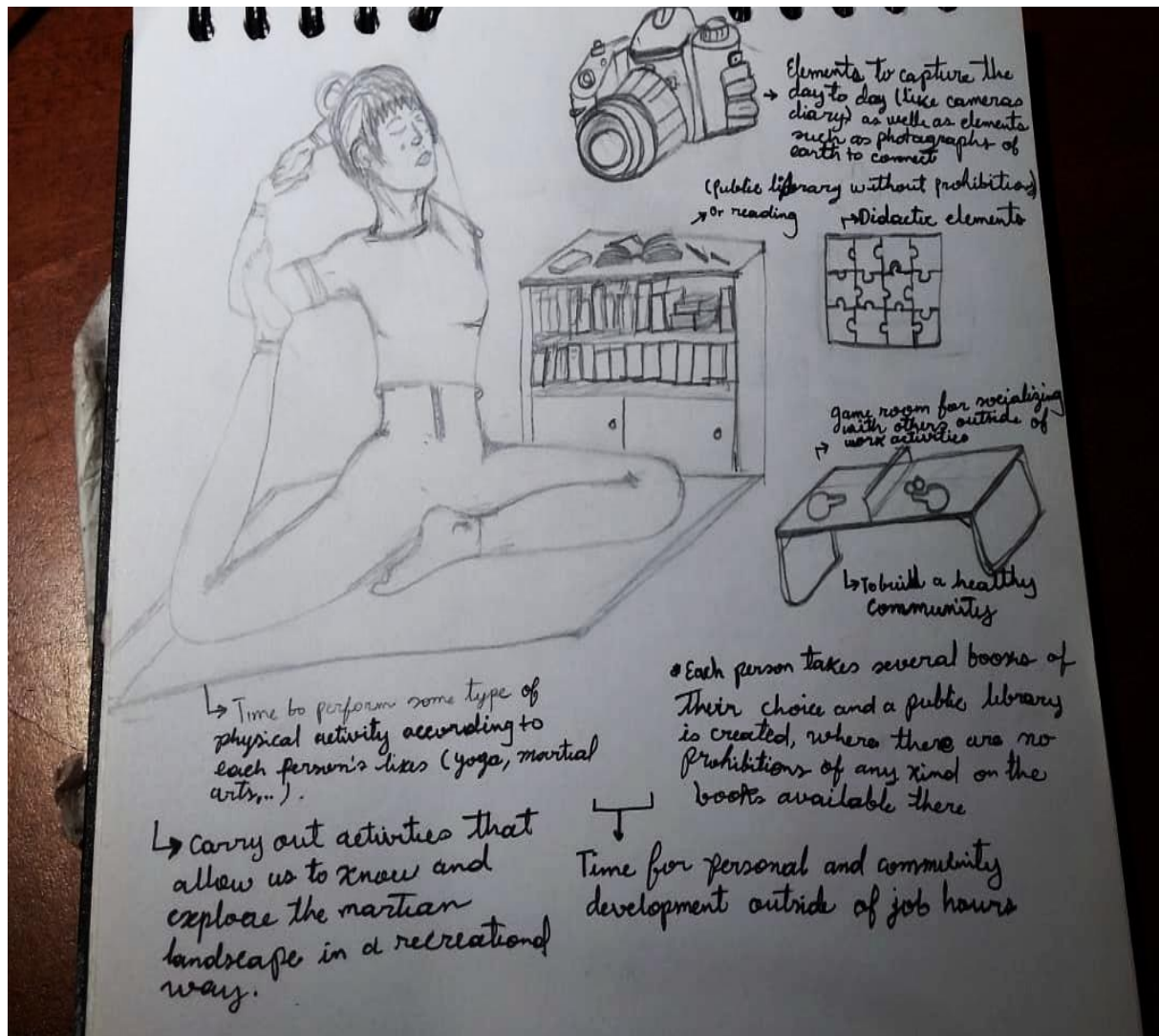




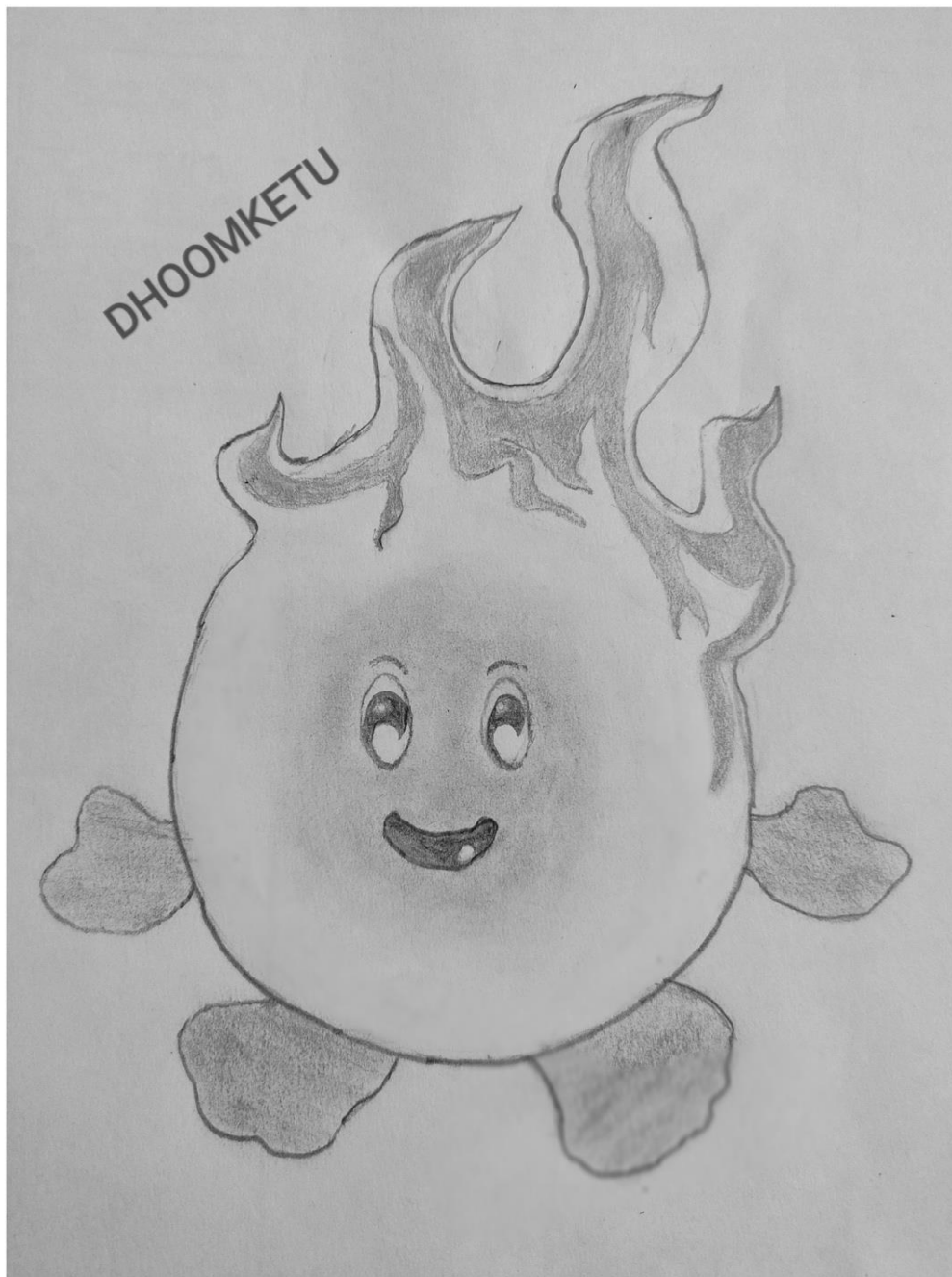
'Things on Mars' by Ilankuzhali Elavarasan.



'Feeling at home with Virtual Reality' by Sachini Wickramasinghe Pubudika.

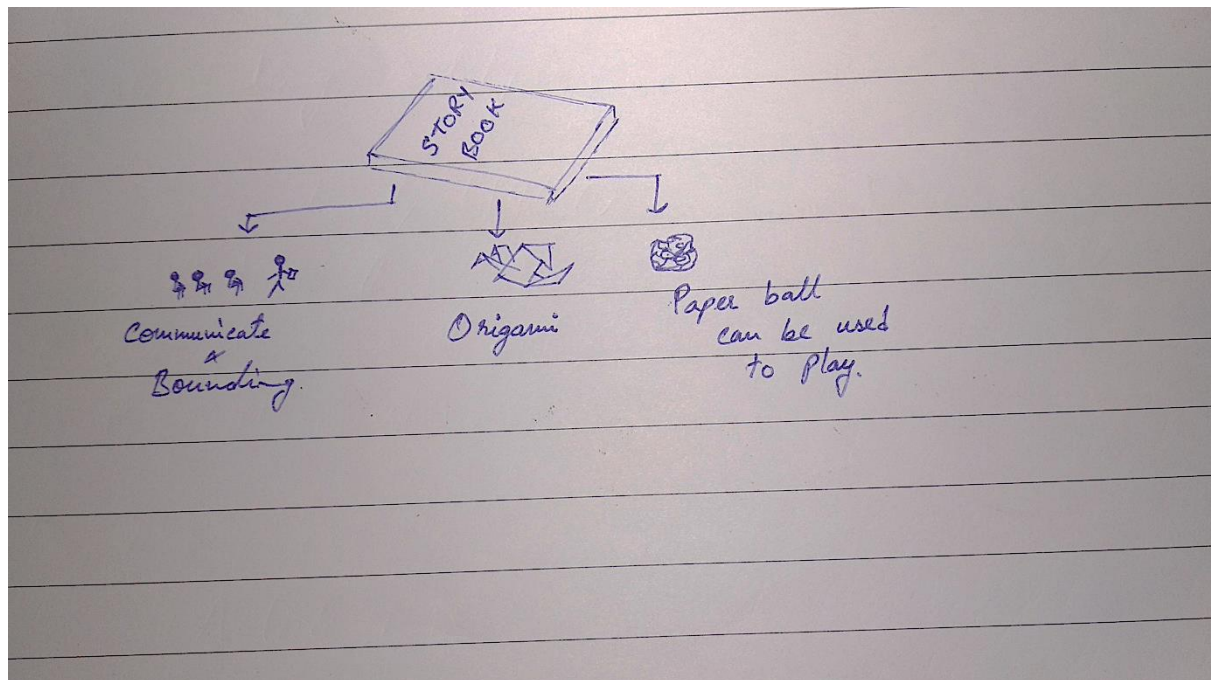


'Life on Mars' by Jessica Andrea Ramirez.



‘Things I would carry with me to the Mars & Course Mascot’ by Deepanshu Mathur.

'Things I would like to take with me to Mars' by Meghma Sarkar.





'The Next Generation' by Bokeh Vedanth Sharma.

