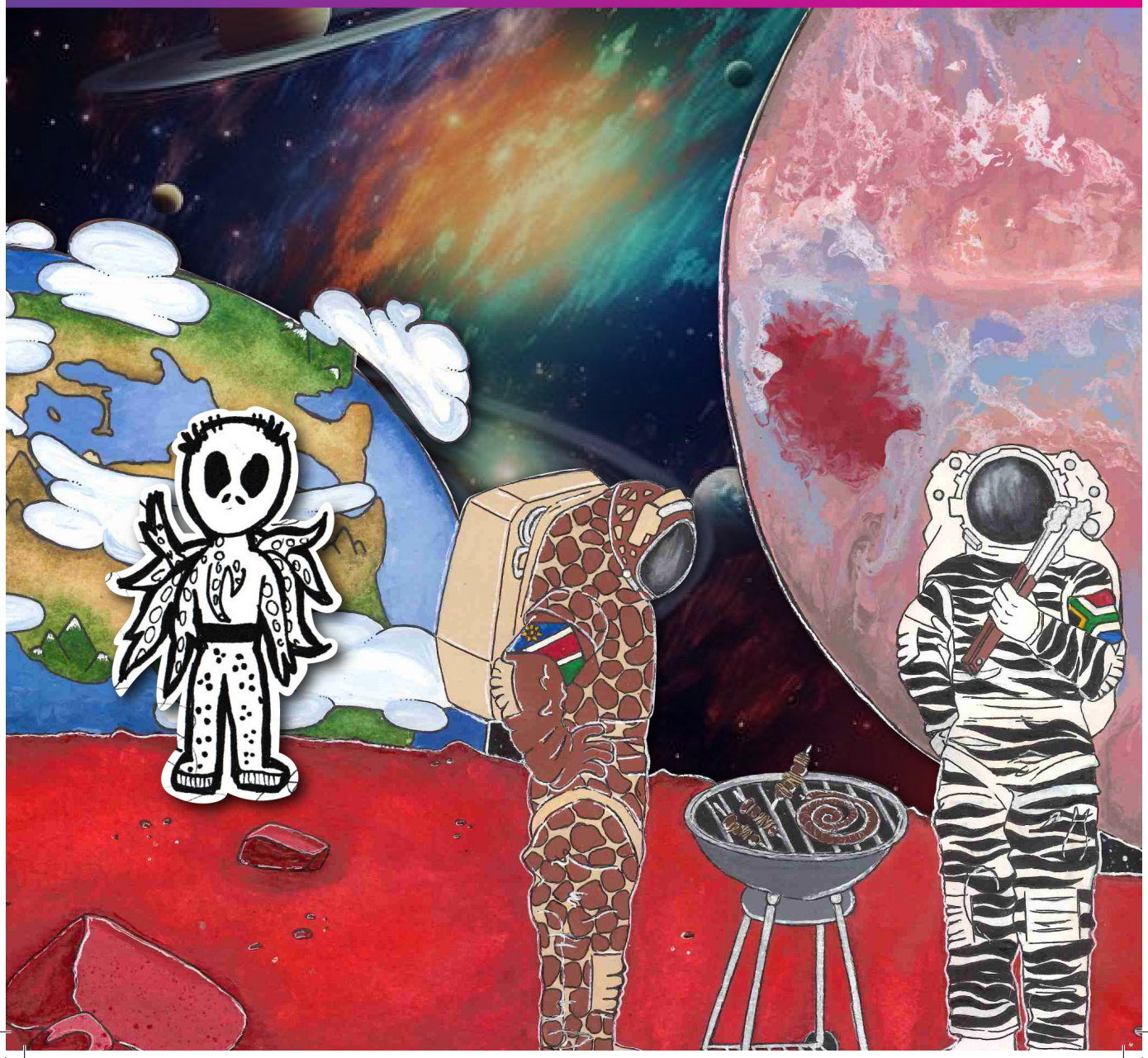
STARLIT CREATIONS

YOUNG MINDS EXPLORE THE COSMOS



STARLIT CREATIONS:
YOUNG MINDS EXPLORE THE COSMOS

OUR PARTNERS

NWU® | SDL Research Unit Self-Directed Learning | University of the Western Cape | IDIA

AfAS African Astronomical Society | iziko museums of South Africa, an agency of the Department of Sport, Arts and Culture | SKAO

NRF National Research Foundation | SARAO South African Radio Astronomy Observatory | Standard Bank | The Carl & Emily Fuchs Foundation

FOREWORD

With perhaps no more than a few exceptions, the images celebrated in this book provide a Multi-coloured conceptualisation of the universe. Even the monochromatic works are rich in the colour of imagination. In the imaginary of the children and young people whose works convey to us a sense of the infinite, and unknown, are the colours of life and the relationships of the living in a world and beyond this world. In short, imagination is to art, what science is to discovery, one cannot practice the former without excited anticipation of the latter. What emerges so powerfully in these very human imaginaries about space, life, our planet, and ourselves, are the many forms of relationship between the known and the unknown, earth and stars, matter and life, between what is dreamed, and what is hoped for the future.

This collection features compositions which speak to our hearts' aspirations, and the reflective dimensions of thinking. In the book we see and read about awareness of how humanity's propensity for discovery and invention, lead to the wealth of technology advancements that enable everyone, inclusive of their differences in belief systems, social and economic class and geographic locality, to participate in the imaginary: life on other planets, life beyond death, the enchantment of travel and the excitement of discovery. Of course, these are also the hopes of our younger generations, even as we are all aware, painfully, of the divisions that separate us owing to history, inequality, inequity. Fact is, no-one imagines a future in which we are not free of our limitations. Even as we live with the limitations of devastating inequity in our world: the normal we imagine for the future speaks also about the abnormal of the present. This book's conscious linking of art and science, astronomy and engineering, goes to the heart of the human condition: that which is rooted deeply in matter and which yearns for freedom, integration of spirit and matter, the infinite, the dreamscape in which an unhindered body fleets across time, transversing it, looping it from past to present and future, and which nourishes wonder, and births joy, rather than seeking for itself the passing pleasures of possession and domination.

It is striking in these images, even those generated by AI later in the volume, how the future speaks to the reader in the form of imagery which is art about science, and science as art: not only do we recognise ourselves in these images and colours, but we also know that every time we put brush, pencil or even fingers to a page or screen to create, that between the imagined and the manifestation, is a chasm that must be broached. Whether 7, 16, 25, or as readers of different ages, we realise imperceptibly what every experienced artist and practiced scientist knows: experiment and imperfection are not only the creative-matter of discovery about ourselves, our worlds and the universe that lies beyond us, but simultaneously also part of our every body-fibre. Read and view this book with joy, because by the time you are finished it is very likely you will be inspired anew about life, and the imaginaries that still await us.

Prof. Robert Balfour
Research Unit Self-Directed Learning, North-West University; Faculty of Humanities, UWC

THE CONTEXT OF THIS BOOK

Nowadays, there is a strong focus to include the Arts in the Mathematics, Science, Engineering and Mathematics (STEM) cluster, and STEAM approaches (the 'A' representing arts) in education is building up momentum. For this reason, the UWC Science Learning Centre for Africa (SLCA) invited school learners in 2023 to submit artwork for the National Science Week celebration. The focus of the learners' artwork in 2023 was to express their views on the role of mathematics, science and technology in our daily lives.

In 2024, a consortium of like-minded institutions- the SLCA @ UWC, the Research Unit Self-Directed Learning @ North-West University, and the Iziko Museums of South Africa, in partnership with organisations working in the field of astronomy, such as the African Astronomical Society (AfAS), the Square Kilometre Array, the South African Radio Astronomy Organisation (SARAO), and the Inter-University Institute for Data Intensive Astronomy (IDIA)- invited young people to submit artwork in which they portray the role of Astronomy in our lives. More than 120 entries were received, and this book is a showcase of sixty of the artworks received. In 2024 South Africa hosted the Astronomy General Assembly, and given South Africa's footprint in astronomy (e.g., co-hosting the SKA with Australia), astronomy as a theme was a good fit for the arts competition.

Art has, throughout the history of humankind, been a way of expressing views and knowledge on science. To illustrate, the painting below (done by Will Alves Joubert) illustrates the depth of interpretation possible.

The artwork captures the artistic interpretations of science and the universe through the ages, highlighting the deep connection between art and human intellectual pursuits. The artwork depicts five dominant eras:

(a) Ancient civilizations, such as the Mayans and the San; (b) the Classical World, with dominant Greek and Roman influences; (c) the Renaissance, which was characterized by scientific exploration, and artistic reawakening. In the artwork, Leonardo da Vinci's Vitruvian Man is shown; (d) the Enlightenment, which brought much scientific progress, and scientific discoveries such as microscopes and the telescope; and (e) the current stage, the Fourth Industrial Revolution, depicted by the image of a robot, in the

era of artificial intelligence. Central in the artwork, is the Khoisan. Carnarvon in the Northern Cape is both the home of the SKA radio telescope, and to the Khoisan. It speaks to the motto of UWC, 'Respice Prospice', looking back, in order to look forward. We need to learn from our rich indigenous knowledge. The San expressed their knowledge of the universe and nature through their rock art, which is also shown in the painting. The Khoisan people are scientists with a wealth of knowledge of plant use (ethnobotany). In the artwork, Aloe dichotoma (the quiver tree) is shown, that was used as quivers for their arrows. Also shown is the Eland, which played an important role in San belief, ritual and rock art.

We trust that you will enjoy the creativity of the young artists celebrated in this book. We would like to thank Standard Bank of South Africa, and the Carl and Emily Fuchs Foundation, for their financial support of educational projects in South Africa.

Prof. Josef de Beer
Research Professor, Research Unit Self-Directed Learning, NWU

THE PARTNERS IN THIS ASTRONOMY ARTS PROJECT

Faculty of Education, University of the Western Cape

Astronomy has always been a subject that ignites the imagination, encouraging us to look beyond our immediate world and ponder the mysteries of the universe. As Dean of the Faculty of Education at the University of the Western Cape, it is with immense pride and pleasure that I reflect on the collection of astronomy-themed artwork, created by our talented school children as part of the National Science Week competition. National Science Week is an opportunity to celebrate the wonders of science and to ignite a passion for discovery in our learners. Through this competition, our school children have been encouraged to explore the mysteries of the universe and express their understanding and imagination through art. The results, as captured in this book, is a testament to the incredible creativity, curiosity, and scientific enthusiasm of our young learners, and it beautifully illustrates the powerful connection between art and science.

This book is a shining example of the innovative and engaging educational experiences we strive to provide for our learners. It reminds us of the importance of nurturing both scientific inquiry and artistic expression, ensuring that our learners develop a well-rounded understanding of the world around them. The artwork in this book reflects our commitment to fostering interdisciplinary learning and supporting the creative and intellectual growth of our learners. It is a testament to the collaborative efforts of educators, learners, and families in making education a holistic and enriching experience. This collection underscores the value of initiatives like National Science Week, which encourage our learners to think critically, explore new ideas, and express themselves creatively. It highlights the impact of our educational programs and the potential of our learners when given the opportunity to engage deeply with both science and art.

As we celebrate the achievements of these young artists, let us also recognize the vital role that education plays in shaping the future. This book is a reminder of the boundless potential that exists within each of our learners, and of the importance of providing them with the tools and opportunities to reach for the stars—both literally and figuratively.

To the young artists: thank you for sharing your incredible visions with us. Your work inspires us all to continue exploring, learning, and imagining the infinite possibilities that the universe holds. Sincere appreciation to all who have contributed to making this project a success. Your support and dedication have helped to create an environment where our learners can thrive and where their talents can shine.

May this book serve as a beacon of inspiration for all who read it, encouraging a

lifelong love of learning and a deep appreciation for the wonders of our universe.

Prof. Rajendran Govender
Dean of the Faculty of Education
University of the Western Cape

Faculty of Education, North–West University

"An odyssey of discovery and creative artistic expression":

"Nexus of space, science, education and socio-environmental activism'

In 1960 Pres. John F. Kennedy said that the US was on 'the edge of a new frontier' and challenged Americans to join the new achievements in space, science, education and social conditions. This challenge inspired infamous words of Neal Armstrong when he stepped on the moon for the first time: "That's one small step for man, one giant leap for mankind." As young boy in South Africa I was glued to the radio not wanting to miss a moment of the commentary of this awesome wonder. Space exploration opened a new window, insights, dreams and many opportunities to humanity.

