News for the students, by the students

SAVE WATER

By Bantu Ndiki

Nelson Mandela Bay, like the rest of South Africa, has been struggling with water scarcity for the past few years. Residents of the Bay have been surviving for days without water, and have had to make other means to get by.

Rising temperatures, due to climate change, are also drying up the dams, as they cause water to evaporate faster. Although there has been rain, it has not been assisting well.

The city once reached Day Zero, where there was no water at all, or enough to supply to certain parts of the region. Many reports from opposition parties have showed that the water scarcity is due to leaks, as millions of litres run down the drain.

The Municipality recently approved a budget of R120 million for a project to improve the water and sanitation system. Because of this dire situation, the city implemented drought projects and other interventions to try and solve the situation and stop interrupting the water running through the city.

Within that budget, some funds will be used for the maximization of Nooitgedagt water to be transferred from the Gariep Dam which is currently operating at full capacity and located 450km away. They are ensuring that



these projects don't experience any delays.

The water shortage is not only the municipality's responsibility, but also the residents – including tourists and students. The residents need to come together and work towards preventing Day Zero by making use of water saving measures, and adopt the lifestyle permanently.

Cutting long showers is one of the best recommendations to save water. Using a basin in the shower to catch all of the water and reuse it to flush the toilet also comes highly recommended, as does any other form of barely used water. Residents are also urged not to just allow water to run unnecessarily.

It is in everyone's hands to solve the water scarcity by working together to prevent Day Zero, and adhere to all advice given by the Municipality. Save the water we have, before we don't have any.

3	THE EARLY BIRD CATCHES THE RIDE
•••	
8	CAN A PERSON OF COLOUR BE RACIST?
EN	FESTYLE AND TERTAINMENT
13	SAVE WATER
	CIENCE AND ECHNOLOGY
22	TEMPERATURE VERSUS HEAT
	SPORTS
23	PSA EXTRACTS POSITIVES FROM CAMPUS LIFESTYLE FESTIVAL

NEWS

MADIBAZNews

News for the students, by the students

Administrator Sade' Prinsloo Sade'.Prinsloo@mandela.ac.za

Editor-in-chief Leigh Nakeetah Jason s219919569@mandela.ac.za

Assistant Editor Mbali Ngube s219043027@mandela.ac.za

Marketing MadibazMarketing@mandela.ac.za

News Editor Mbali Ngube s219043027@mandela.ac.za

Sports Editor Siyolise Gqongwana s223501948@mandela.ac.za

Science and Tech Editor Sonia van der Linde s221333223@mandela.ac.za

Opinions Editor Sikhulule Moyeni s219991138@mandela.ac.za

Graphic Designer Shirindza Euphonia Navotna s221422196@mandela.ac.za



This is a student-run newspaper. The views expressed in this publication do not necessarily represent those of the Nelson Mandela University

LETTER FROM THE **EDITOR**

With the first term drawn to a close, and graduation season being upon us, we are so excited to bring forth the second edition of 2023!

Equipped with a mix of new and existing journalists, our team has worked hard to produce modern and insightful articles that cover everything from the water crisis, to recent sport matches to informing articles about artificial technology and the dangers (and clear benefits) thereof.

We would like to extend our congratulations to the 7000+ graduates, both those that did and those who were not able to walk the stage. We extend our condolences to those families whose loved ones' passed before they were able to walk their path to being qualified, and wish them comfort. We wish our new alumni all the best for their future endeavors with whatever journey they will walk.

We also extend our best to the current students, especially the first years who have hopefully settled and are ready to embark on their journey for the next year(s). Remember to stay hydrated, stay focused and look after yourselves. It is very easy to become lost and stray, but remember your end goal, and work hard!

Please do enjoy our new edition, and engage with our social media pages to let us know what you would like next! Keep safe,

Leigh Nakeetah Jason

THE EARLY BIRD CATCHES THE RIDE



By Thandokazi Matshaya

Returning to contact classes has been a heck of a rollercoaster, but one of the biggest rides students have been facing (literally), is transportation from off-campuses residences, to campus and around the city.

Waking up at the break of dawn and arriving at dusk means that students never have enough time to cover their daily schedule - there is never enough time for assignments, studying and even attempting a social life, never mind getting enough sleep to be productive in the first place.

A social life, seems invisible when you consider that you are hardly able to attend classes because of transportation issues. One off-campus student, Yonela Nkweba, describes this problem as 'daunting', especially considering academics. "The shuttle issue has affected my academics since face-to-face classes are not recorded and I sometimes miss class."

Not having enough hours in the day means that students sometimes sacrifice their sleep for academic commitments, leading to frustration. At this point, the university is doing all they can to assist students so that the shuttles can arrive, and arrive on time. The university is trying their best to meet students halfway.

"In an effort to address the challenge of the provision of student shuttles, Manco approved the addition of a further 25 vehicles (the equivalent of six buses), with effect from Monday, 13 March 2023." The communication from the Emergency Management Team on Thursday, 09 March 2023, read. We do hope that this communication and effort helps many, and lessens the load on students' shoulders.