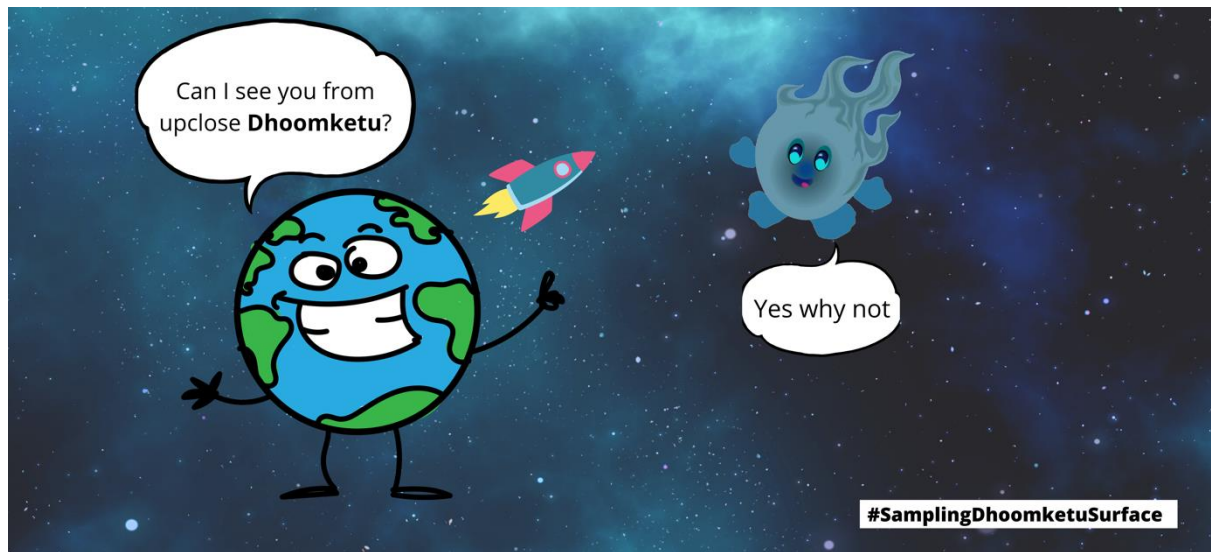


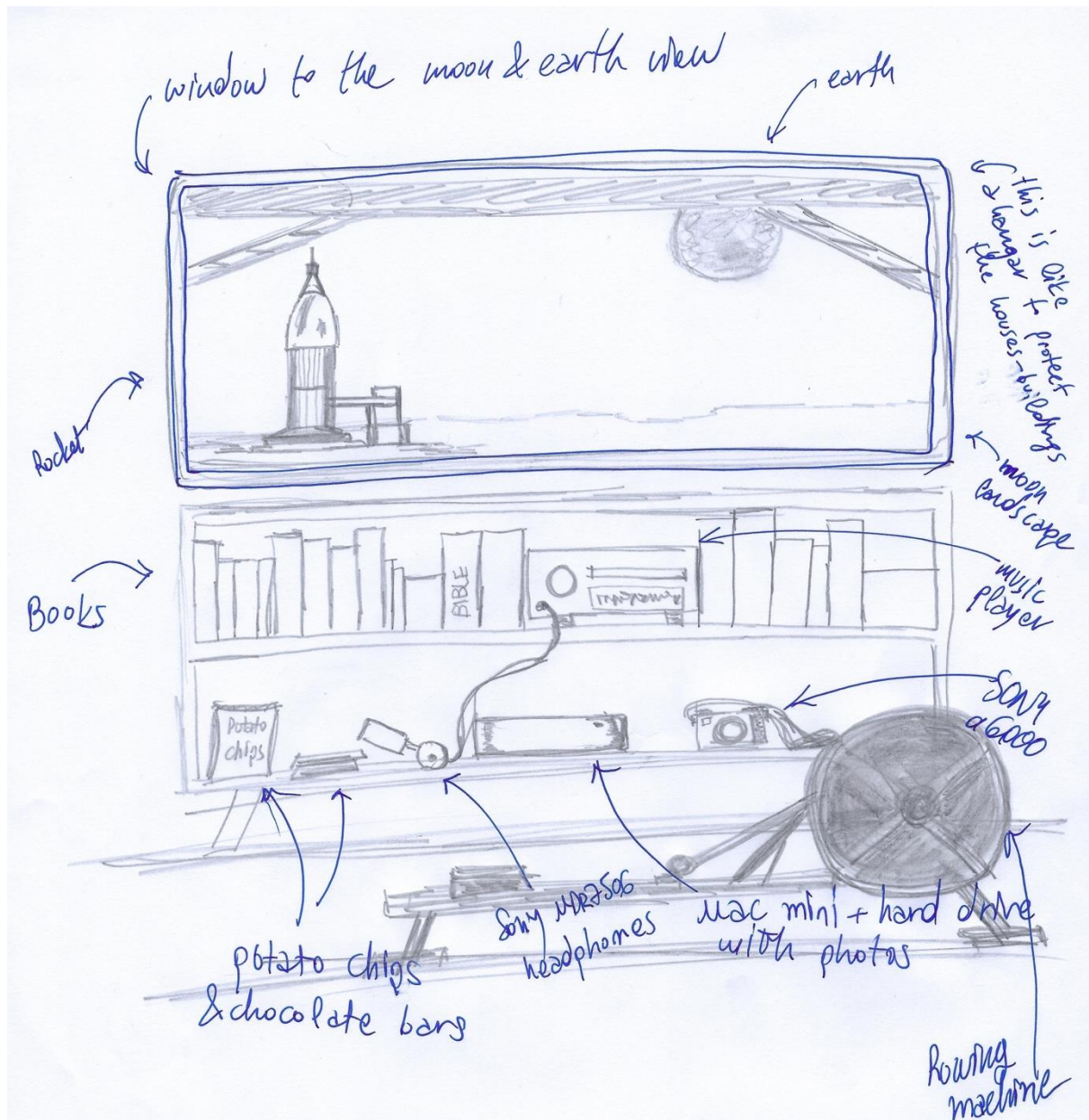
'Once upon a time in Mars', from the first-hand experiences of Camilo Andrés Reyes at the Mars Desert Research Station in Utah.



'Not a regular stroll' by Katari Anu Deepika.

'Sampling Dhoomketu' by Rishi Gandhi.





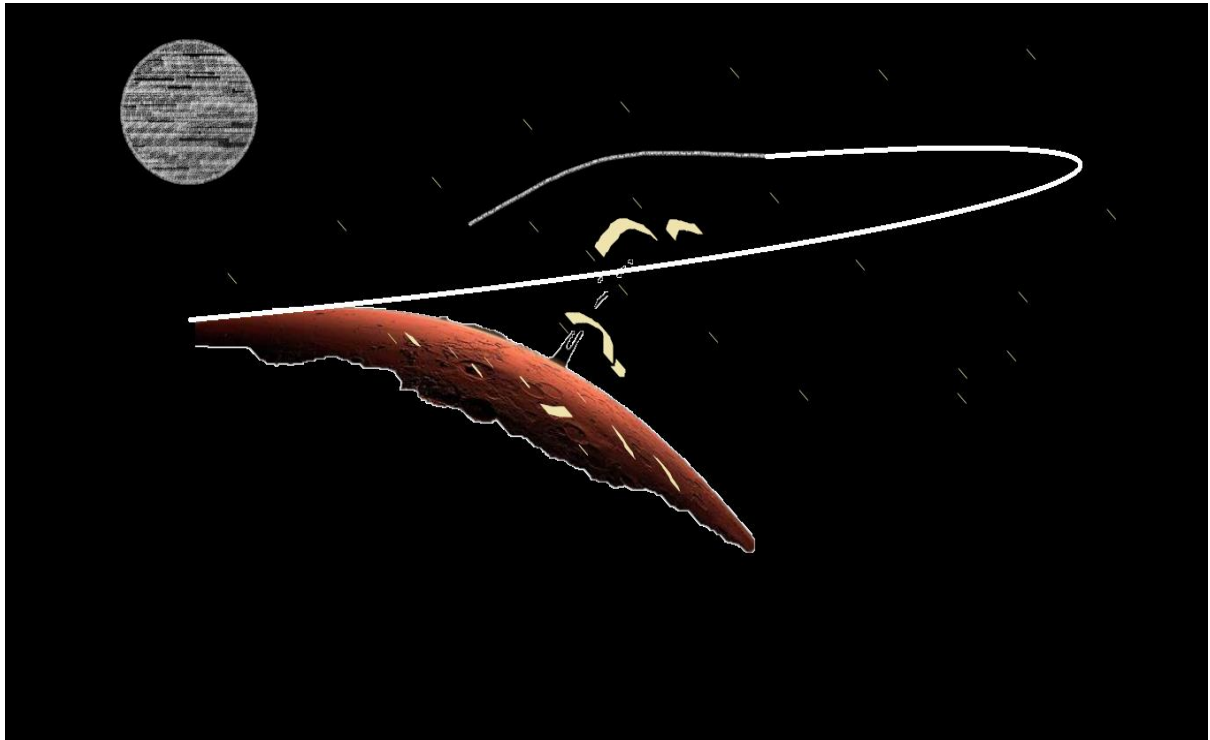
I'd consider that people living here (moon, mars etc)

Should always have the right to financial stability; meaning that they should never have in mind about their financial survival and well-being.

Of course, the primary is oxygen & resources and then follows the financial part.

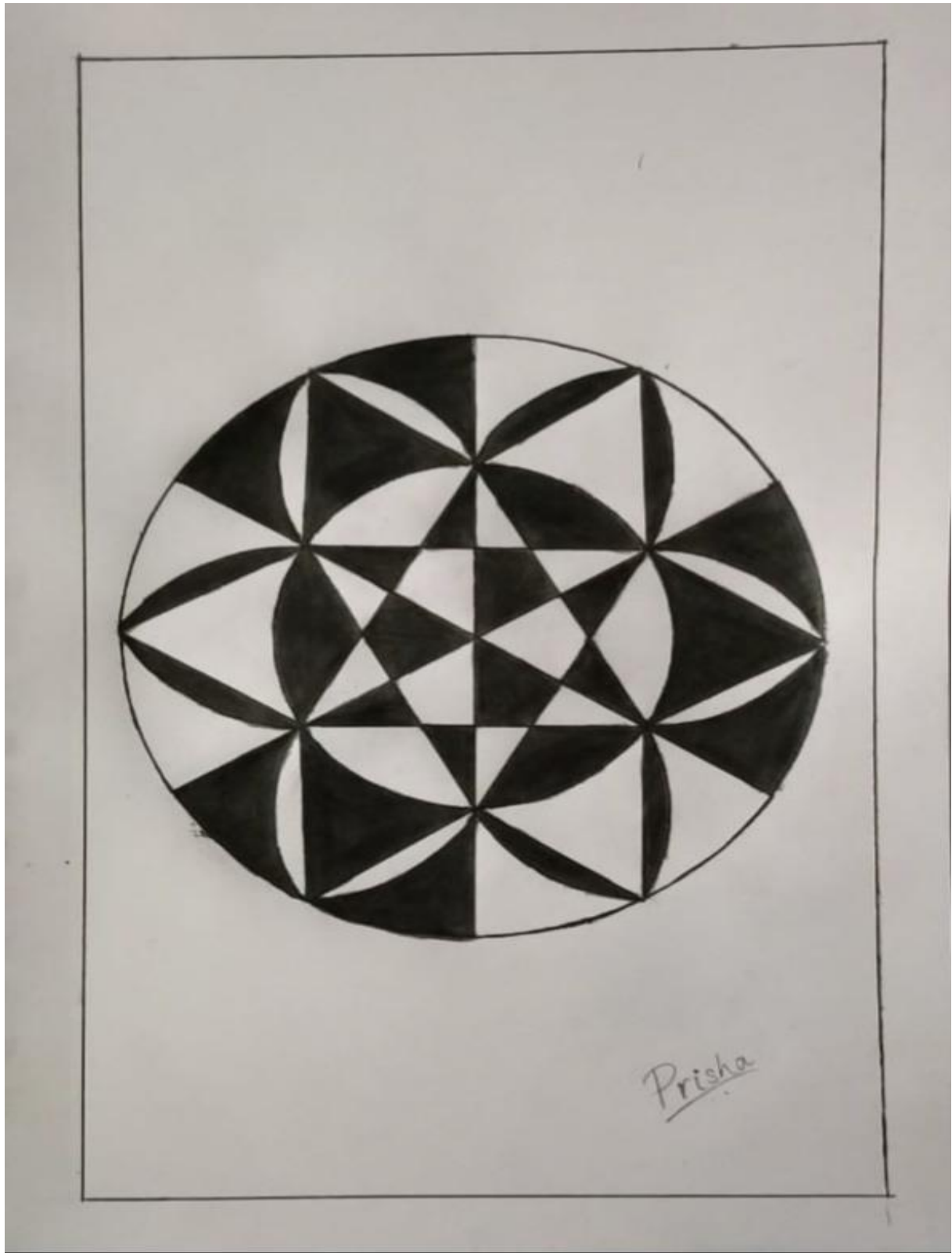
'Earth view from within the room' by Panagiotis G. Tsolakidis.

'Dust on Mars' by Waleed Ali.



'Painting' by Pradnya Malegaonkar.