This book reignites that same feeling of awe. Today, the "edge of a new frontier" represents not just space exploration, but also uncharted territory in our vision of the world, driven by education and imagination. The paintings featured in this book offer a window into the minds of learners and students, promoting self-exploration, self-expression and creativity. Through art, students build confidence and develop a unique sense of identity. The artists interpretations of the world, demonstrate how science and education can lead to new frontiers.

The Faculty of Education at North-West University is committed to expanding the boundaries of education. Our goal is to train teachers who are not confined by the traditional curriculum but rather motivate learners to explore and delve into what might be considered uncharted territory or the proverbial "unknown". We recognise that space is not the final frontier; beyond it lies potential for new discoveries, approached with responsibility.

As one of the largest faculties of education in the country, we provide both contact and distance learning, striving to produce Newly Qualified Teachers (NQTs) who, as self-directed learners, will cultivate creativity in a new generation of students. By embracing the STEAM (Science, Technology, Engineering, Arts, and Mathematics) approach, we hope to inspire more students to engage with the natural sciences, giving them deeper access to the curriculum. Often, the emotional and creative aspects of learning are overlooked, but by integrating artistic expression, we can enhance students' interest in science and motivate them to consider careers in the natural sciences. As Simpson-Steele (2016) notes, the processes of science and art are aligned in their need for discovery, observation, experimentation, description, creation, interpretation, and analysis. Through art, students also learn about science and give creative expression to their thoughts.

The NWU Faculty of Education, in collaboration with the Science Learning Centre of Africa at UWC, proudly presents this book which showcases 60 pieces of artwork created by students from primary, secondary, and tertiary levels. These artworks offer diverse perspectives on astronomy and humankind's fascination with celestial bodies.

Prof. Lloyd Conley
Executive Dean Education

The Science Learning Centre for Africa (SLCA) @ UWC

It is with great excitement that we publish this art book where the beautiful work of learners and students are displayed.
This book was born from the vision to foster creativity, critical thinking and holistic education – all of which are integrated into science. The vision that the UWC Science Learning Centre for Africa (SLCA) strives toward, is to be:

- a Centre of Excellence, as a community engagement entity to engage in STEM (science, technology and mathematics) teacher professional development,
- an institution of learning offering programmes to popularize science amongst school learners, with cutting-edge science education research,
- and an organization to nurture productive relationships with funders and research partners in order to transform lives and empower communities.

One of our learner programmes to popularize science, is having a National Science Week event which is also coupled with an art competition. "The Beauty of Astronomy" was our theme for our 2024 art competition, and we received more than 120 entries to this competition from inside the borders of South Africa, as well as from other African countries.

These artists so fittingly display their different views of how young artists perceive astronomy in the current African context. Some examples are where they link astronomy with braaiing in space, including their national flag in their display of astronomy, and expressing their visions of women as astronauts.

It gives me great joy to experience the culmination of Art in Science where we give real stature to STREAME – Science Technology Robotics Engineering Art Mathematics Education. Seeing how artwork portrays a story through visual literacy, allows more learners to explore science. May we continue to create spaces for our upcoming scientists to express their ideas also in non-verbal ways, advancing a broader understanding of the world out there.

Dr Benita Nel
Director: SLCA

The Research Unit Self–Directed Learning @ NWU

The Research Unit Self-Directed Learning at the North-West University is the only Research Unit of its kind in Africa and one of only a few in the world. The vision of the Research Unit Self-Directed Learning is to promote self-directed learning that will lead to life-long learning in all education sectors. Self-directed learning is an intentional learning process where the learners take the responsibility for their own learning.

In this Unit the more than 70 researcher joined forces in a community of practice to contribute to the body of scholarship of self-directed learning internationally, including the African continent. The Unit consist of 7 subareas, all specialising on an aspect of self-directed learning scholarship and the enhancement of self-directed learning. It includes research in assessment, blended learning, different teaching-learning strategies (i.e. co-operative learning, problem-based learning, inquiry-based learning), metacognition, indigenous knowledge, contextualized learning, play-based learning and theories underpinning self-directed learning. We are fortunate that the Research Unit is also home to the UNESCO chair for Multimodal Learning and Open Educational resources (OER). This Chair aims to promote an integrated system of research, training, information and document sharing on self-directed multimodal learning and OER.

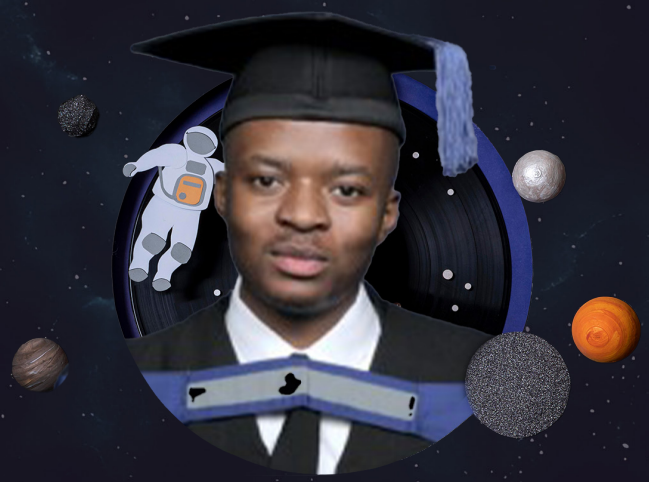
Our national and international footprint is strong due to the relevance of our research on self-directed learning as an imperative twenty-first-century competency and its importance for the Fourth Industrial Revolution. This can be seen in our outputs in internationally accredited high-impact journals as well as requests from researchers worldwide who have shown an interest to liaise with the Research Unit Self Directed Learning and to be involved in our work.

Evidence of our research quality and impact can also be seen in the fact that two of our researchers also appears in the Africa Education Top 100 Scientists for 2024. We also have twelve NRF rated researchers and several of our researchers have received awards from the South African Education Association to acknowledge their contribution to Education research in South Africa. The director of the Research Unit Self-Directed Learning received the Malcolm Knowles Memorial Self-Directed Learning Award in 2020 in Florida, USA. This award recognises excellence in the promotion of self-directed learning internationally.

We are proud to be involved in this book that showcases the artwork of learners and students. It is evident that they applied the process of self-directed learning when creating their artwork.

Prof. Elsa Mentz
Director: Research Unit Self-Directed Learning

The African Astronomical Society (AfAS)



Have you ever looked up at the night sky and wondered what's out there beyond the stars? Maybe you've imagined visiting faraway planets or even becoming an astronaut! Astronomy, which is the study of space, helps us understand our place in the universe.

In this art book, we invite you to go on an exciting space adventure, discovering the wonders of astronomy through the creativity of young artists like you. But why is it important to learn about space? Surprisingly, astronomy plays a bigger role in our lives than you might think. The time on our clocks, the changing seasons, and even some of the technology we use all have connections to the stars and planets. By learning about space, we can understand our world better and become better thinkers.

The African Astronomical Society (AfAS) knows how important it is to get young people excited about space. We believe that by inspiring a love for the universe, we can help build the next generation of scientists, engineers, and explorers. This competition is a way to celebrate that idea.

Mr Moleboge Lekoloane

The Iziko Museums of South Africa

IZIKO is an isiXhosa word meaning "hearth", where food is prepared and shared, stories are told, and knowledge passed from one generation to the next. The hearth is traditionally and symbolically the social centre of the home; a place associated with warmth, kinship, and the spirits of ancestors. The "hearth" embodies the spirit of a transformed institution and our vision of "African Museums of Excellence". The three flames in our hearth logo represent the three collections brought together in our museums: Social History (ochre), Art (red), and Natural History (green). These are made accessible to learners and the public through education and public programmes. Iziko Museums' was thus envisaged as a space for all South Africans to gather, nourish body and soul, and share stories and knowledge passed from one generation to the next. Iziko Museums seek to celebrate our heritage while generating new cultural legacies for future generations and a society that has moved beyond the shackles of the past.

A visit to this museum is not only culturally enriching, but the impressive natural collection will also ignite a spark of interest in learning more about the creatures with which we share our planet. Museums are spaces of exploration and discovery, showcasing artefacts, specimens and research undertaken by museum curators. Museum collections are diverse treasure troves filled with history, science and art. A museum visit is not only an opportunity to see the marvels on show, it also provides opportunities to learn.

Iziko Museum's art educator, Mr Rory Emmett had the opportunity to adjudicate some of the works submitted for the 2024 SLCA competition. The entries consisted of a variety of artworks that reflected imaginative concept development, creativity, technical skill, visual impact, and alignment to the theme. The works explored the intersections between art and science in interesting ways, with a strong focus on the scientific field of astronomy. Many of the works demonstrated a keen understanding of the subject and manifested these ideas visually in exciting ways.

Mr Hylton Arnolds
Director: Education

The Inter–University Institute for Data Intensive Astronomy (IDIA)

The Inter-University Institute for Data Intensive Astronomy (IDIA, https://idia.ac.za/) was founded in response to the rapidly evolving demands of modern astronomy. Today's astronomers must navigate enormous data sets, master coding, and understand complex computational systems. This shift has made astronomy a truly multidisciplinary field, requiring collaboration across a wide range of expertise - including data science, engineering, research, and data visualisation to name a few.

IDIA was established to address these challenges by bringing together professionals from all related disciplines within a university setting, providing not only support for astronomers but also a comprehensive platform to carry out massive data processing. As a partnership of three universities (the University of Cape Town, the University of the Western Cape, and the University of Pretoria), IDIA's overarching goal is to build capacity and expertise in data-intensive research within the South African university research community. This will enable global leadership on large scientific datasets, particularly those emerging from the MeerKAT radio telescope and other massive upcoming astronomical surveys (such as the Square Kilometre Array, SKA, and the Rubin Observatory's LSST).

IDIA is therefore extremely grateful to all partner institutions, funders and primarily the young contributors for collaborating with us on the creation of this beautiful collection of learners' artworks. This book, inspired by astronomy, reflects the journey of IDIA and all the book's contributors in fostering an environment where different disciplines converge to tackle the challenges posed by modern astronomy and society as a whole. Furthermore, it illustrates how collaboration across fields can open up new possibilities, not just in astronomy, but in broader scientific and educational contexts as well.

Dr Sally Macfarlane

The SKA Observatory (SKAO)

The SKA Observatory (SKAO) is a global collaboration bringing together some of the brightest minds in science and engineering from 16 countries to build the world's two largest radio telescope arrays, located in Australia and South Africa. They will transform our understanding of the Universe, tackling some of the most fundamental scientific questions of our time, from how the first stars and galaxies formed, to whether we are alone in the Universe. The SKA telescopes are being built on land with strong ties to Indigenous heritage, and celebrating the knowledge and wisdom of Indigenous peoples, and their connection to the sky, is central to the Observatory's goals.

Science and art have long been intertwined, and provide complementary ways of interpreting and understanding the world and Universe around us. Art is also an important way of sharing culture, representing stories and traditions passed down through generations.

This was the motivation for the SKAO's involvement in this arts competition.

As the SKA telescopes teach us more about the Universe in the years and decades to come, artistic works will continue to help us to comprehend the cosmos, and how cutting-edge science fits into the broader cultural wisdom of humanity.

Dr William Garnier
Director of Communications, Outreach and Education

The South African Radio Astronomy Organisation (SARAO)

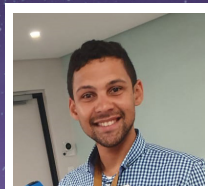
The SKA South Africa project that became SARAO was established in 2003, and it has been five years since the inauguration of the MeerKAT telescope in 2018. MeerKAT will be integrated into SKA-Mid within the next few years and become part of the Square Kilometre Array Observatory (SKAO). However, given that data is being collected at a much higher rate than it is being processed to generate science, publications from the standalone MeerKAT will continue to flow for much longer. SARAO will retain the resources to meet this challenge and, at the same time, channel resources towards developing South Africa's SKA Regional Centre (SRC), which will provide access to data products, a platform for advanced scientific analysis, user support and training for astronomers using data generated by the SKA telescopes. Another indispensable pillar is the human capital development (HCD) in science and engineering, without which South Africa's dividend from having constructed MeerKAT and continuing to participate in the SKA would be much smaller. When South Africa's journey to the SKA began in 2003, there were only about five local radio astronomers, while today, approximately a quarter of MeerKAT proposals are led by South Africans. It was essential to build the local radio astronomy community as quickly as possible so our country could reap the intellectual benefits of investing in this exciting global project. Therefore, being involved in schools and school-based projects like this art competition is a fundamental part of the Social Licence to operate for SARAO and projects linked to SARAO. Art and indigenous understanding of Astronomy can be viewed as a precursor to the Science being done by instruments like MeerKAT and the SKA.