CAMPUS LIFE FESTIVAL MAKES **MASSIVE RETURN**



By Somila Tiwani

The Campus Life Festival showcased Student Life and Development. The event was held on Saturday, the 25th of March 2023 at the Indoor Sports Centre and Madibaz Stadium, South Campus, from 09:00 to 18:00. There were diverse sporting activities, food stalls, society exhibitions, and formations at the event. Football, rugby, netball, athletics, basketball, hockey, volleyball, and chess were among the sports.

The event started with a society exhibition which was held inside the Indoor Sports Centre. This provided the opportunity for societies to educate, promote and recruit students in their respective societies. This was followed by sporting and outdoor activities at Madibaz Stadium where formations also took place.

Residences battled for the final prize and Premier Student Accomodation came out victorious, succeeding Xanadu/Melodi now known as Claude Qavane and Sarah Baartman Residences, who claimed the prize in the last event, in 2019. According to Loyiso Ngcivana, the event was long overdue since we had come back from the Corona Virus pandemic, which deprived us the joys of outdoor activities. The Nelson Mandela University student further stated that other senior students got to experience the festival and the event was important for students to get to know each other.

One of the SRC's Societies, Sports, Arts and Culture representatives, Buhle Mchunu was part of the planning for the event, and it was a satisfying moment for her to witness their project come to fulfilment. "I had lower expectations than what has really occurred, so I am incredibly appreciative of the students' enthusiasm and cooperation."

THE REVIVAL OF CULTURE

By Leigh Nakeetah Jason

Ouma Katrina Esau was, and has always been, a woman on a mission. In 2018, she released the children's book 'Qhoi Nla Tihoi' (Tortoise and Ostrich) to enrich South Africans and help to revive the dying language 'N|uu'.

The Tsitsikamma Khoisan Council took a leaf from Ouma's book, and recently hosted a Basic Nama (Khoisan) Language course for the community.

Mostly residing in Namibia, then Bostwana, and then South Africa, the Nama population stands at about 230 000 people, with just a little over, still speaking the language.

Jackie Joseph, the organizer of the event, mentioned that the event was put together due to the "exponential decrease in the prevalence of the Khoisan heritage", and was established by the aforementioned council, who formed for the same cause.

Joseph went on to say that the prevalence of the Nama language, especially in the education system from early age to tertiary learning is basically non-existent.

"The language is mostly transferred at home, in community. close family circles in areas such as Riemvasmaak and Kuboes in the Northern Cape where "The hope is that the group of people that their language is actively spoken, but is not attended the course will assist in training other recognised as a language for formal education learners and community members to grow settings." He further mentioned that the youth the language," Joseph says as he sets more had no interest in learning the language or objectives to make his goal and dreams come heritage. true.

5



Joseph shared that the council's vision is to see a country where all South Africans, but especially those from Khoisan descent, speak, read and write in the Nama Language.

As the descendants of the Khoisan in Tsitsikamma (translating in Khoi to 'a place of many waters'), they are trying their best to revive the culture, starting with the Basic Nama Language Course.

The course spanned over three days and was facilitated by twelve people from the Northern Cape and Namibia, and attended by over 40 people in total, scholars and adults from the



By Luphelo Zendile

Are you ready to voice your thoughts? The African Youth Spirituality is calling for students' engagement in discussing African roots, and setting flame to the burning arguments of African beliefs and practices through debates and art creativity.

Nelson Mandela University is proud to have the first ever holistic society that approaches spirituality. The African Youth Spirituality is a society established to question the beliefs and practices that have been accepted by society, and is focused on welcoming youth and inspire them to think critically and evaluate conspiracies of myths, and demystify complex issues regarding spirituality.

This society believes that there is a creative within everyone, and have therefore produced this platform for the youth to be the creators of their own time. They infuse spirituality with art and culture so that they can learn and teach through drama, dancing, music, poetry, writing, storytelling, handcrafts and other physical art. They also learn and share knowledge about food, history, language, and culture.

People are believed to have different views of life in general, and this platform allows each person to express their world through the creativity of art. Many youths are part of the university's community, but due to academics, heavy workloads or simply being unaware, do not participate or engage in things that they like. The African Youth Spirituality Society reaches out to all those curious, but not stuck in the past. If this sounds like you, then the society welcomes you to a world of exploration, expansion and new experiences.





THE HUMAN RIGHT TO ACCESS **ELECTRICITY**

By Somila Tiwani

There is no stated right to electricity in the South African Bill of Rights. Whereas the Bill of Rights guarantees that everyone has the right to have access to health care, housing, food, and water, it is passive on whether the state has an obligation to ensure that everyone has uninterrupted access to electricity.

However, in order for medical facilities to operate properly and for health services to be provided with integrity, they must have electrical power. Electricity is required for the functioning of essential medical technologies, including equipment for laboratory and diagnostic procedures and emergency surgery, among others. The provision of clean water depends on electricity as well. Also, the availability and quality of healthcare services are impacted by the poor and inconsistent energy supply in healthcare institutions.