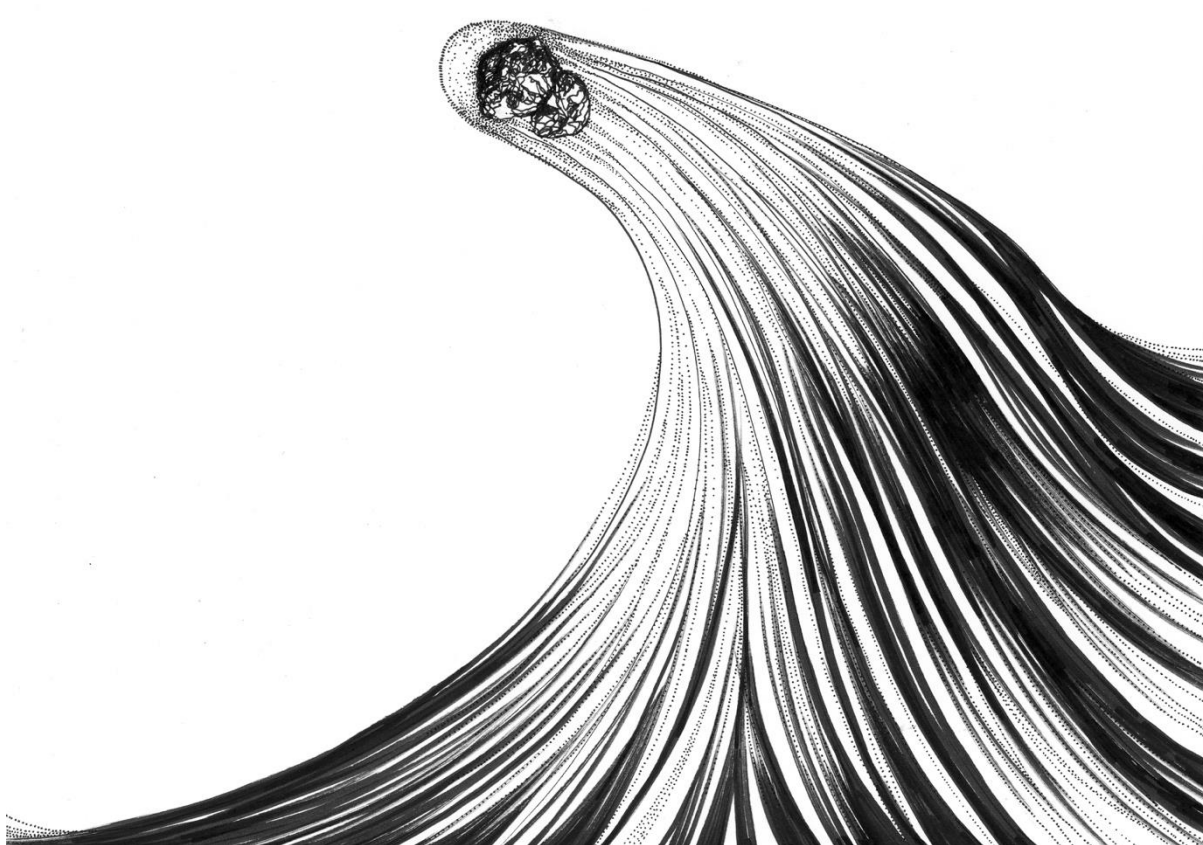


Prisha Bhat writes that this drawing depicts the cosmos symbolically.

bashravya@gmail.com



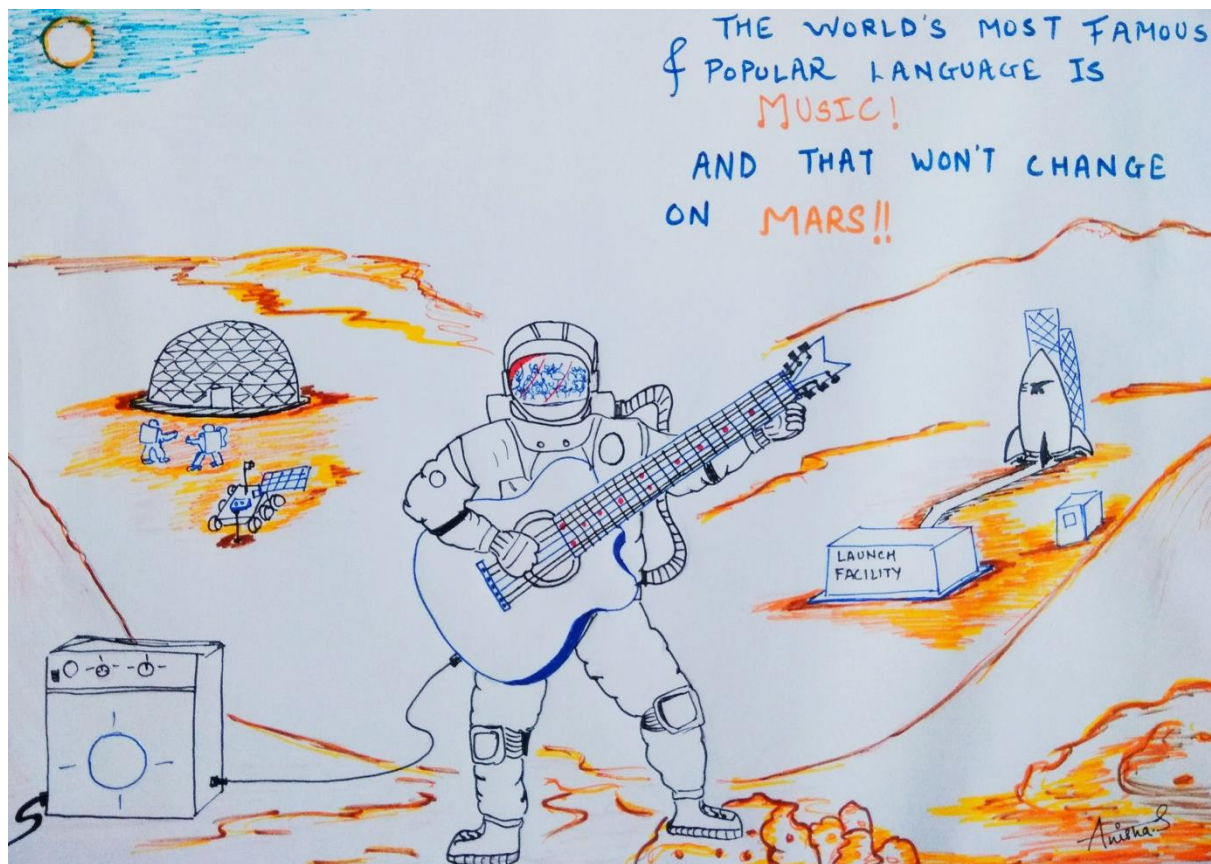
'F122' - Shravya Ba will take her papercutting skills to Mars.



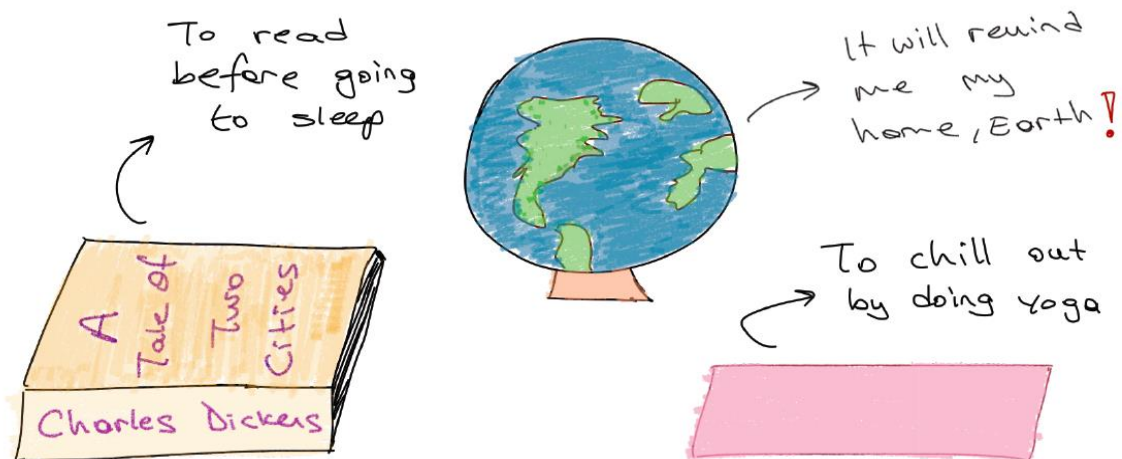
'Christine and Emilio Space Opera Heroes' by Christine Mizzi.



‘Edificio de Comercio Oficinas Inversora Dara C.A.’ by Maria Arroyo.



'Harmony??' by Anisha Shastri.



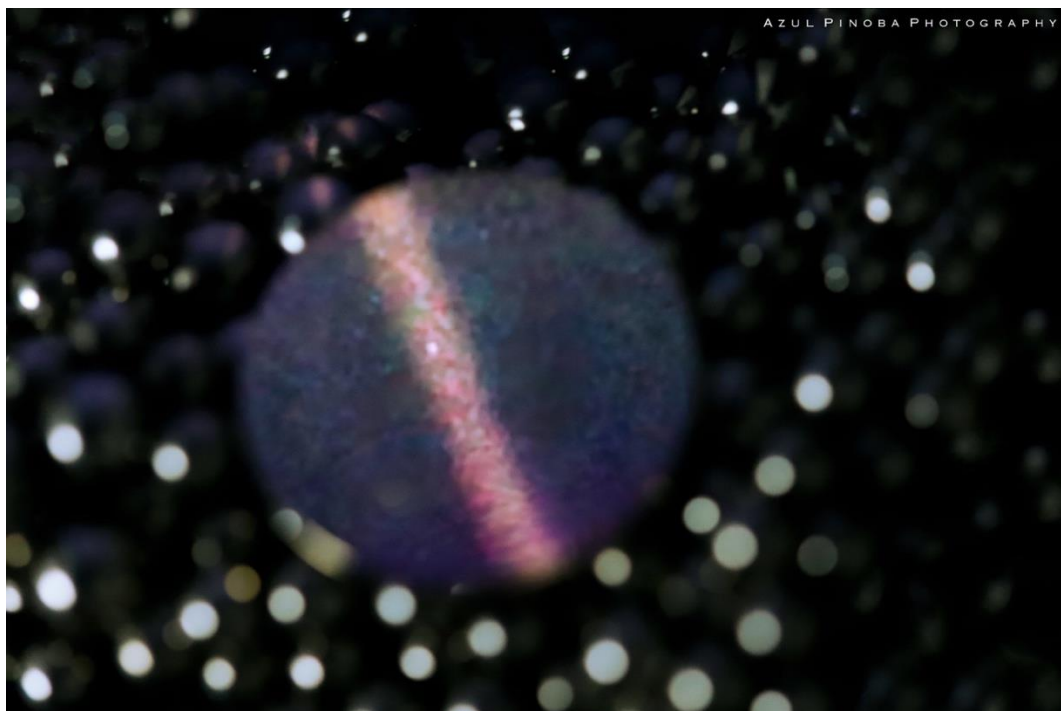
'My artwork' by BÜsra Elkatmis.



Karen Raymond will make beautiful handmade soaps on Mars.