Dr Anton Binneman

ACKNOWLEDGEMENT

Funding by the Standard Bank of South Africa to the SLCA @ UWC, and of the Fuchs Foundation for SDL @ NWU, is hereby acknowledged.

Funding from the NRF for the project, 'Isiqalo esitsha! A new season for contextualized science education in Khayelitsha schools', is acknowledged. Views expressed in this publication are not necessarily those of the National Research Foundation.



Project management: Chad Frans

Layout and design: Sisonke Kalipa and Almari Van Niekerk

CATEGORY WINNERS

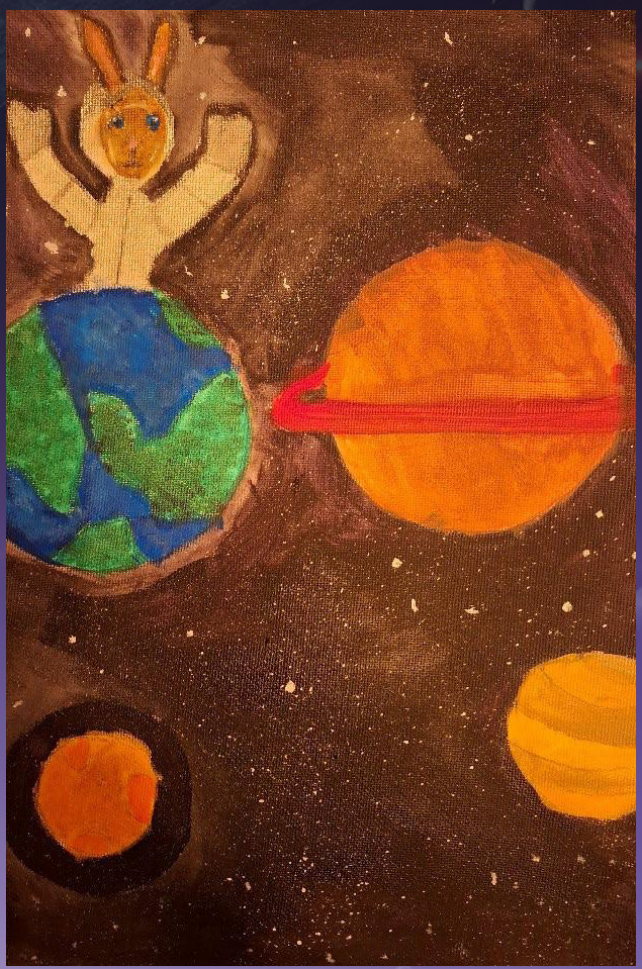
- Primary schools
- Secondary schools
- Tertiary institutions

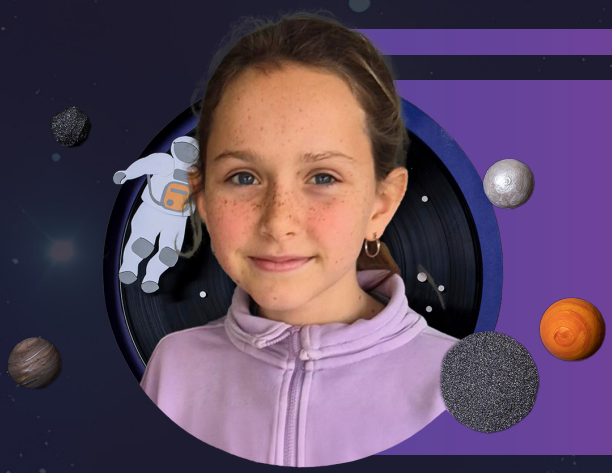
Primary School: Grade 3
Winner: Rebecca Gower

When its a full moon, I can see the outline of a rabbit - I love bunnies and our beautiful planet Earth, so I combined them! Last year I got a galaxy themed hoverboard, those beautiful patterns inspired the background to my artwork.

I used mostly acrylic paint to create it. To make the tiny speckled stars, I splattered white water paint with a dry paintbrush.

This project was a lot of fun, because I could use many colours and let my imagination be free.

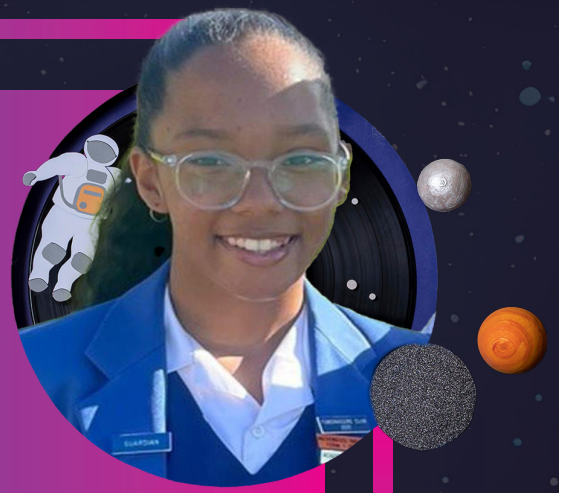




Primary School: Grade 4-7
Runner–up: Andriana Van Niekerk

Title: Child of the Universe
My motivation is that we all came from the stars, so we are all interconnected and beautiful.

Oil pastels, permanent paint markers and watercolour on multimedia paper.

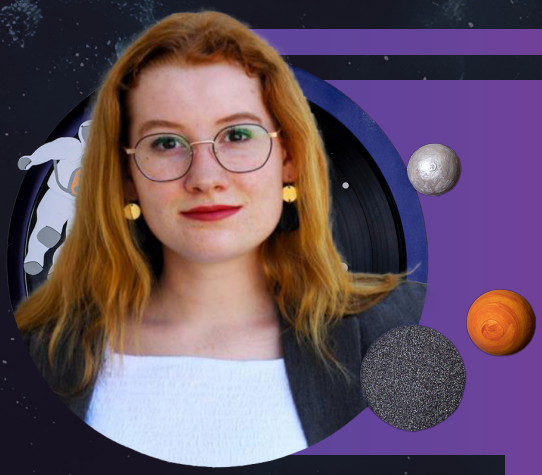


Primary School: Grade 4-7
Runner–up: Zivah Khan

The sun is the heart of the galaxy.

Everything in our solar system revolves around our sun. It's always sending out charged particles. Every single day we need the sun for energy. It drives the weather, the ocean currents, seasons, and it makes plant life possible through photosynthesis.

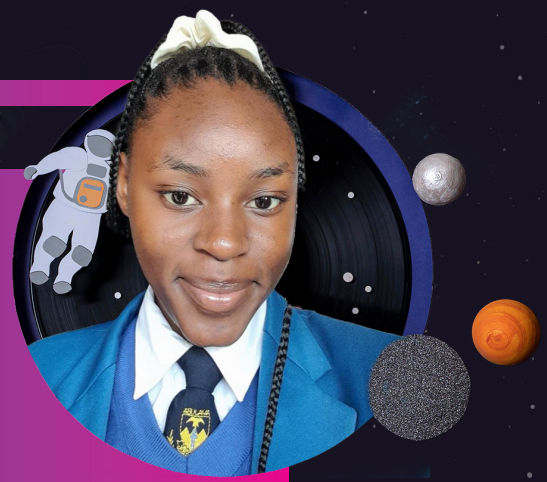
I wanted to create a picture using chalks on black paper. My picture represents the heart of the galaxy – a woman (she is sunrise) surrounded by swirling planets holding the life force of the solar system. And the sunrise always represents a brighter future each day.



High School: Grade 11
Winner: Anemi Dames from Windhoek Afrikaanse Privaatskool

Title: Child of the Universe
The thought that there could be life out there or even a totally new galaxy is what drives people to discover the unknown in hopes to be the first to discover something new. The beauty of space is seen through the nebulas, commit, trillions of stars even those we will never be able to see, and the planets.

My favorite planet is Mars because of its reddish colour. I have dreamed of being able to step foot on this planet. And who knows maybe One day I'll be able to have a braai surrounded by astronauts from around the world.



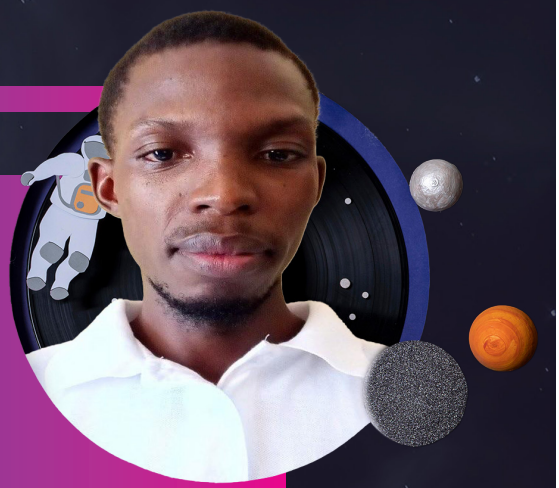
High School: Grade 12
Runner–up: Akudziwe Claire Chivane from Amajuba High School in Newcastle

The name of the artwork is 'Ethereal'.
I used graphite pencils, a battery eraser and graphite powder. For the stardust I mainly used graphite powder with a soft paintbrush and a battery eraser for the stars. The artwork features a woman in the universe with planets, stars and galaxies around her. Women hold a lot of power and beauty, and they have the ability to bring new life into the world and so much more. I created this artwork to represent the ethereal beauty that women hold.

University winner: Sancia van Niekerk

Gases of beauty
Medium: Spray-paint Graffiti Art. This is a 4-painting series each A1 size (594 x 841 mm) and framed. Ready to be displayed. Stages of earth creation of the gases reflecting colour when sun light is projected on them.

Painting 1: (H2) and (He) a purple and pink colour.
Painting 2: Volcanoes: H2O, CO2 NH3. Making the colour yellow and red.
Painting 3: Then land and plants are formed which brought in a form of lime green with light grey.
Painting 4: Finally, the modern world. Plants and animals thrive in balance. CO2 and O2, this shows a lot of dark blues, strong dark greens and whites for clouds that fill the sky