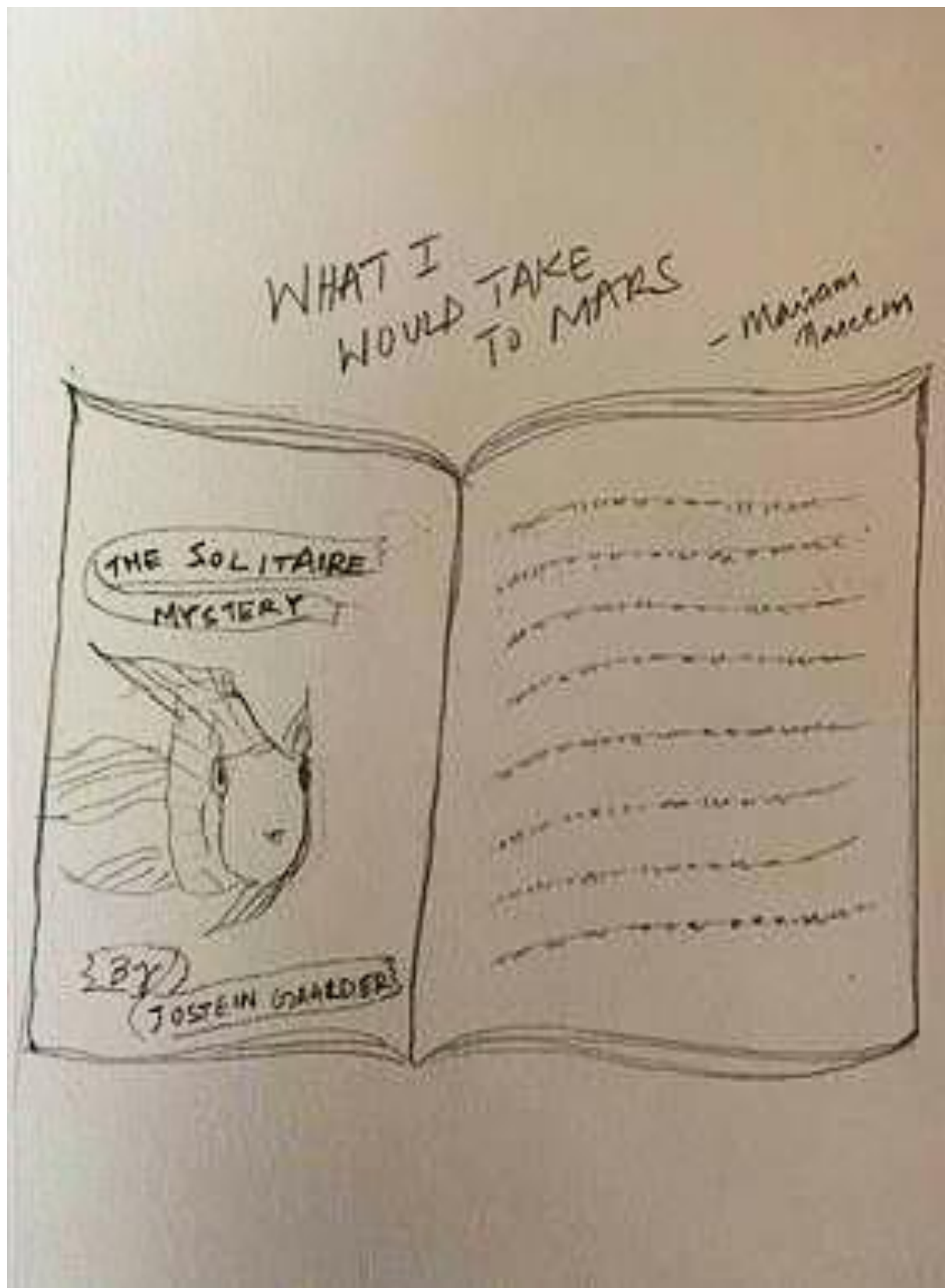
Azul Pinochet Barros is a scientist and sci-artist who draws inspiration from major scientific events & phenomena (space missions, ecological events, genetic discoveries, etc). He writes:

‘This week I thought a lot about what to draw for “what might help you live off- Earth”. It was hard for me to pinpoint one or more objects. Obviously, there is a lot of practicality involved in settling on another world. Personally, I think one can bring anything: tools, survival kits, optimum materials and construction designs, engineering as well as law & governance textbooks, and even a memento from their world of origin (a pendant, a bottle of sand or water from your favourite beach, a childhood toy, etc). Ultimately, however, I think that the things that will help us live and peacefully prosper on Mars, the Moon, and beyond, are non-tangible things: open mindedness, curiosity, determination, creativity, wisdom, spirit of adventure and the will to make it happen.’



‘Looking Back to Look for You’ (Feb 2020) The Pale Blue Dot photo 30th anniversary.

Here I took the image of the original Pale Blue Dot photo and reflected it on a golden record metal pin I have in a bowl of magnetic beads. The low light gives the appearance of a starlit space background. Thirty years ago yesterday (Feb 14th 1990) we looked back at ourselves from the confines of our solar system. Voyager 1, having flown past Neptune's orbit, turned around and took one last look at home. What did we learn then, when we saw ourselves condensed into a mote of dust, a pixel of a blue dot, suspended on a beam of light in the vast, eternal void? What have we learned since? Hopefully something. And maybe, just maybe, other motes of dust have also endeavored to seek us out. And here we still are, looking, gazing back, to see what lies ahead. Other worlds. Other Pale Blue Dots.’



'My favourite book goes to Mars' by Mariam Naseem.

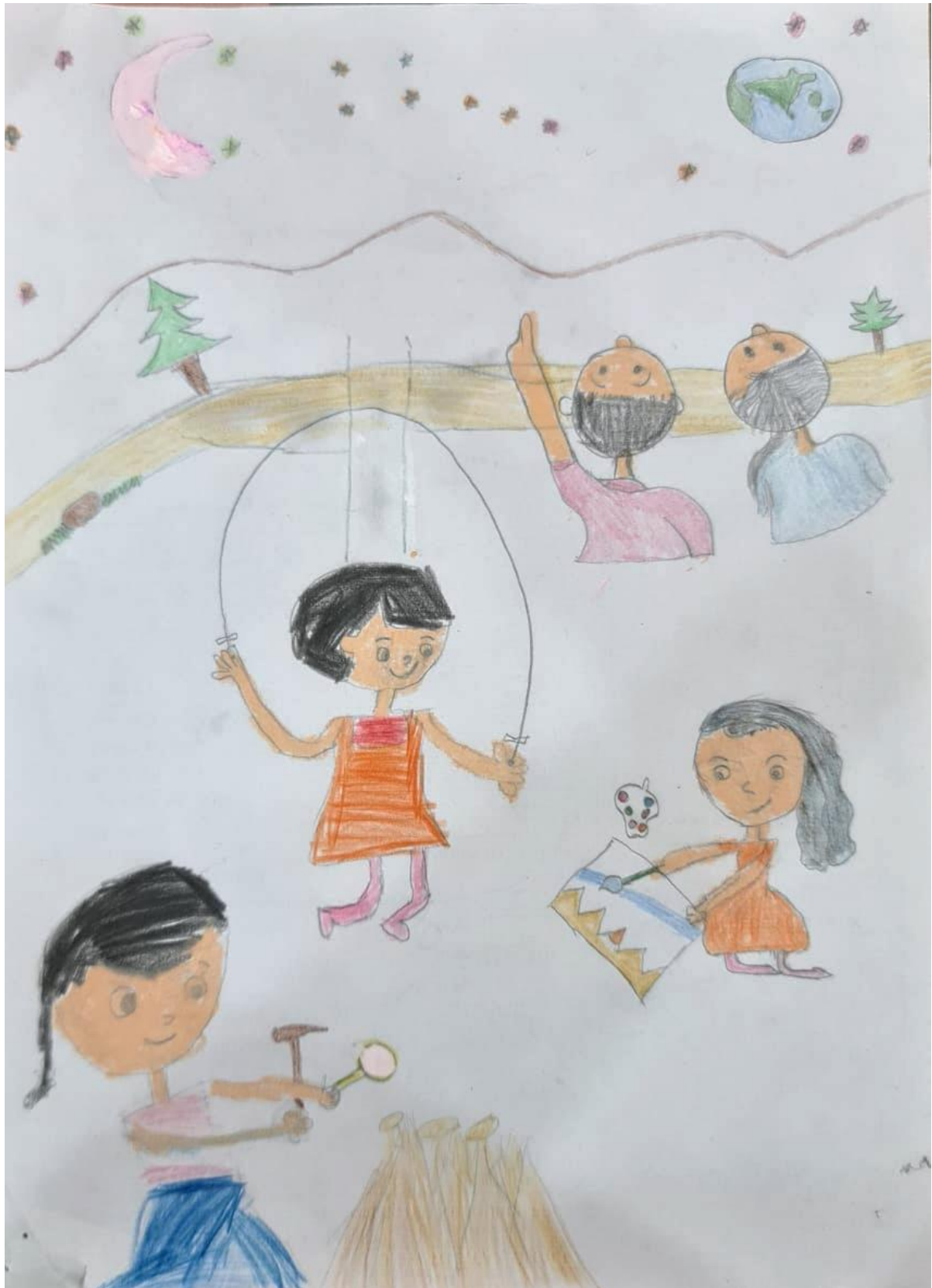
‘Painting 1’ by Aditee Ashar.

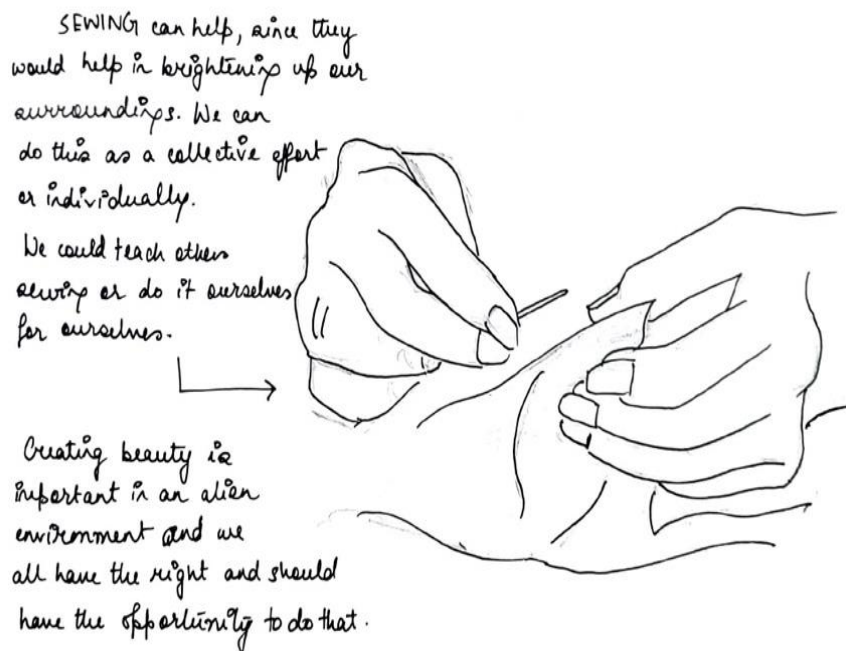
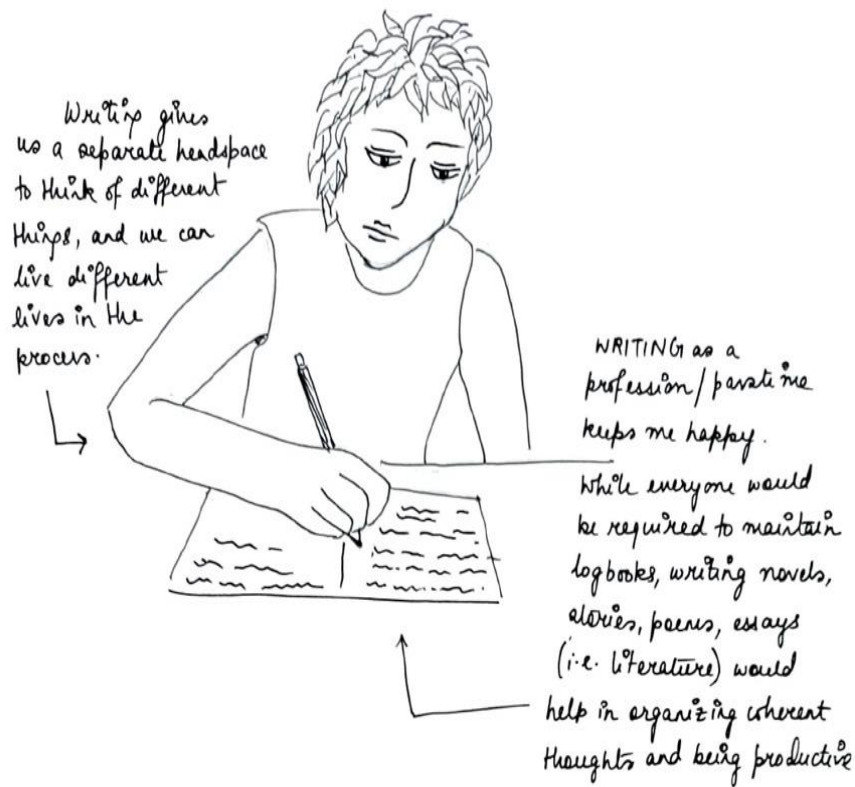




By Arifa Khan.

Here's the work of our youngest artist, five-year old Kayra, niece of microbiologist Kruti. I am fascinated by the person in the foreground with the geologist hammer!

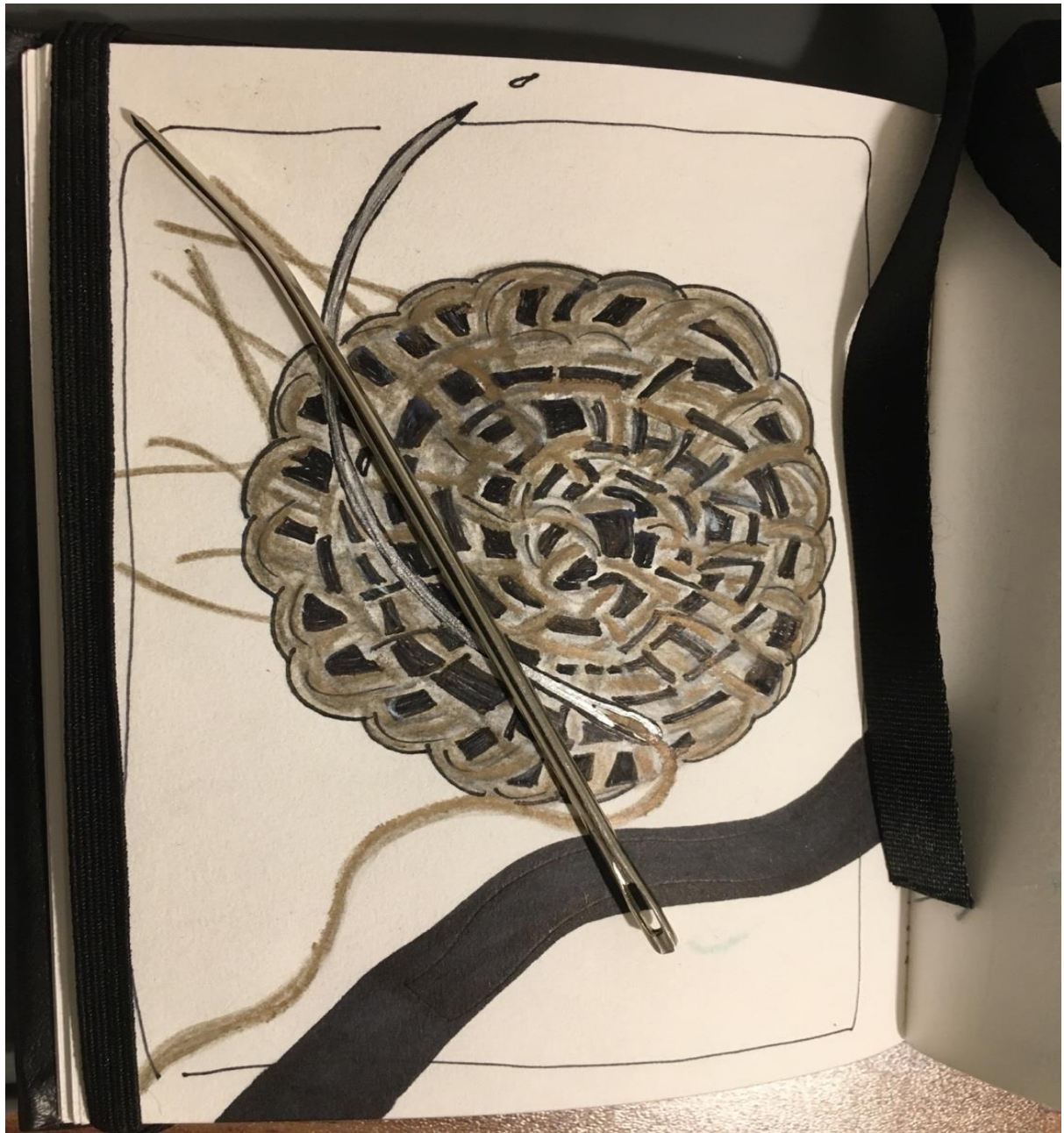




This is one of my favourite drawings. Arundhati Chowdhury thinks through her materials as she writes and sews and draws.

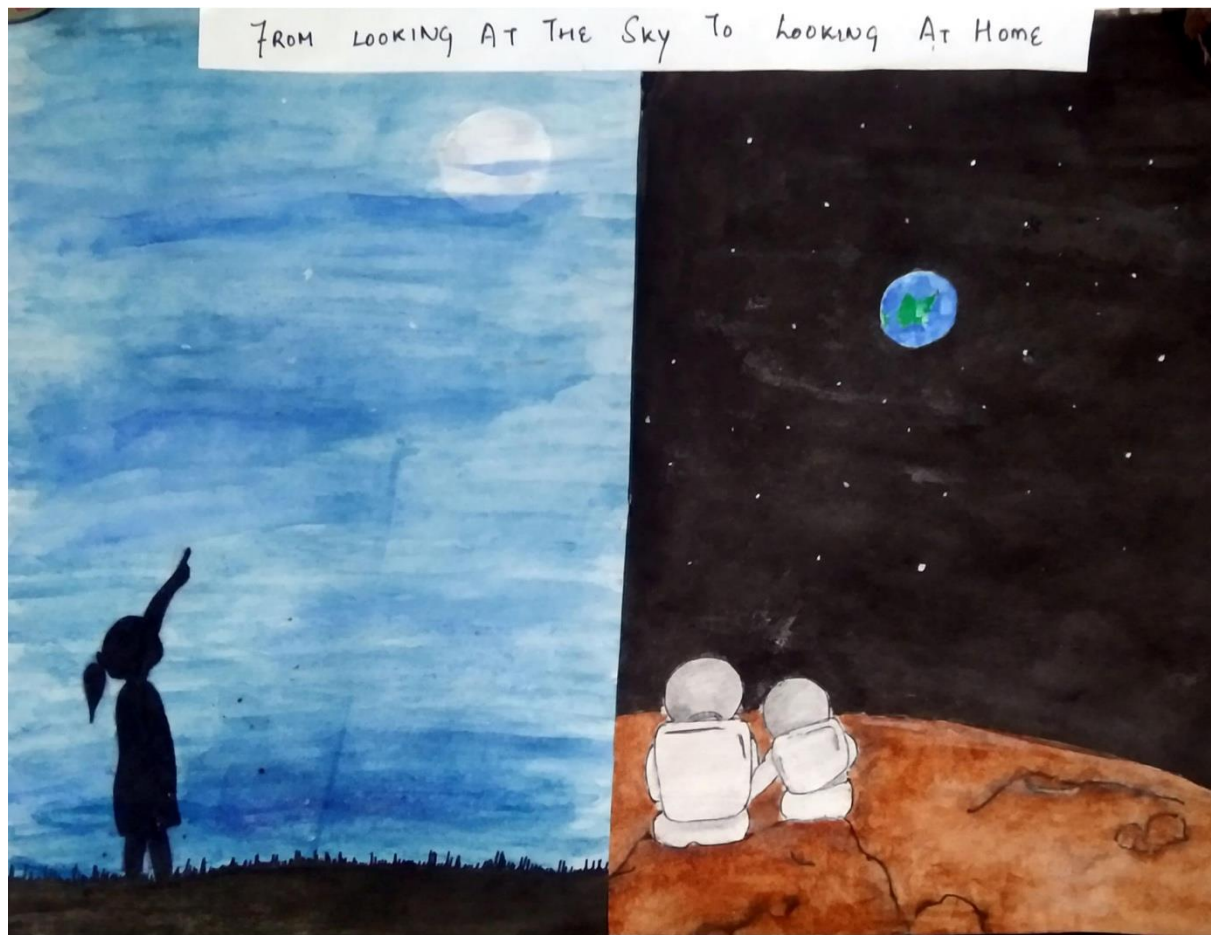


'Happy Summer' by Aayushi Rajgor.



flow...
tangled threads ~
time & history
Fibonacci gone astray
But swimming in focus,
purpose, flow

'Flow' by Brony Dennis.



'Changing Aspirations' by Neha Maanju.



The model making work of our instructor microbiologist Michael Macey. Please note his attention to detail.



Kedar Kulkani photographs a futuristic red planet.

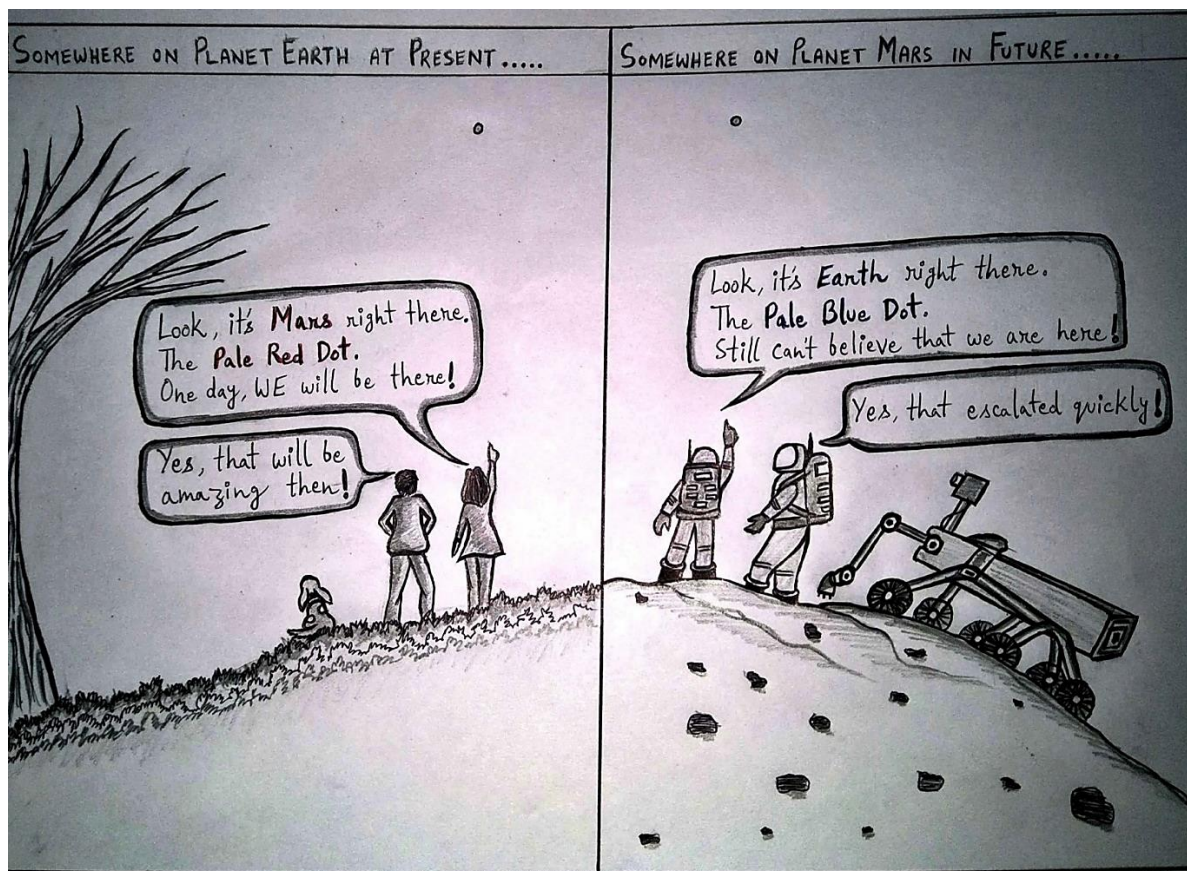
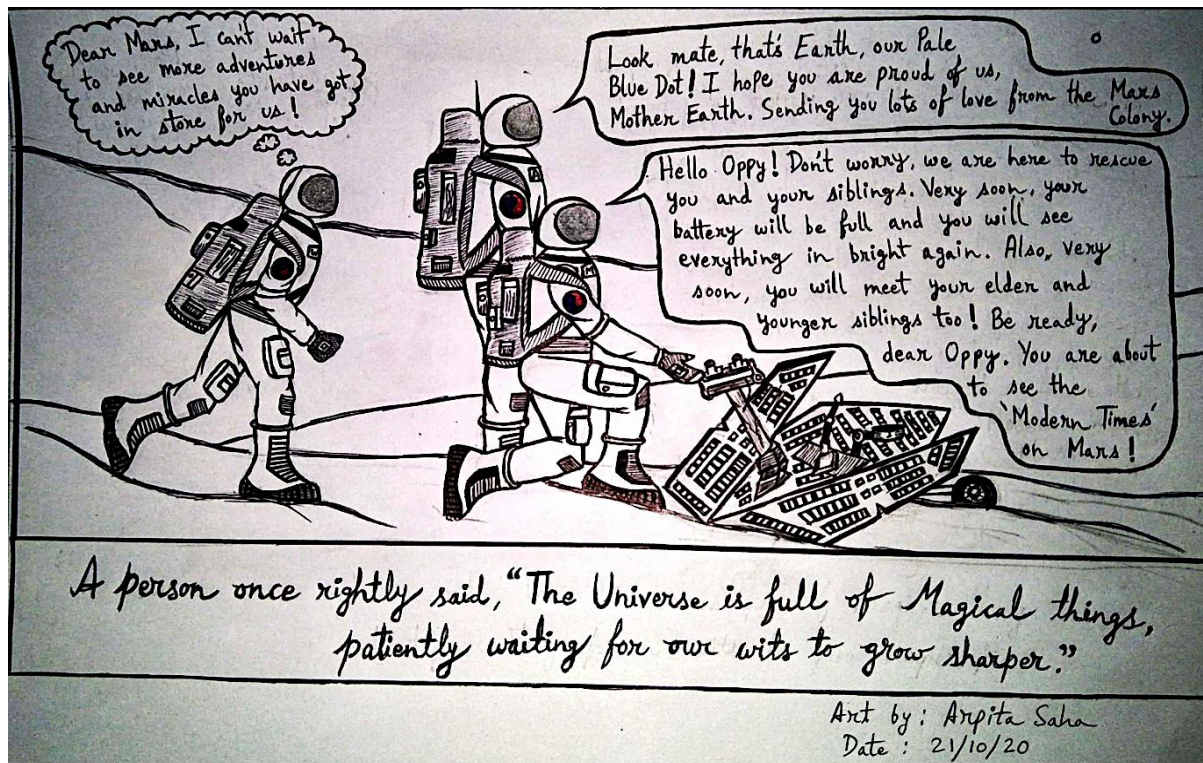


Surbhi Baghotia paints butterflies to remind her of Earth.