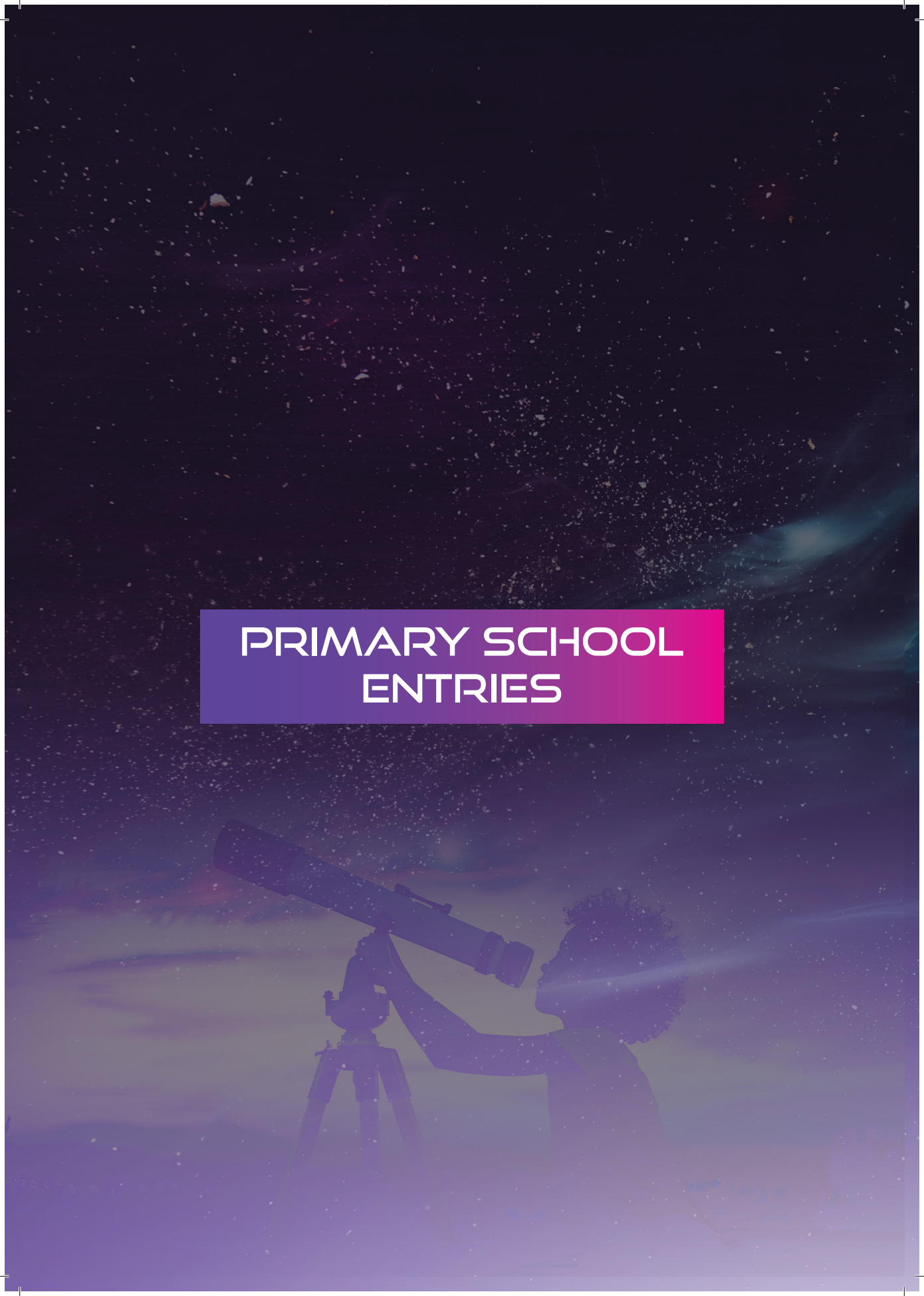


University
Runner–up: Moemedi Moka from Botswana International University of Science and Technology (BIUST) (Masters student)

A painting titled "African Astrophotography" shows the beauty of an African night sky. It shows a group of people gazing at the night sky which is in the form of a map of Africa.

The background colors which forms distortion makes the night sky of Africa to pop up hence sending the message that our African night skies are amazing, we need to appreciate it. This painting which captures celestial events was created on a 61 x 45.5 cm canvas using Acrylic paint.

PRIMARY SCHOOL ENTRIES



Gabriella Walker
Muizenberg Junior School, Grade 7

From auroras that shine through the night
To the lonely moon that shines quite bright
Allowing night dwellers to hunt and see
As I look up to see stars shining down on me

Tides grow stronger with the help of the moon
With stars as their guide, boats hope to get home soon
Others look up, at the sight of the stars
Hoping to see something else, like the glow of mars

Satellites that soar through empty space
Searching for life, or hoping to find a trace
Astronomy is more important than it seems
So appreciate it next time, see?

Anelda Botes
Nelspruit Laerskool, Grade 7

Guiding the future in the love for astronomy

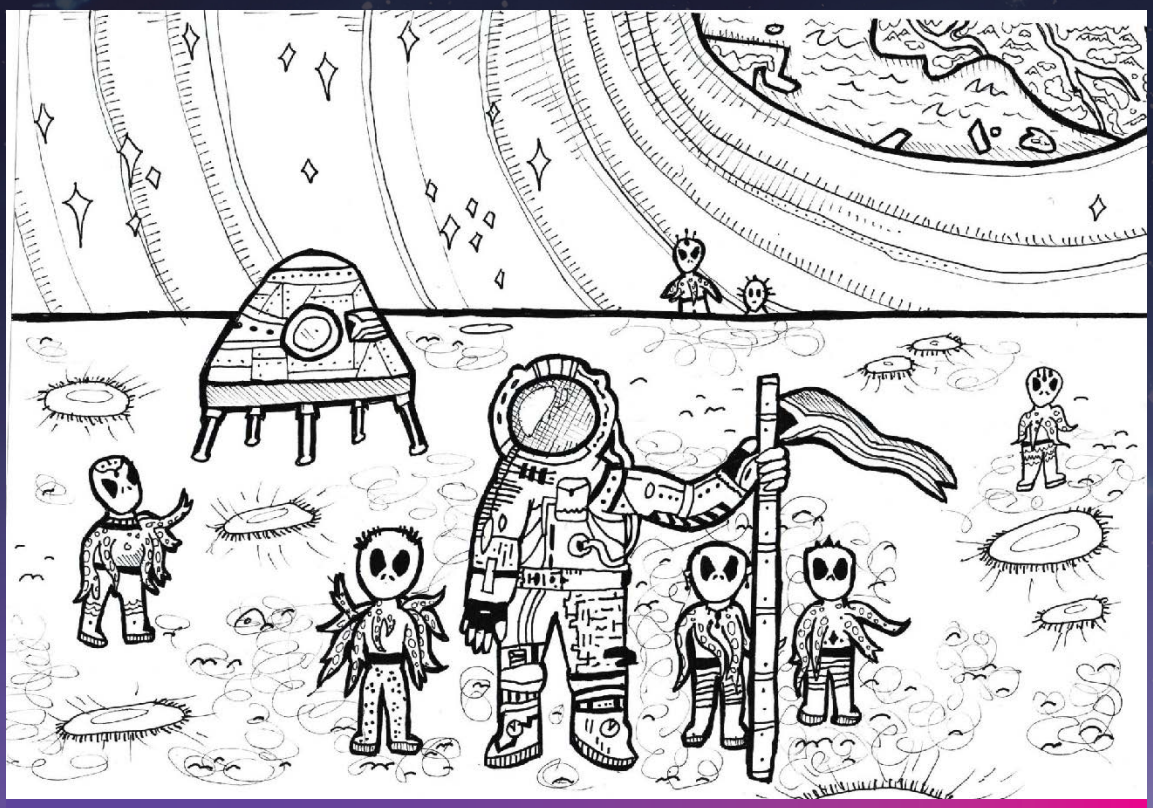
C.B. Klassen
Kimberley Staats Primary, Grade 3

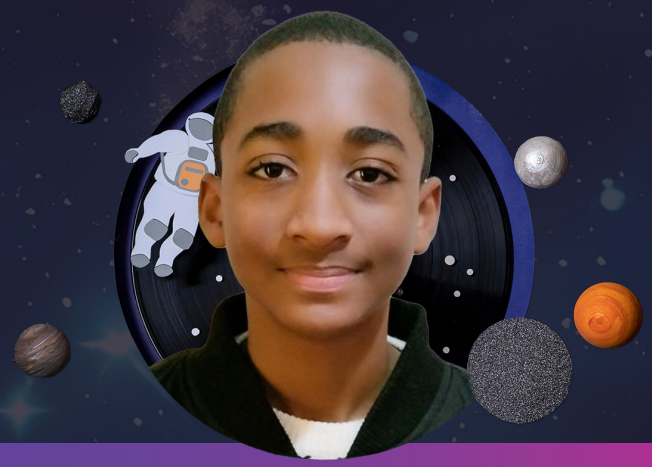
I made a space picture with my oil pastels! I drew planets and stars with my favorite colors: blue, orange, purple, and yellow. I put the colors on really thick to make them look like the bumpy parts of the moon. Then, I scraped some parts off to make lines like the tails of shooting stars zooming by. My picture is like a space story that I made up, with every color and shape being a different part of the space adventure I'm imagining!

Astrology is important in my daily life because it helps me feel connected to the universe. I love looking at the stars and thinking about how they affect us.

Luca Groves
Somerset East Gill Primary, Grade 7

Thanks to modern technology





Morgan Jones
Paarl William Lloyd Primary School, Grade 6

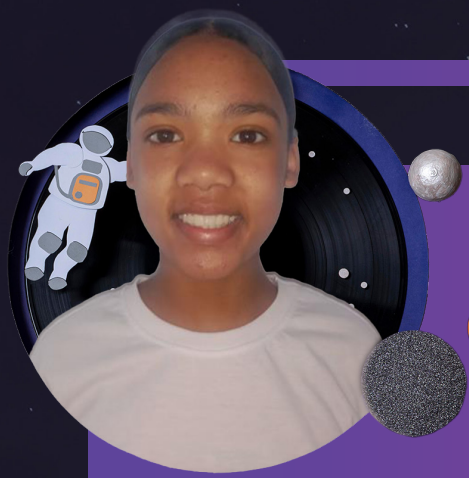
My artwork focuses on the important role of astronomy in our daily lives. The Sun provides Earth's energy, light and heat. Without it, photosynthesis won't take place in plants and there will be no food for living things. We need the Moon in our daily lives because it impacts our time, tides, light and with our navigation. Earth is the only planet in the universe that can sustain life because it has every factor that living things need to survive. Astronauts travel in spaceships to conduct experiments, collect information from different planets to broaden our knowledge about the universe.

Annabel Ungerer
Stellenbosch Eikestad Primary School, Grade 6

Astronauts play a vital role in helping us understand the importance of astronomy in our daily lives through their exploration, research, and public outreach. They help discover other planets, stars and a lot more.

Nina Ungerer
Stellenbosch Eikestad Primary School,
Grade 6

Celestial Navigation
The Moon aids historical maritime navigation through its phases and tidal effects. Its gravitational pull affects satellite orbits, crucial for modern GPS systems. Mars challenges space navigation with its unique orbital dynamics, driving technological advancements in robotics and autonomous systems that benefit terrestrial navigation and exploration.



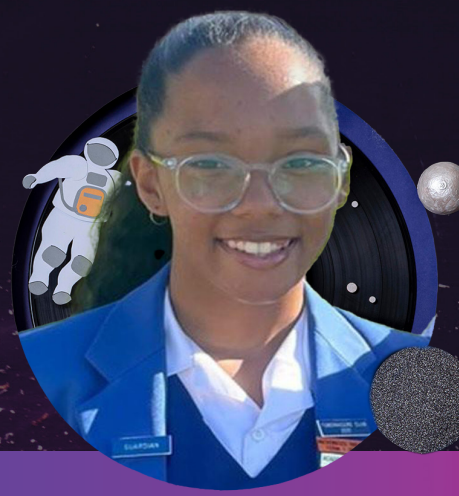
Leeshay Grill
Muizenberg Junior School, Grade 7

In my picture I wanted to create a telescope on Earth and the James Webb telescope floating through the universe. The colourful swirly shapes represent galaxies and dust particles. I have created a sun because we need it every single day. I have also drawn the James Webb telescope.

Alisha De Bruin
Muizenberg Junior School, Grade 7

My interests are in gaming and art, and I used my imagination to create a picture which brought my interests together. The theme of the Universe and the planets is an amazing way of using art, gaming, and bring it all together.

At the bottom, the purple colour band represents an abyss in a galaxy sea. There is an astronaut looking at the sun, Earth and the moon. The yellow-haired figure holding the planet mercury represents the sun while the blue-haired figure holding the star represents the moon. In the background you can see the planets Jupiter and Uranus. I also included a surprise in the bottom right – an Among Us character.

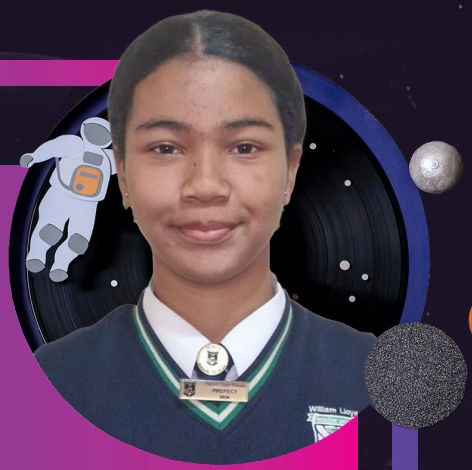


Zivah Khan
Muizenberg Junior School, Grade 7

The sun is the heart of the galaxy.