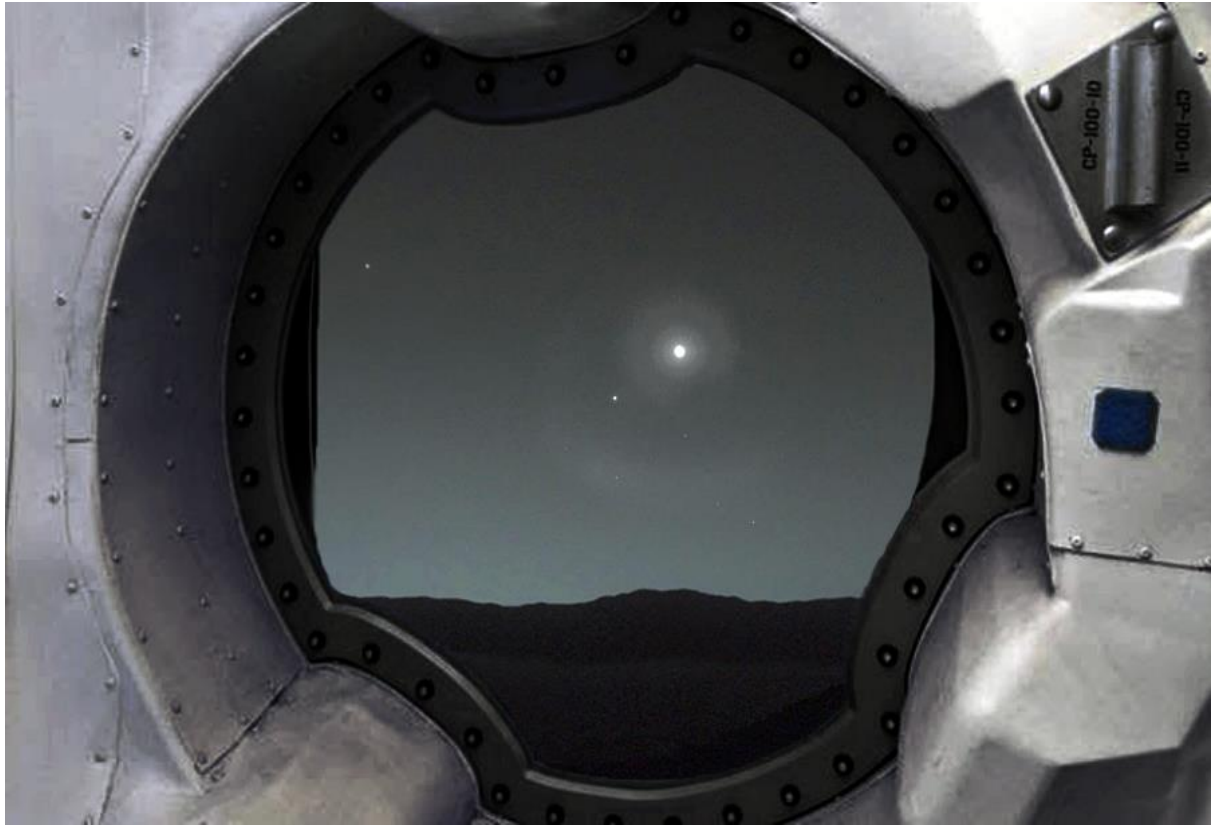




Neethu BK draws overlapping landscapes.



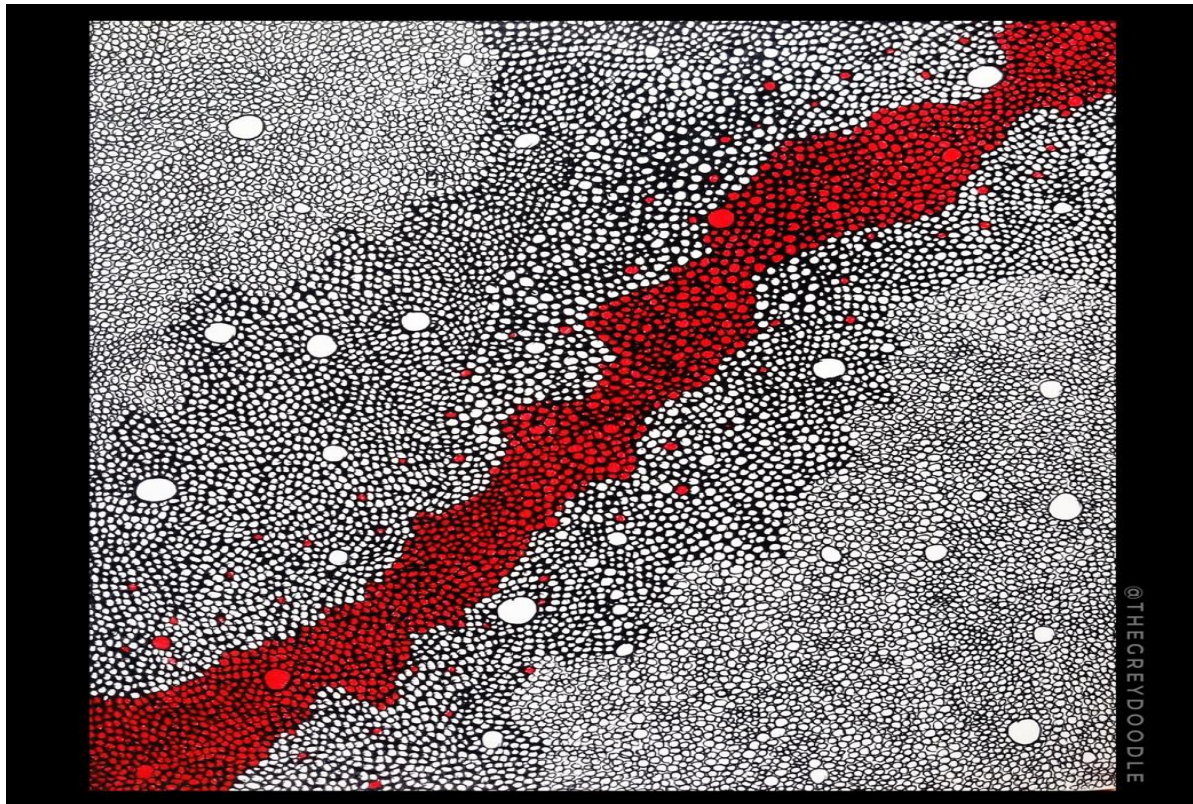
'When the future becomes the past and the past becomes the present' by Arpita Sahal.



‘Gazing into the Martian sky through the window of my cabin’ by Badal Maharana.

'Aerogarden lettuce crop' by Aj Burke.



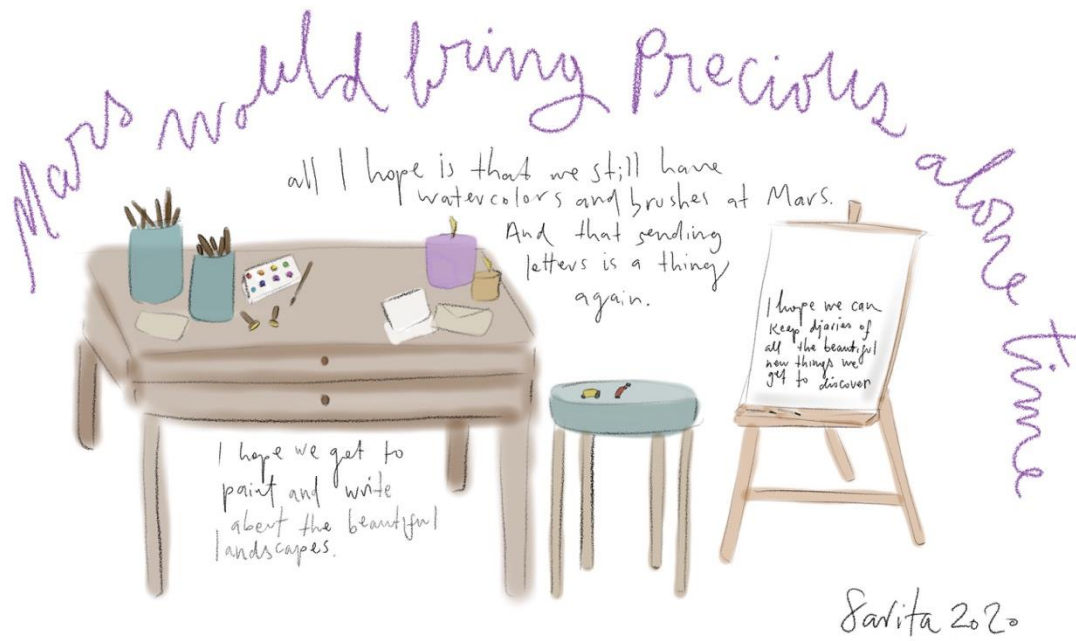


Upagnya Parakeh writes:

'*Clarity from Chaos*' shows that art need not be complicated to be meaningful. In the future, life on another planet could mean a lot of isolation, uncannily similar to the times we are facing in the midst of a pandemic today. While making this piece, my mind would often wander to the thoughts I would have found uncomfortable, but with a perspective to find solace, to find stability. And I found a few answers and some peace more often than not. The red represents the clarity I gained from introspection induced by this process.



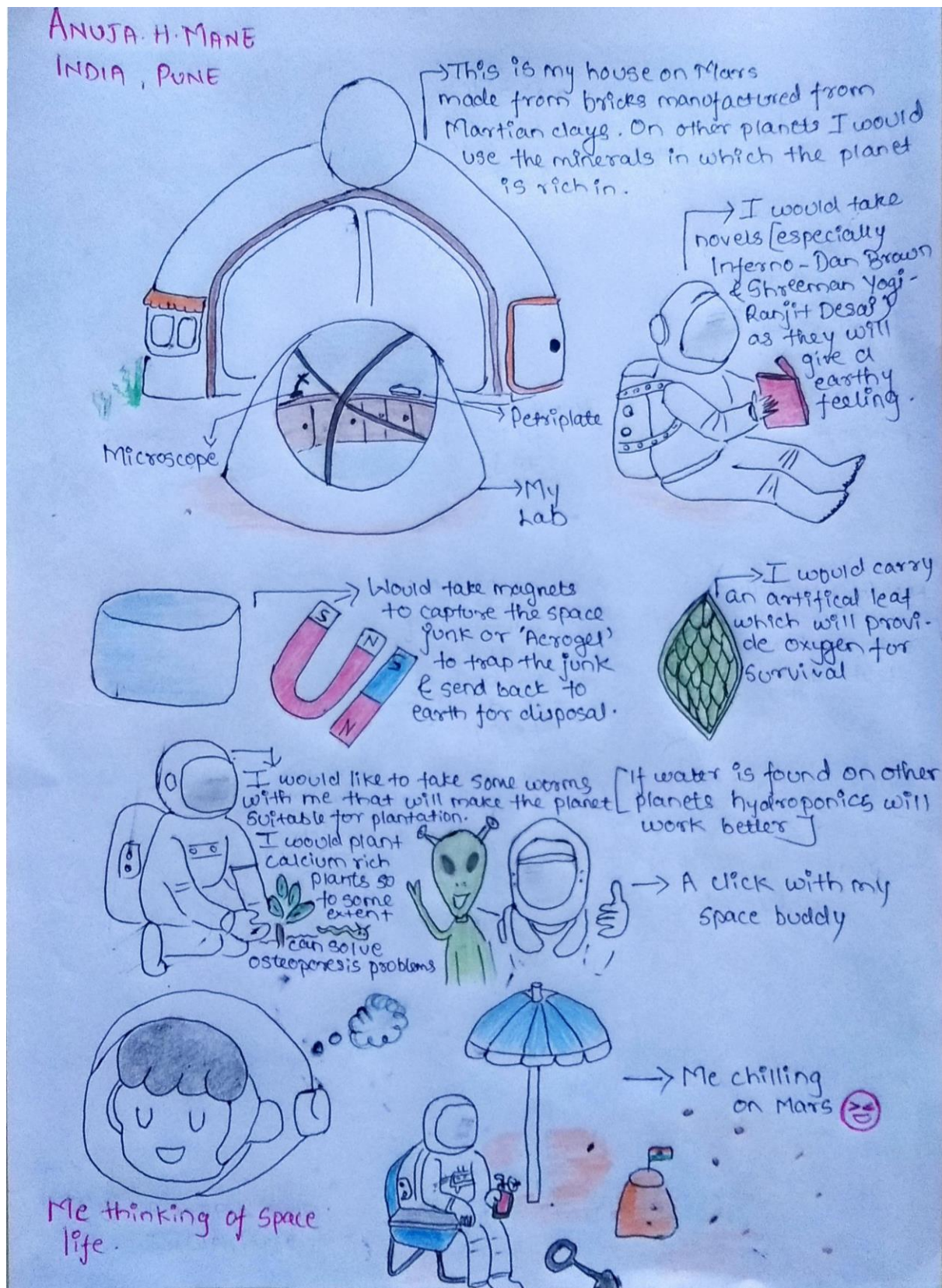
By Aarti Subhedar.



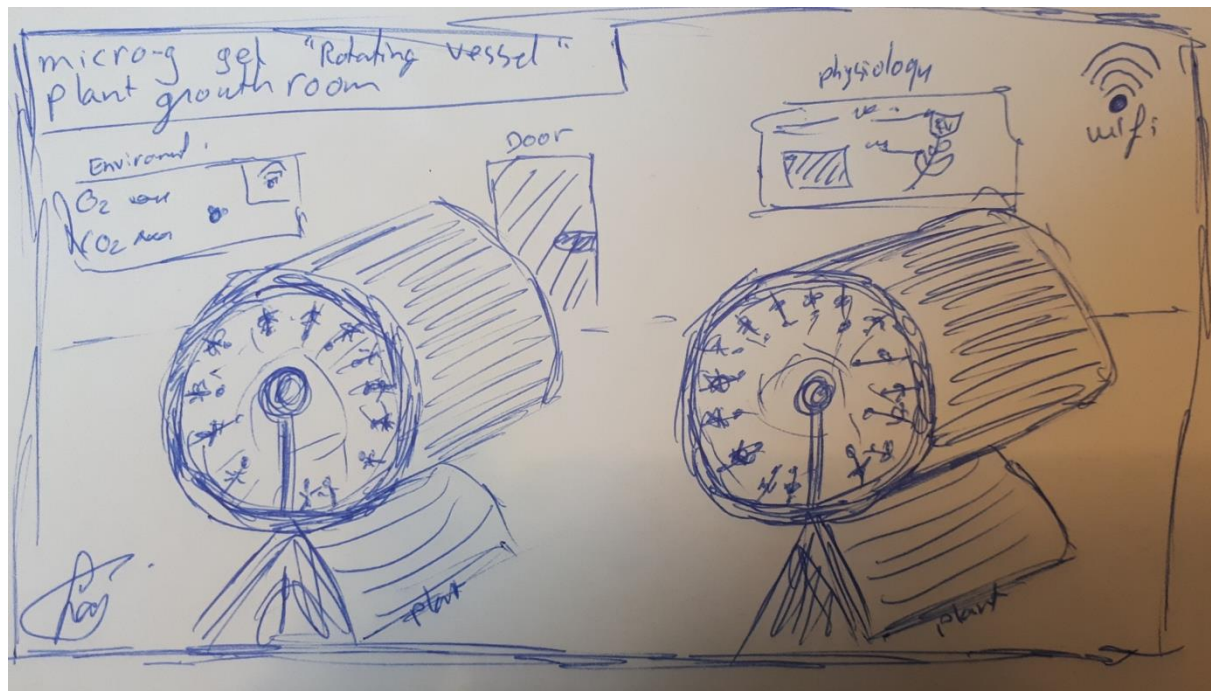
'Mars would bring precious alone time' by Sarita Muñoz Gómez.

'A day in life on Mars' by Vinuri Arambepola.





'Anuja Astro drawing' by Anuja Mane.



'Microgreens on a rotating wall in a life support department with wifi and environmental /plant sensors (my dream).' By Arnoldus den Toom (Arno).

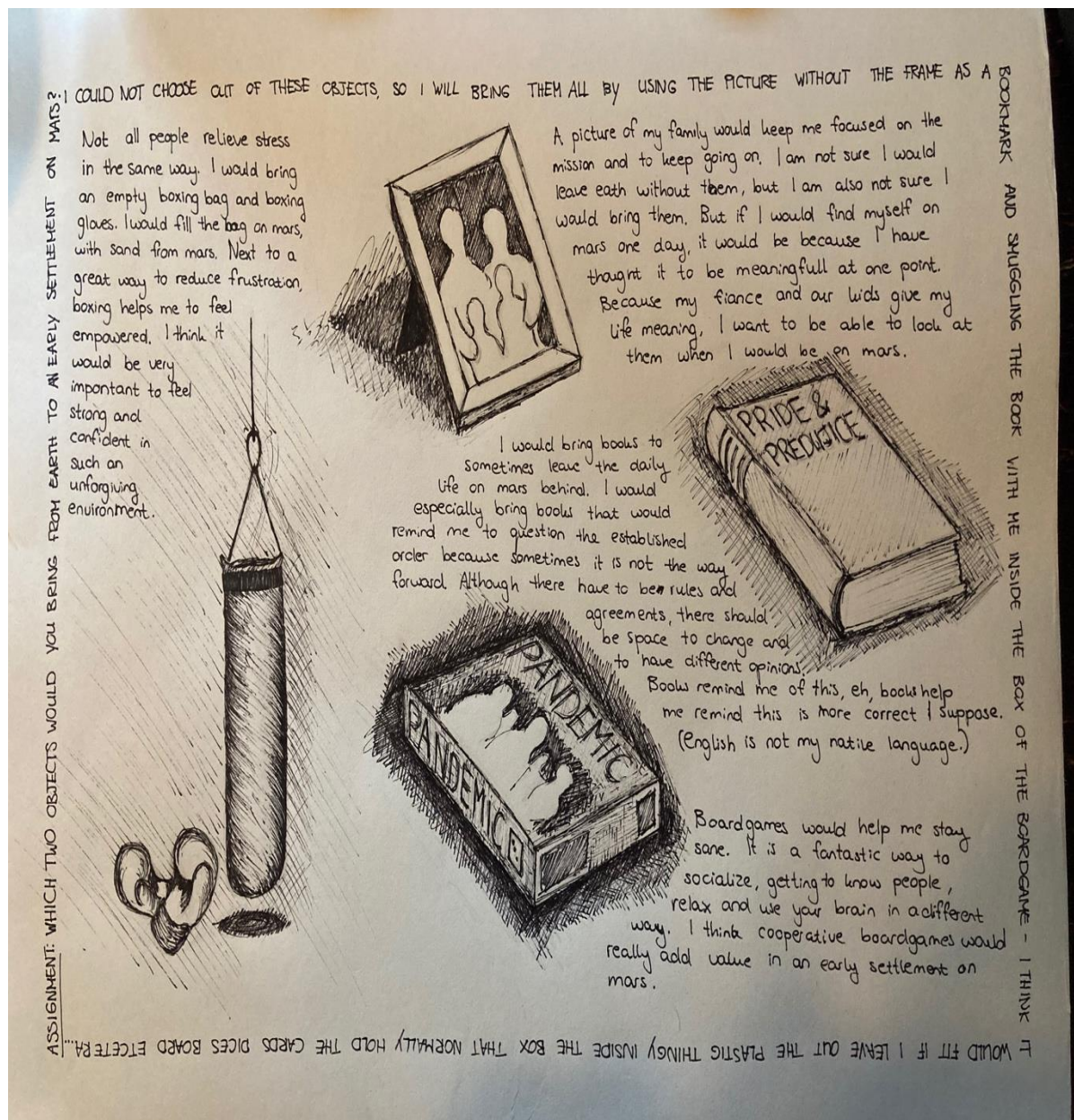


'Blender (it is an art making in a Blender)' by Margarita Belali.



Nature plays important
role for every living being
on Earth.
I like to look at flowers
and leaves when I'm
worried and being in
nature actually reduces
all worries, anxiety,
stress & depression.
So I feel nature is
important for our
mental well being & to be
at peace mentally.

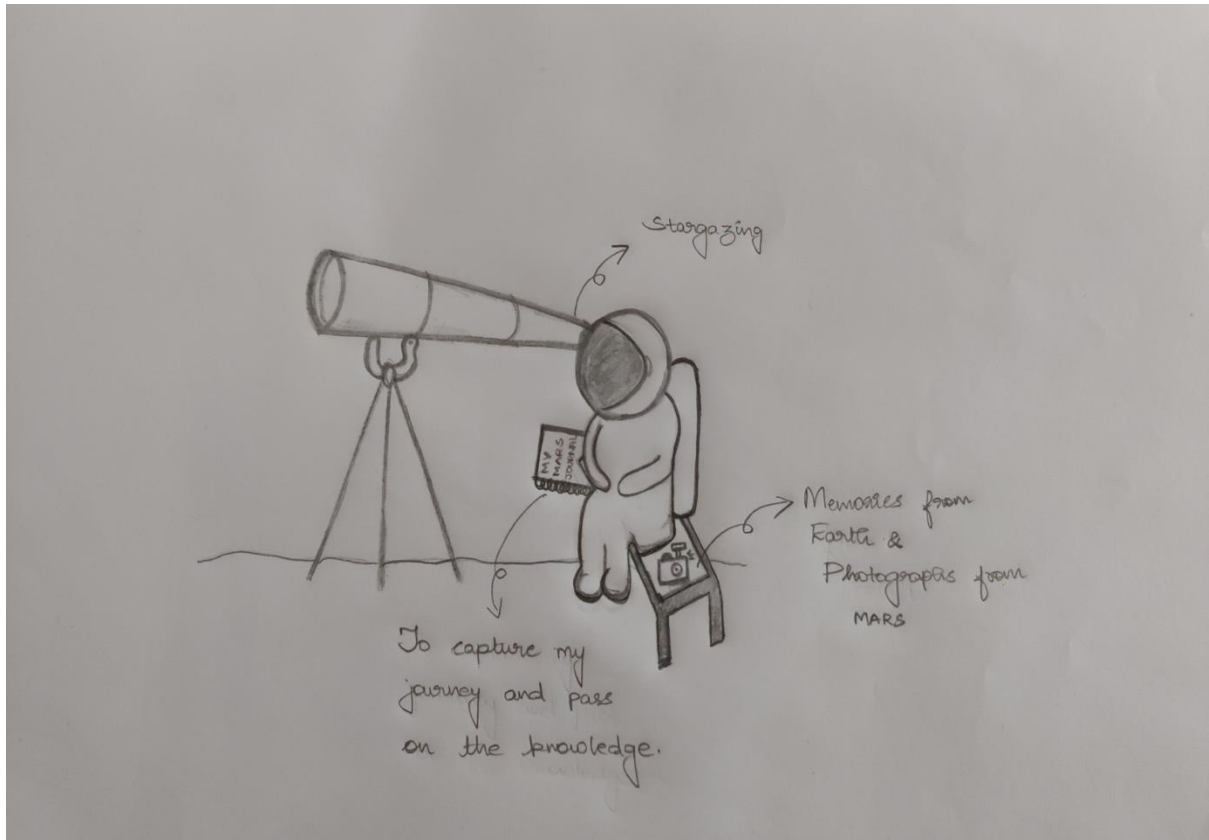
'Flowers' by Divya Gaikwad.