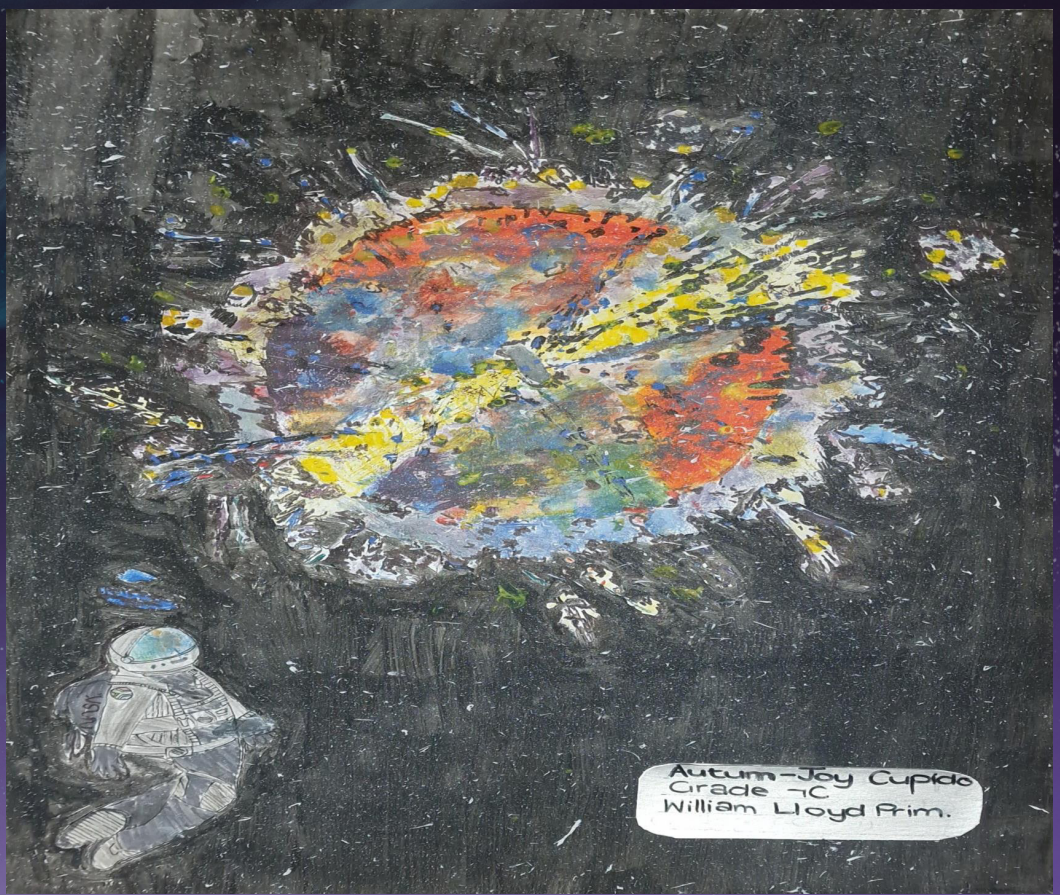
Everything in our solar system revolves around our sun. It's always sending out charged particles. Every single day we need the sun for energy. It drives the weather, the ocean currents, seasons, and it makes plant life possible through photosynthesis.

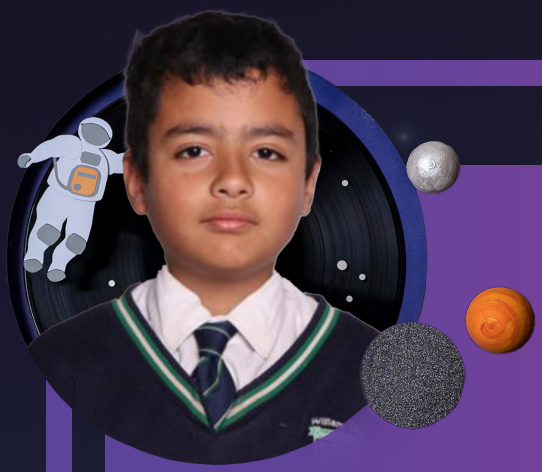
I wanted to create a picture using chalks on black paper. My picture represents the heart of the galaxy – a woman (she is sunrise) surrounded by swirling planets holding the life force of the solar system. And the sunrise always represents a brighter future each day.



Autum–Joy Cupido
William Lloyd Primary School, Grade 7

My artwork was created to show the beauty of stars including what we can't see from Earth. This astronaut got the chance to see a star explosion in front of his eyes. He was stunned by the beauty, and he couldn't believe how this beauty of stars can't be seen from Earth.



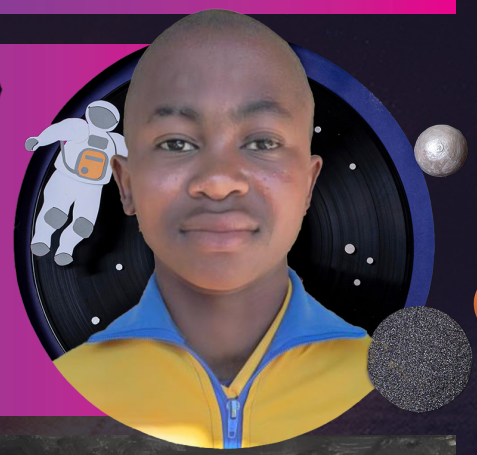


Connor Jethro Adams
Wellington William Lloyd Primary School

Astronomy inspires us with images so beautiful and promises answers to the bigger questions asked. Stars are important because they have helped people navigate on Earth. When it is dark, stars would light up the sky, giving us light. Cultures identify celestial objects with gods and observe their movements across the sky.

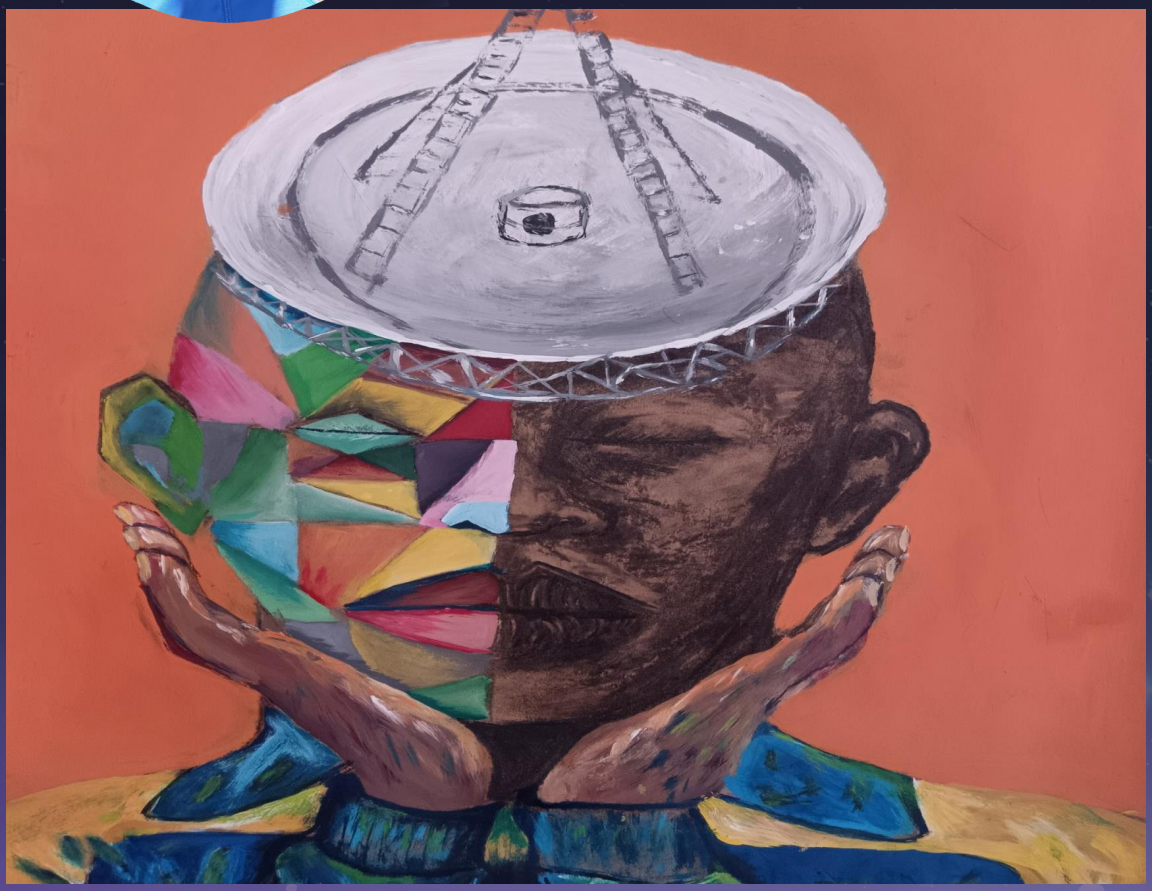
Lisakhanya Bangiso
Nkazimlo Primary School

Kids are often brave and willing to take risks to learn new things. This painting shows a fearless young boy using a telescope to look at the universe while riding on the back of a fierce animal. The artwork also raises the question, 'What will humankind do, once we have destroyed our beautiful planet Earth?'

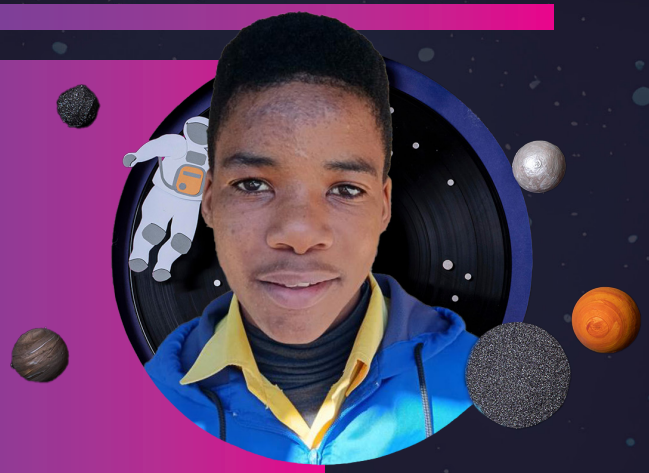


Mbalentle Linganiso
Nkazimlo Primary School

The human brain is capable of amazing things. The 21st century has also made it possible for humans to use artificial brains in the form of technology to gather information on the entire universe in different ways. Such info is then used in our daily lives to prepare for the future.



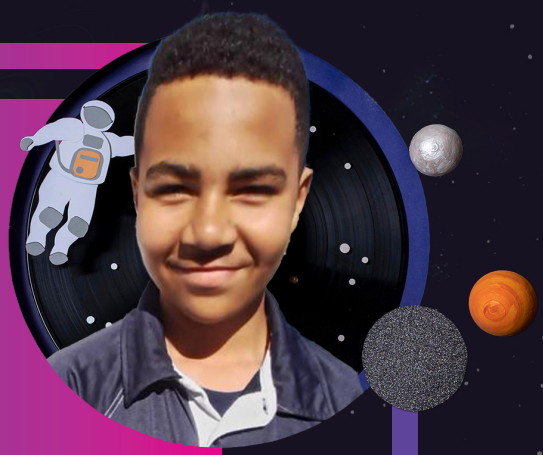
Azile Tom
Nkazimlo Primary School



Migration happens all the time on Earth, and birds are great travellers. Human activities also affect where animals migrate. Animals move for different reasons, like finding food or better living conditions. If they could, some might even travel beyond our atmosphere to explore the colorful universe, as some animals love bright colors and have excellent eyesight. Birds could also be used to carry tools to collect information from outer space.

Salaamah Abbas
Habibia Primary School, Grade 7

Cosmic Triumph
An astronaut floats amidst the celestial wonders, embodying the spirit of human endeavor and exploration. Each star, a beacon guiding their journey towards an elusive goal- a distant planet, a celestial body yet uncharted. Through the lens of astronomy, the artwork narrates the timeless story of reaching a goal, where perseverance and ingenuity pave the way to triumph.

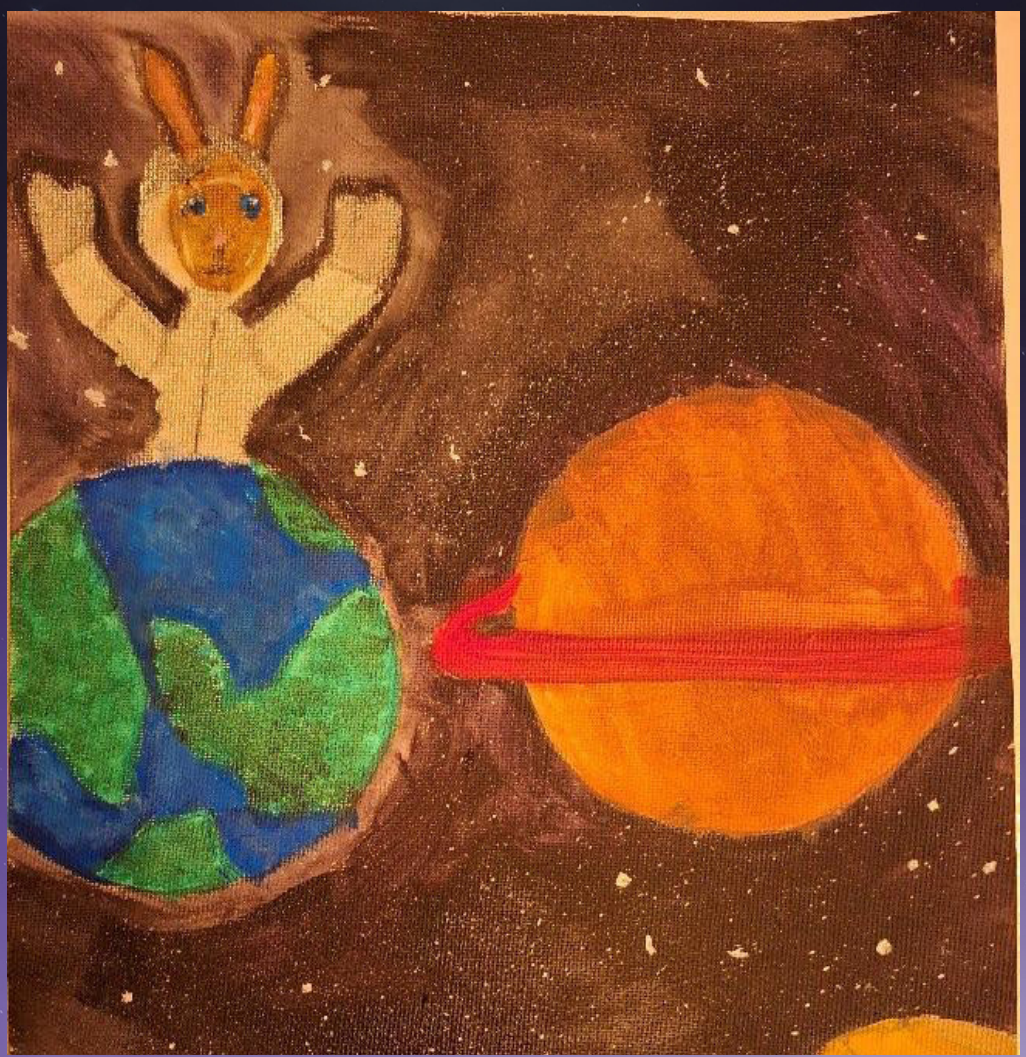


Nuh Mohamed
Hoekwil Primary, Grade 7

My art piece is located on an alien planet in a solar system similar to ours. I used a unique blend of art pencils, chalk pastels and markers. A unique blend of black, yellow and purple colours have been used to catch a cosmic aura. Two small planets, a large Neptune- like planet and a sunlike star make the solar system.

Rebecca Gower
The Bridge Assisted Learning School
Lonehill, Grade 3

When its a full moon, I can see the outline of a rabbit -
I love bunnies and our beautiful planet Earth so I combined them!
Last year I got a galaxy themed hoverboard, those beautiful patterns inspired the background to my artwork.
I used mostly acrylic paint to create it. To make the tiny speckled stars, I splattered white water paint with a dry paintbrush.

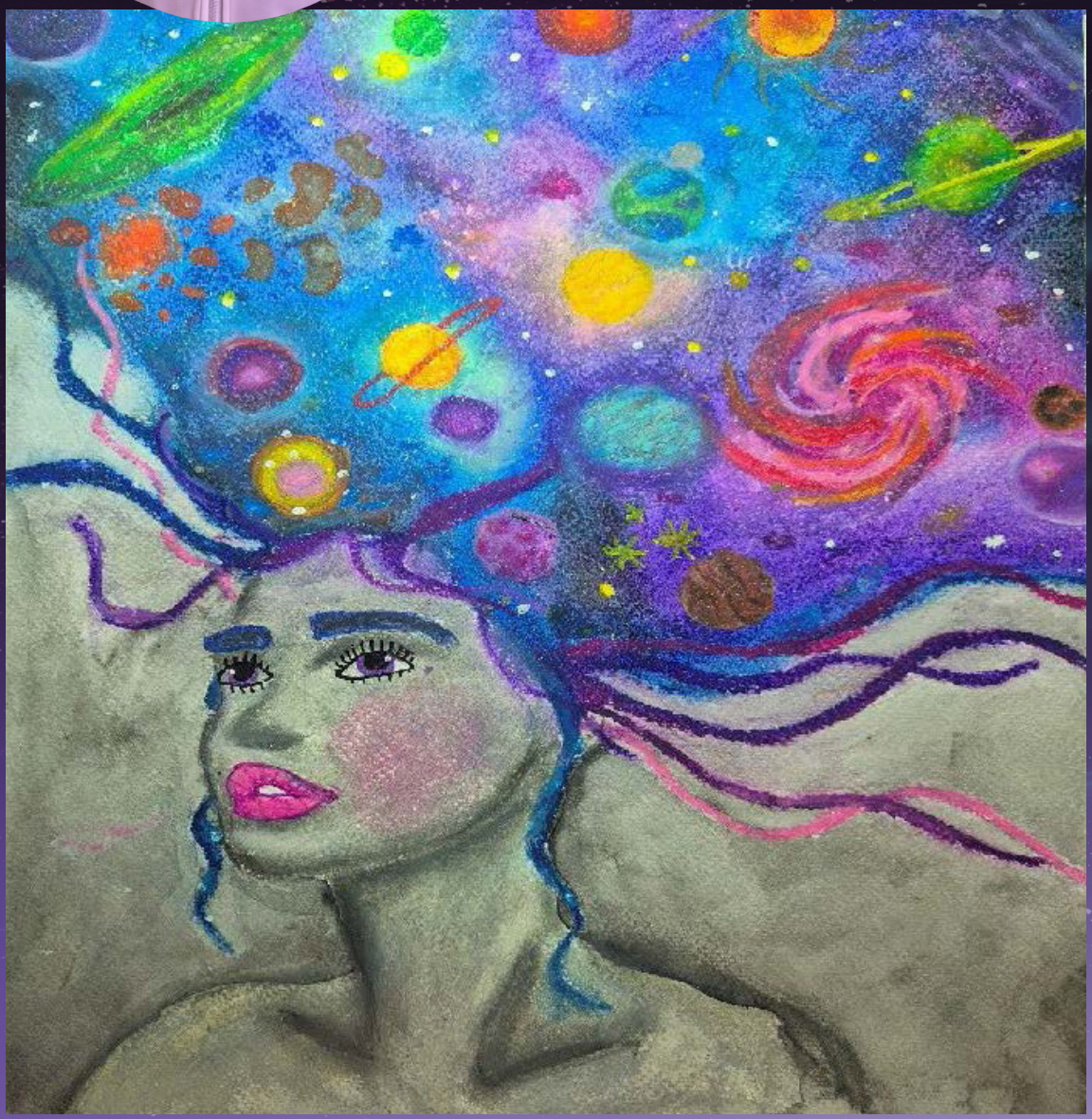


Edmund George
Hoekwil Primary School, Grade 7

My artwork is an unknown planet inspired by Jupiter. It is completely an oil pastel with a mix of black and blue for the background, and yellow, blue and purple for the planet. The sun is white in the middle going darker outwards.

Ariana van Niekerk
Pringle Bay
Hendrik Louw Primary School, Grade 5

Child of the Universe
My motivation is that we all came from the stars, so we are all interconnected and beautiful.
Oil pastels, permanent paint markers and watercolour on multimedia paper



Aryana Naicker
Newcastle St Dominics, Grade 3

We have been learning about our solar system at school. People have been into outer space.

I used pastels, paint and glitter glue to make the picture.

Zithelo Samkele Mbuyazi
Newcastle St Dominics, Grade 3

The solar eclipse happened this year. We discussed it in our news time in the morning. It looked just like this. We read the newspaper article about it in class.

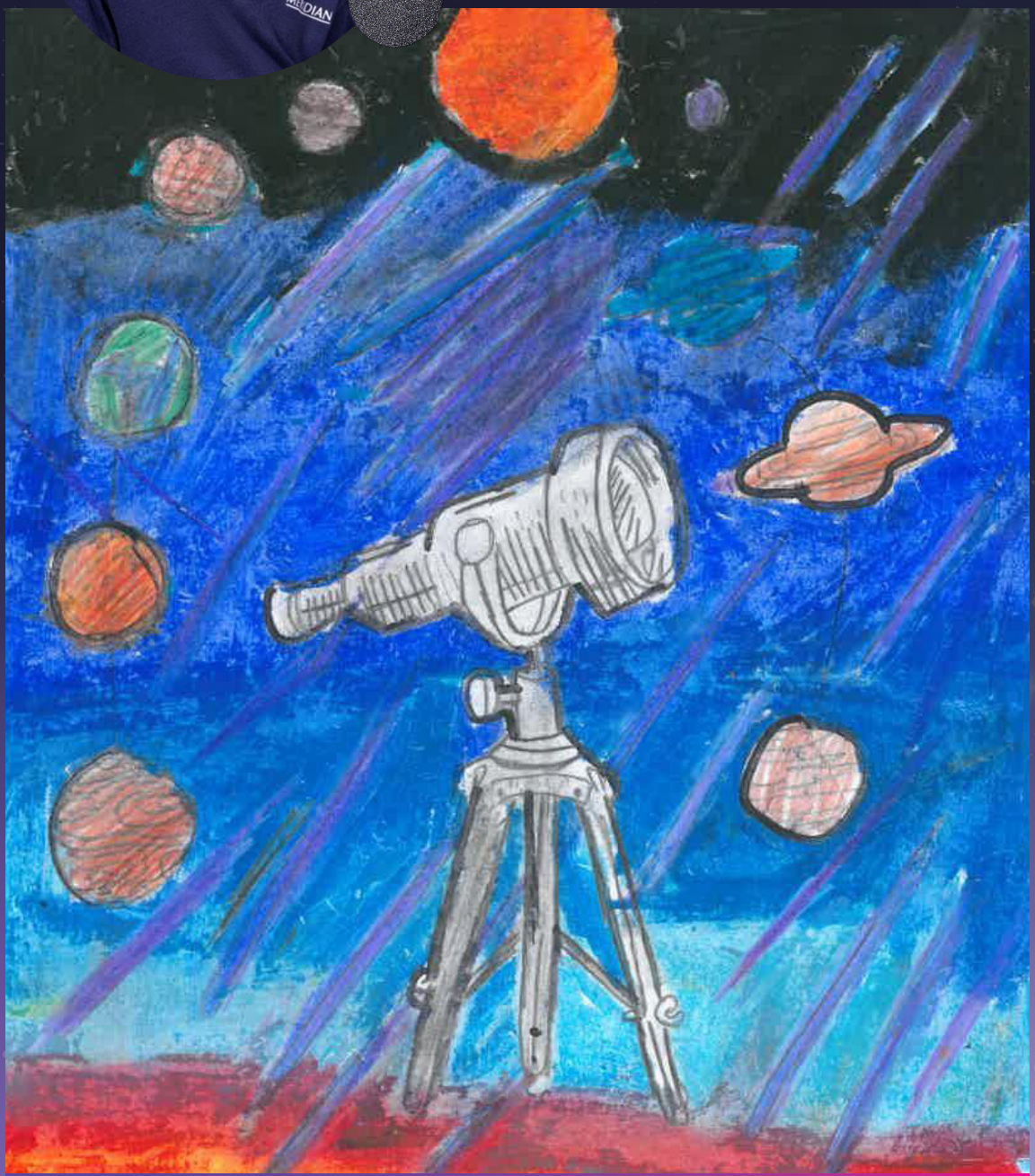
Prajna Ramsahai
Newcastle St Dominics, Grade 3

We have learnt about space this term at school and how people been into outer space.

I used paint, pastels and glitter glue to make my picture.