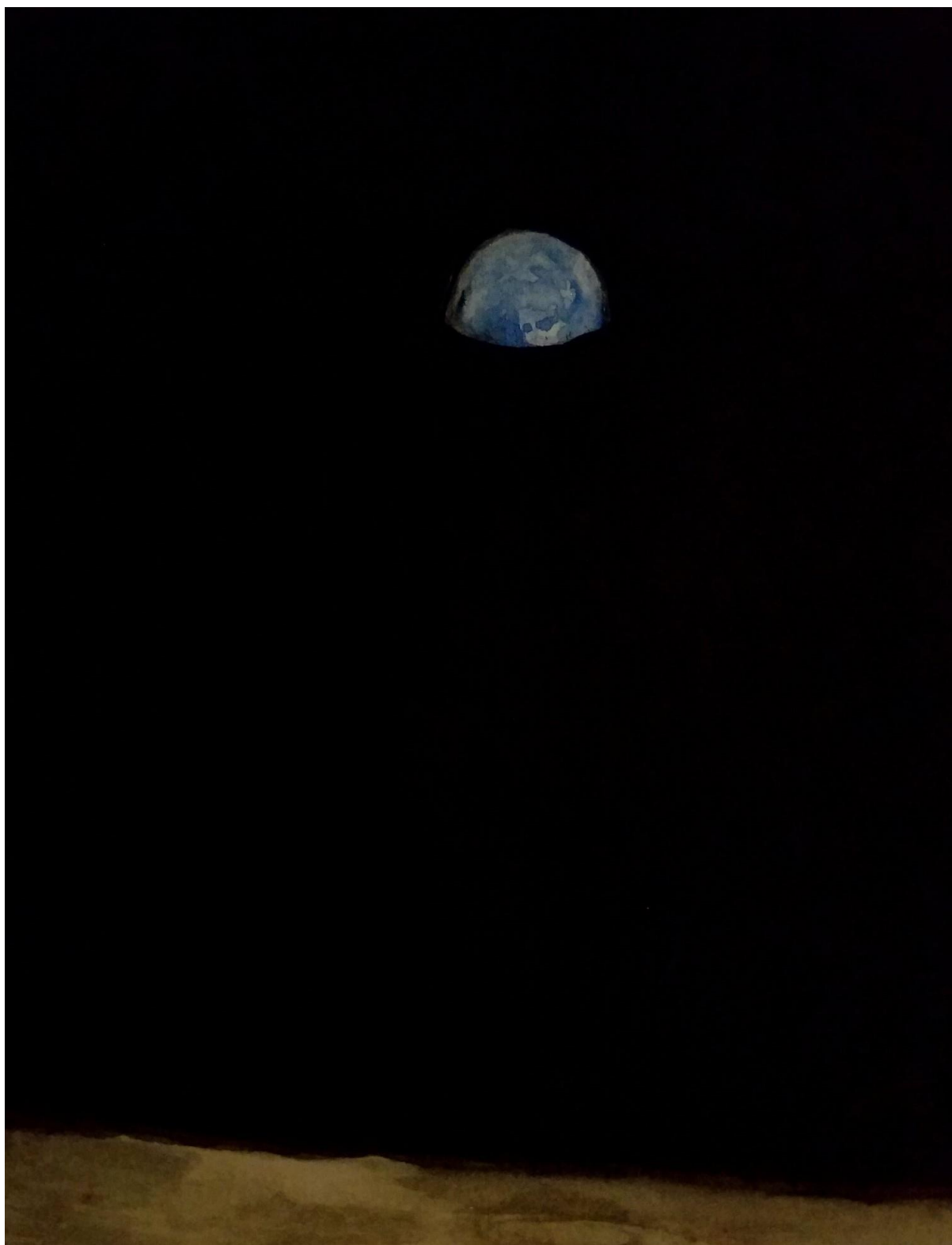
'Contraband to take to Mars' by Astrid K.



'Allegory to Sideral Space (the astronaut looking at Earth, from another planet)' by Loretta Sanjines Balladares.



'My life on Mars' by Sathya K.

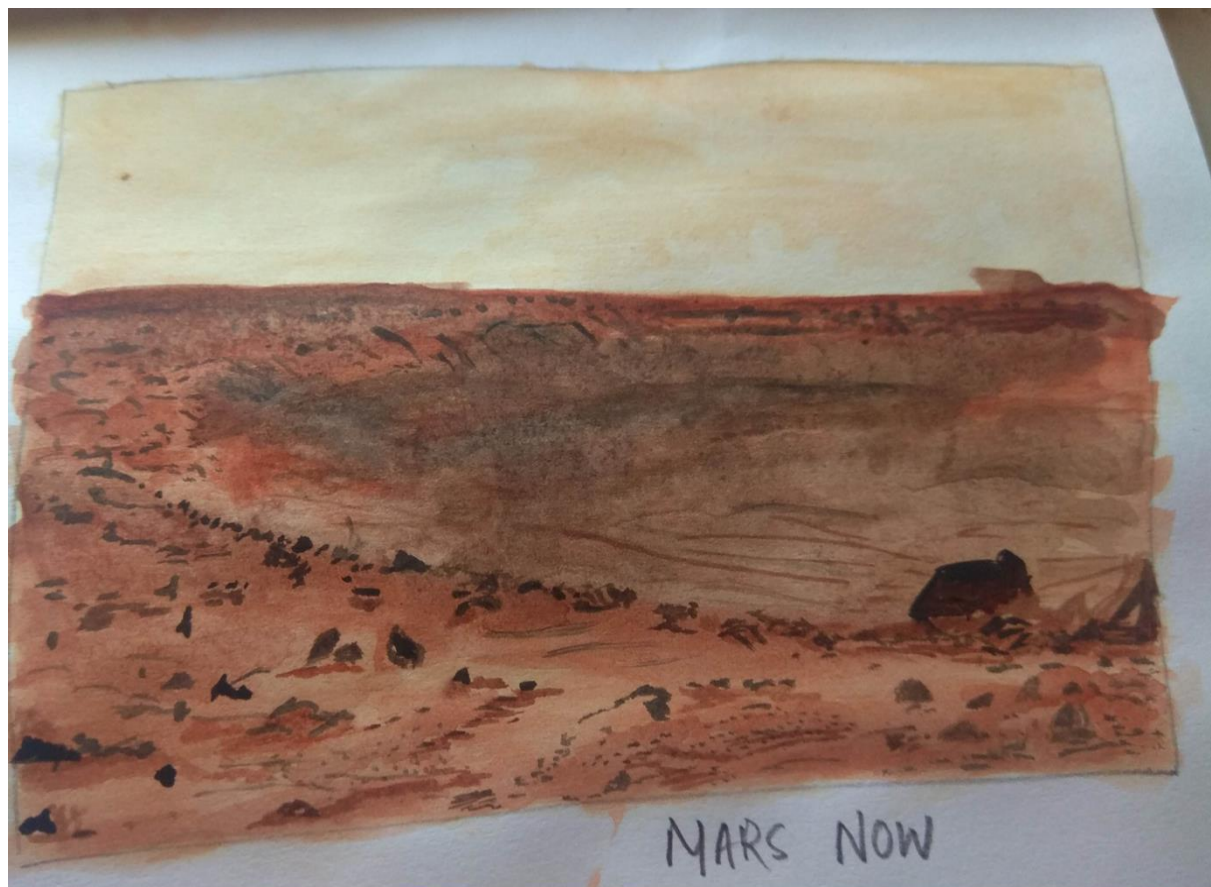


'Meditation Earthrise' by Lisa Marie Persaud.



'My diary n pens to draw aliens' by Vatasta Koul.

'Mars Now and Future' by Shubham Agarwal.

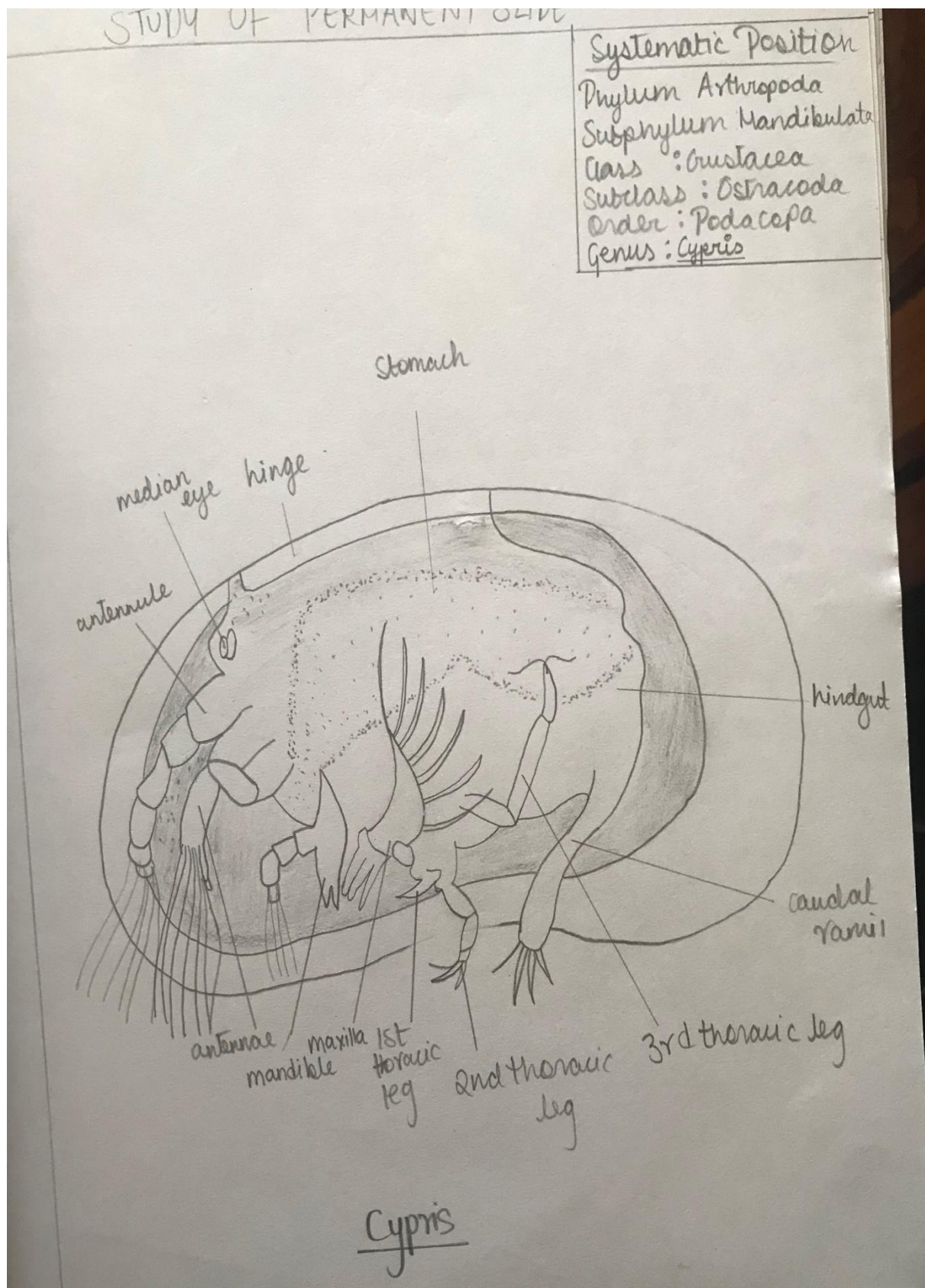




'MACL Pioneer's landing party' by Matías Aarón Camino López.

'Ancient Mammoth' (chalk on tarmac track), by Roman Vyhnánek.





'Cypris' by Nawang Sherp.



Tony Woodgate's drawing is of a rural scene taken from *The Hobbit* by J. R. R. Tolkien, a book which is the personal object he would like to take to Mars.

On the Draft Constitution, he suggests:

'Every person on Mars has the right to start a petition by a mechanism that protects that person's anonymity; and every person on Mars is able to add their names or comments to that petition with their anonymity protected. And more generally, enshrining of a secret ballot mechanism. Your lecture raised an important liberal question - who knows more about how people work/how to promote mental health - artists including novelists and playwrights or psychologists and sociologists?



'Dhoomketu on the Rainbow mountain, Cusco, Perú' by Waldir Chara.



‘Annalea Beattie’ by Deshraj Deepak Kapoor. Thanks so much Deshraj.

Dhoomketu says good bye!

See you next year



Blue Marble Space
Institute of Science

MSA
Mars Society Australia



The Open
University