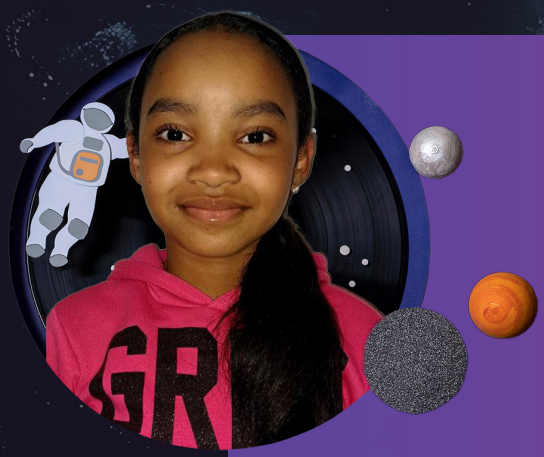
Sameul Thabo Gumbi
Curro School

Life is about the journey to help understand and open up the world. When you know something beyond what you see, it helps you appreciate the beauty of the universe and find your place within it.



Limile Leano Zantsi
St Johns, Grade 6

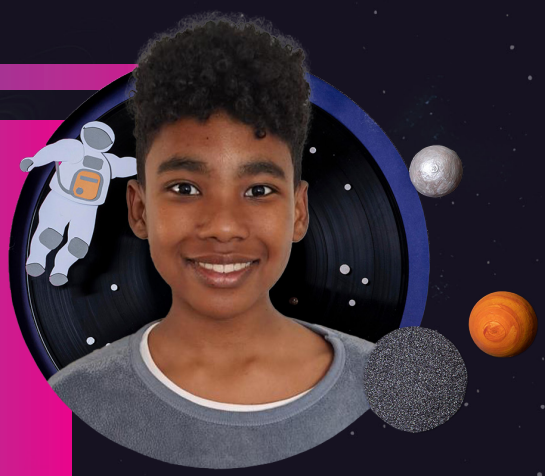
The topic wasn't easy, and it was frustrating in the beginning, but I am really happy I got the opportunity to participate. When I think of Africa propogating life on a new planet I first thought about adding African animals, so I chose Saturn so the animals could walk on the rings. My favourite idea was adding rocket stations similar to Earth having train stations or airports. I added an African astronaut with the South African flag because I am proud of my country. I used markers to draw my art, and I am really happy with how it turned out.



Riley Walters
Rouxville Primary, Grade 6

My painting is inspired by a young woman who as a girl always dreamt of being an astronaut and is finally living her dream. She is now working for NASA, and she got assigned to a project in space. After exploring the vastness of space for years she arrived on a planet no-one has seen before.

While exploring the planet, she discovered that it inhabits life! After all of the hard work and dedicated years she has been through, she is proud to announce the new planet she has discovered.

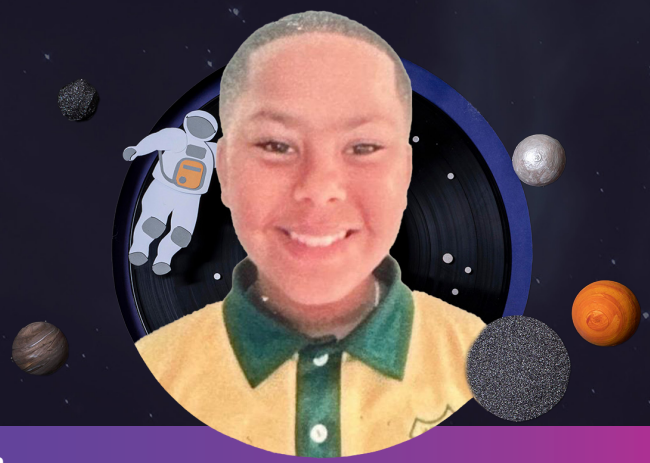


Evan Damons
Muizenberg Junior School, Grade 7

Just as we can listen to the sounds of nature, it's also possible to listen to the sounds of the universe. NASA scientists have converted astronomical data into soundscapes. We can experience the cosmos with our ears as well as our eyes. I included an old-fashioned telephone as a link to the history of communication as well as the James Webb telescope, the milky way, and the planets of the solar system. Here in South Africa, we can actually say that we have our own ears to the Universe. We have the SKA!

Qasim Abrahams
Cape Town West End Primary School,
Grade 5

Astronomy is beautiful and it can be scary sometimes. Because there are may weird things like a black hole and once you enter it then you will never come out. Our planet Earth is beautiful with its plants, trees and oceans. My favourite event about space is a supernova, its when a star explodes. Earth is beautiful but we are killing it by polluting. The sun is the most important thing in our solar system, and we need it to for light and heat. If you were to land on Jupiter you would burn instantly because the atmosphere is too hot.



Jiyaad Karriem
Cape Town West End Primary School, Grade 6

Astronomy, the study of celestial objects, impacts our daily lives in subtle yet significant ways. GPS technology relies on satellites orbiting Earth, precise timing enabled by atomic clocks syncnonizes with celestial bodies. Weather forecasting uses satellites imagery to track storms and predict patterns. Even our modern calendar is based on astronomical observations with leap years accounting for Earth's orbit around the sun.

Rueben Thys
Cape Town West End Primary School, Grade 2

When I look up into the sky at night, it looks so beautiful. It fascinates me to think there are planets up there and that we also live on a planet. I'm not sure of how many planets there are. The stars shine so brightly, and I wonder if there is life on the other planets. Our planet is called Earth and we as human beings cannot live on other planets or even in space without a space suit. My mother tells me that there is a milky way and even showed me pictures if how it looks in space. I'm interested in going there, how awesome it will be to go into space and travel across the galaxy and see all that is out there.

Zara Kariem
Cape Town West End Primary School, Grade 7

Astronomy is the branch of science that deals with celestial objects, space and the physical universe as a whole.

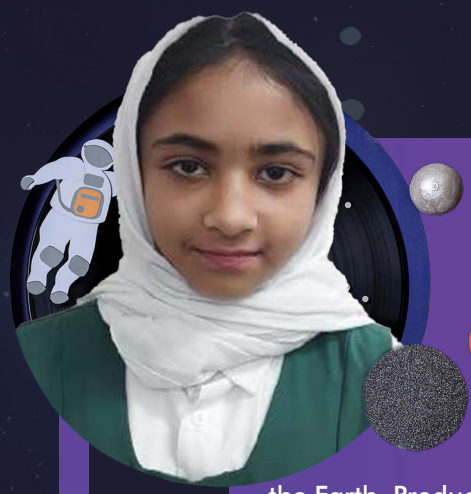
Without space programs, we wouldn't have GPS, accurate weather prediction, solar cells or instantaneous global, communication.

Mawadda Manuel
Cape Town Habibia Primary School, Grade 7

My motivation for creating the drawing was the inspiration that came when I saw artists have their work displayed and admired and noticed and I wanted to experience it too so that maybe I could inspire other people too. I used a lot paper because I kept on drawing until I was satisfied with the result. I mainly used oil pastels, white and black paint and pencil colours.

Gad Arkoh Awotwe
Ghana Accra Kasoa Fehanson Children
University
10 years old

With all the planets in space, I thought of the natural things that does not deplete when things surround them dies. If the universe is for the biotic, it can also be for abiotic. I looked at the wonderful atmosphere at the cemetery, wondering how birds kept visiting day and night enjoying the sunlight, moonlight and admiring the stars together with the dead ones. I asked myself, do dead ones also enjoy nature in the space? Let's pay attention to those who are no more and visiting them at times. They were once among us and will one day be like them.



Hadiyah Petersen
Cape Town Habibia Primary School,
Grade 6

My painting is an astronomer's dream view in the evening with a telescope at the edge of a cliff overlooking the ocean, gazing at the galaxy . I love the look of the ocean at night and am fascinated with what happens in the sky and beyond, and how it impacts the Earth. Producing it, I first had a look at other artists' work as well as images of the galaxy for inspiration and guidance. This was my first time painting with oil paints and canvas, and I found enjoyment bringing it to life with colours and techniques.

Rachel Barnard
East London Merrifield, Grade 5

My artwork is a space shuttle and I wanted it to be unique. If the world had no astronomy the world have no wifi, satellites, cell phones and the world would be weird.

Anda Platyi
East London Merrifield, Grade 5

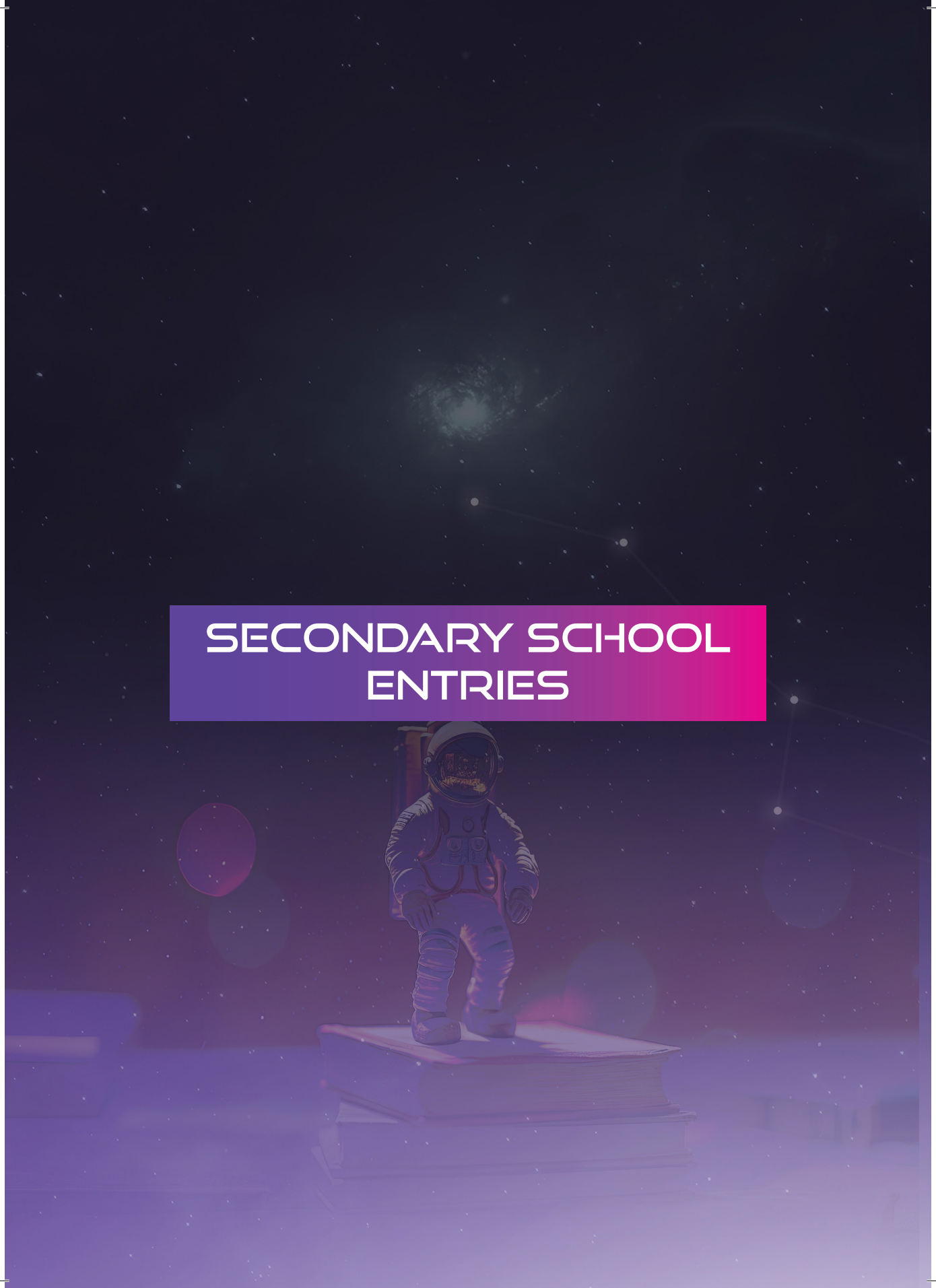
My art was inspired by the Northern lights and space. I imagined that I was outside enjoying the beautiful view.

Aqeelah Abdurahman
Cape Town West End Primary School, Grade 7

Astronomy is the study of the universe. That includes objects we can see without naked eye like celestial bodies. It also includes things we can only see using a telescope. It also includes questions about things we cannot

see at all, such as dark matter and dark energy. The importance of astronomy is to measure time, mark seasons and navigate oceans. Astronomy is a part of all cultures, and one of the oldest forms of science.

SECONDARY SCHOOL ENTRIES



Caitlyn Leigh Baartman
De Kuilen High School, Grade 12

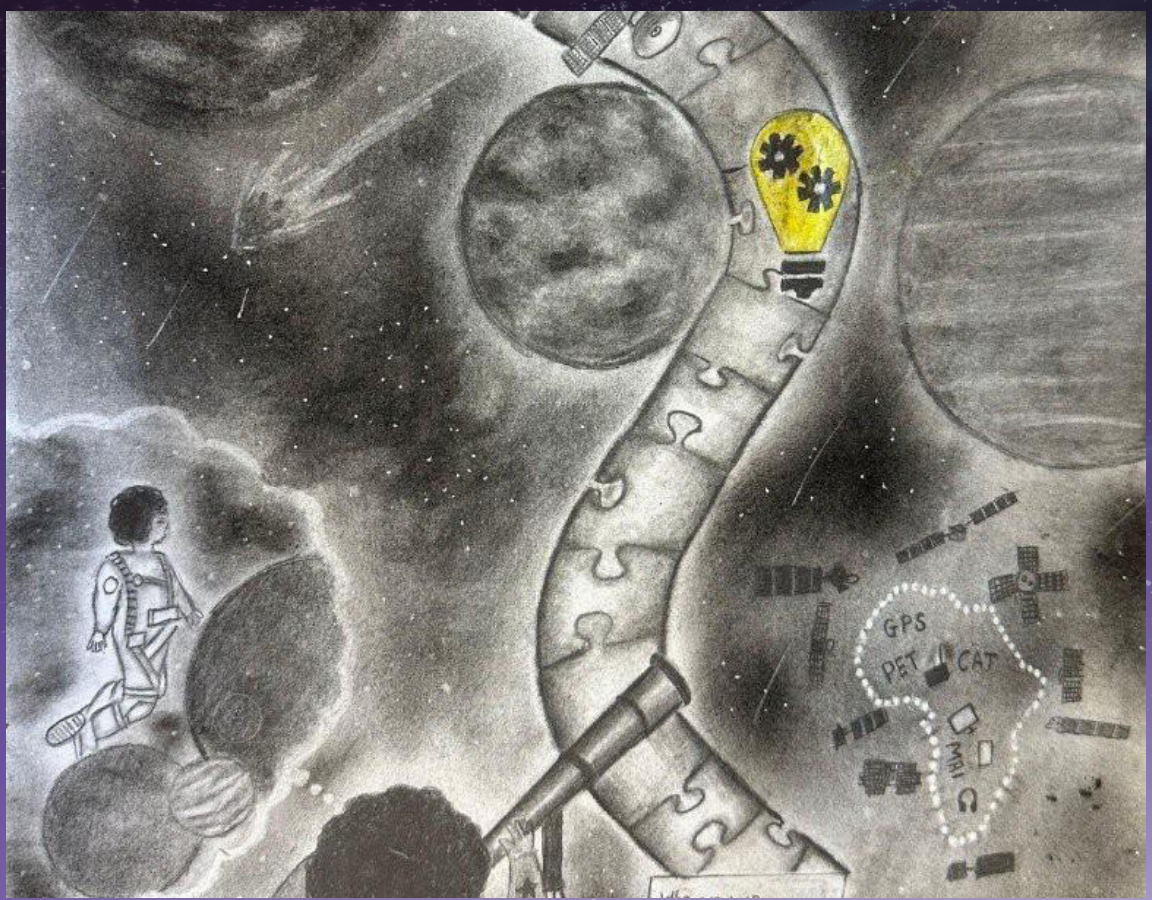
The imbalance of existence (self–portrait)
This art piece was done in watercolour pencils and acrylic black [mixed media] .The purpose or awareness I am portraying is to show how we as humans are dependent on the gravitations of the Earth to reflect on our daily task of agriculture, technology as well as communications. At the same time, it is also astronomy that inspires us with beautiful images and answers to the big questions to feed our curiosity.

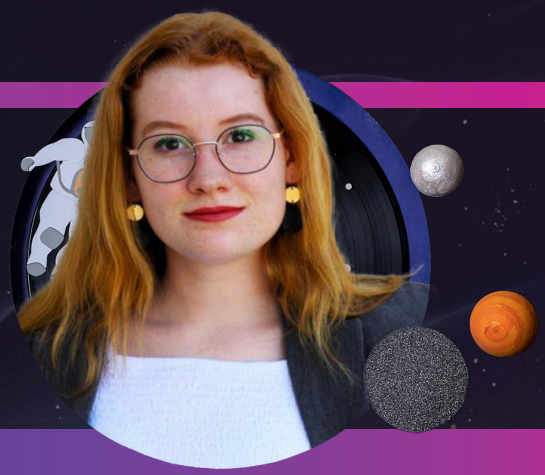
In the work ,the background is in acrylic black with planet clusters to reference the galaxy. The female figure is portrayed with four arms in a balancing stance, and this shows how evident it is that humans tend to manipulate the celestial objects.

Wavhudi u Nemukula
Tshandama Thengwe High School, Grade 11

This art piece shows how astronomy inspires young people to wonder about the universe. It also encourages interest in science and technology. Astronomy also paves a pathway to greater inventions such as geostationary satellites which are used for communication purposes such as phone and TV and computer connection. Astronomy has helped us understand the universe and solve some the questions and mysteries we had about outer space.

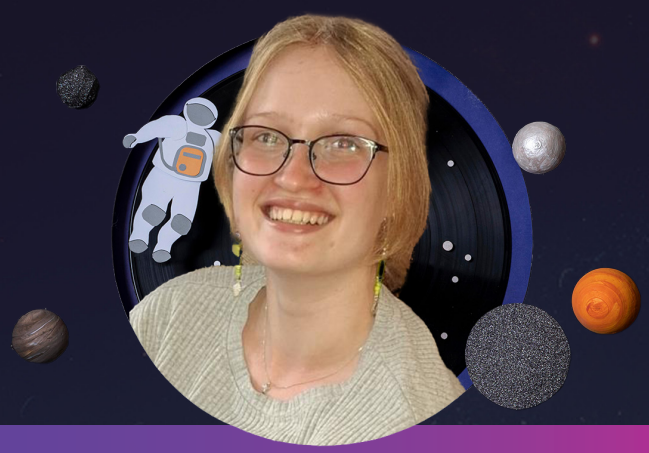
This art piece was created using pencils and charcoal powder.





Anemi Dames
Windhoek Afrikaanse Privaatskool, Grade 11

The thought that there could be life out there or even a totally new galaxy is what drives people to discover the unknown in hopes to be the first to discover something new. The beauty of space is seen through the nebulas, commit, trillions of stars even those we will never be able to see, and the planets. My favorite planet is Mars because of its reddish color. I have dreamed of being able to step foot on this planet. And who knows maybe one day I'll be able to have a braai surrounded by astronauts from around the world.



Celia Wentzel
Crawford International College Sandton, Grade 11

White Dwarf Pulsar
Ink pen and charcoal depiction on brown paper of the white dwarf pulsar J1912-4410 which was primarily observed by South African telescopes. I created this artwork to show how South Africa - represented by indigenous flowers - and Africa as a whole, can contribute to Astronomy and Astrophysics. Astronomy allows Africa to showcase itself as more than capable as well as unique in a scientific environment that has previously been dominated by more economically wealthy countries. Astronomy impacts our everyday lives by creating a way for humanity to see how small we are compared to the rest of the universe.

Akudziwe Clair Chivave
Newcastle Amajuba High School, Grade 12

The name of the artwork is 'Ethereal'. I used graphite pencils, a battery eraser and graphite powder. For the stardust I mainly used graphite powder with a soft paintbrush and a battery eraser for the stars. The artwork features a woman in the universe with planets, stars and galaxies around her. Women hold and lot of power and beauty and they have the ability to bring new life into the world and so much more. I created this artwork to represent the ethereal beauty that women hold.

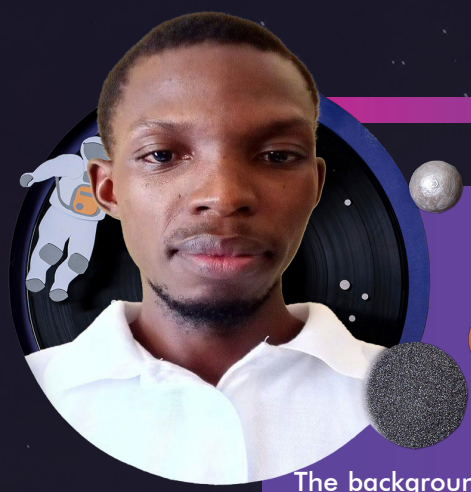

UNIVERSITY
STUDENTS

Winner: Sancia Van Niekerk from
University of South Africa
BA Hons Visual Art

Gases of beauty

Medium: Spray-paint Graffiti Art. This is a 4-painting series each A1 size (594 x 841 mm) and framed. Ready to be displayed. Stages of earth creation of the gases reflecting colour when sun light is projected on them.

Painting 1: (H2) and (He) a purple and pink colour.
Painting 2: Volcanoes: H2O, CO2 NH3. Making the colour yellow and red.
Painting 3: Then land and plants are formed which brought in a form of lime green with light grey.
Painting 4: Finally, the modern world. Plants and animals thrive in balance. CO2 and O2, this shows a lot of dark blues, strong dark greens and whites for clouds that fill the sky.



Moemedi Moka
Botswana International University of Science and Technology (BIUST) Masters degree

A painting titled "African Astrophotography" shows the beauty of an African night sky. It shows a group of people gazing at the night sky which is in the form of a map of Africa. The background colors which forms distortion makes the night sky of Africa to pop up hence sending the message that our African night skies are amazing, we need to appreciate it.

Meshach Adeiyongo
IU International University of Applied Sciences 1st year student

My late father told me about rockets at 10 years old and I have been fascinated by rockets and astronomy ever since. The image is from a hobby of mine, astrophotography. It was shot on a dark night in my village in Gboko, Nigeria on my Google Pixel 7.

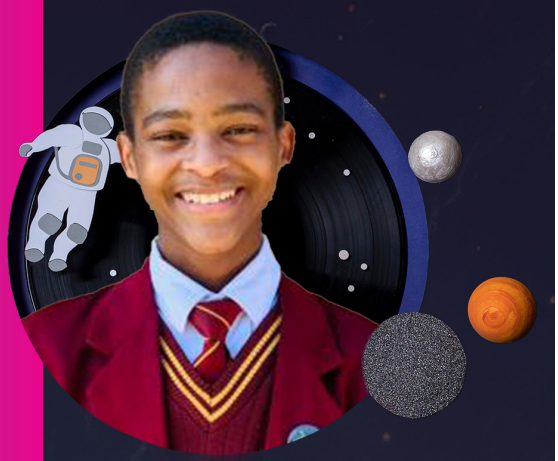
Trueboy Samarista Gayiza Dlamini
University of Johannesburg

"Starseed" is a painting that combines acrylic and fabric paints on a repurposed wooden frame, serving as a poignant reminder of our innate connection to the vast expanse of the universe. This piece is an ode to human potential, acknowledging the boundless possibilities that lie within us. At the same time, it pays tribute to the awe-inspiring mysteries of the cosmos, inviting the viewer to contemplate our place within the grand tapestry of existence. Through "Starseed," I aim to inspire a sense of wonder and curiosity, encouraging the pursuit of knowledge and understanding through the intersection of science, technology, and philosophy.

ARTIFICIAL INTELLIGENCE GENERATED ART

Imanam Maqwazima
Kraaifontein Masibambane Secondary School
Grade 9

The beauty of astronomy has a profound influence on creativity in people from a young age. As children gaze up at the stars, they are inspired by the vastness and wonder of the universe. This spark of curiosity often manifests in art, as they attempt to capture the beauty of celestial bodies through drawings and paintings. With crayons and pencils, they bring to life vibrant depictions of planets, stars, and galaxies, sharing their unique perspective on the wonders of the cosmos.



Choosen Otis
Birchleigh High School

Celestial Bodies and Human Endeavors
Surrounding the central figure are celestial bodies such as planets, moons and stars, each a world unto itself, inviting us to ponder our place in the grand scheme.

Interspersed are instruments of our quest: telescopes that bring distant galaxies within our gaze and sextants that remind us of our history of navigation by the stars. The presence of an astronaut and spacecraft signifies our physical ventures into space, pushing the boundaries of what it means to be a terrestrial species.