By imposing loadshedding, Eskom is allegedly infringing fundamental human rights. This is according to evidence that was presented to the North Gauteng High Court by the Health and Allied Workers Indaba Trade Union (HAITU). It has been reported that HAITU is taking part in a legal battle alongside UDM, NUMSA, and other organizations to have public health care facilities and several essential economic sectors exempted from electricity. Evidence illustrating the harmful impacts of loadshedding upon the public health care system has been supplied by HAITU. As a result of the ongoing rolling blackouts caused by loadshedding, every day, people lose their lives in hospitals.

HAITU has demanded that the government and Eskom be accountable for the human lives lost as both the right to human dignity and the right to life are getting violated. They have remained at the forefront of attempts to prevent all hospitals from loadshedding. The right to life cannot be violated by Eskom due to its financial constraints.

7

Term 1 2023

CAN A PERSON OF COLOUR BE RACIST?

By Akahlulwa Radana

Racism is the idea that one race is superior to others due to inherited physical characteristics. But have you ever wondered about the history of Eugenics and White Supremacy and whether People of Colour (POC) can be racist?

Eugenics is the scientifically incorrect idea that humans can be improved through selective breeding. It originated in the late 1800s by scientist Francis Galton whose study believed that the discriminatory and erroneous interpretation that abstract human traits like cognitive ability and interpersonal behaviours could be passed down from generation to generation.

It is a more distorted version of Charles Darwin's theory of natural selection whereby the favourable genetic traits are believed to be possessed exclusively by white Europeans and requires the replacement of natural selection by human control. Like in World War II where Adolf Hitler attempted to create an Aryan Race through the genocide of Blacks, Jews, and Homosexuals.

Throughout history, there have been numerous systems established to keep people of colour and black people below their white counterparts. This is evident through Apartheid laws and Jim Crow legislation. These systems still have an impact on us today as we unconsciously believe that non-white on white racism is justified, as we tend to respond more harshly to white on non-white racism.

According to TikTok creator, Sirachalesbian, a POC friend group needed approval to invite



a "Token White" to the group. Tokenism is criticised as it is dehumanising, reducing people to tools for diversity.

People should be viewed as people and not "tokens." Furthermore, why must a POC ask for permission to invite their friend just because the friend is white? Consider the reaction if a white creator said, "If you're going to bring a "token black" to our group, you need to ask for permission from everyone here first."

It is guaranteed that the reactions would be more severe, and they certainly would not be able to maintain their platform. In a sense, wouldn't that mean that yes people of colour can be racist? Everyone must try to face their own racial prejudices to truly unite in the fight against racism.

ALWAYS BRING YOUR JACKET!



By Ciko Ndlovu

Gqerberha has earned the reputation of being referred to as the "Friendly City" due to the easy going nature of its residents. This helps students from outside the metro feel more welcome. This is essential when having to navigate their new home for the duration of their course. However, what type of greeting does the Bay's weather provide?

Based on multiple student accounts, the most common consensus was the erratic nature of the weather. Many felt that looking at the weather forecast is pointless as the city's weather often makes unpredictable changes. A perfect example - it can go from being cool and cloudy to warm and sunny in under seconds. The frequency and extent of rain was often mentioned as precipitation is of a sparse nature which explains the ongoing water crisis.

Living up to its secondary nickname, the strong winds present in the metro is an experience of its own. Students have many stories of hats blowing away and umbrella receiving immense damage from the metro's prevailing winds.

Interestingly, when accumulating responses from students what also effected their own experiences was the region where they originated. Students who came from the Western part of the country often stated that they had experienced little to no changes. This is due to the similarity of Nelson Mandela Bay's climate to the Mediterranean climate of the Western Cape for example. Students from the Eastern part of the country felt the most changes due to the many different climate regions present in the Eastern section of South Africa.

Moral of the Story: Always Bring Your Jacket!

BUILDING A SOCIAL NETWORK POST-PANDEMIC



By Ciko Ndlovu

For the first time in three years, students are attending contact lessons. Due to the pandemic, many students had to adapt to this new lifestyle change and for some, this means that they have to relearn the art of building social connections.

Many may feel anxious and overwhelmed about the return to campus. Both first and senior year students share these feelings as they navigate through the different formats friendships may take in this new period. What could make matters worse is when others within one's environment have already formed social circles, which may leave one feeling isolated.

As an introvert myself, I find it difficult to strike up conversation with anyone on a whim due to the internal pressure of being charismatic and talkative enough to spark someone's interest in building a friendship with me. A great way to tackle this challenge in a lecture setting, is to start by asking a classmate academic-related question, which can serve as a starting point, possibly for something beautiful like a study-buddy and best case scenario, a friend.

You could also build friendships by joining societies, which is a great way to meet individuals that share the same interests. You could too attend campus, residence or community events, as they could help you gain some social exposure. You could also start by interacting with students in your residence, which may be an easier way to build friendships. While this journey may involve some trial and error, and possibly loss, you may end up meeting people who are in the same predicament as you, and are interested in getting to know you.

LOOK AFTER YOURSELF

By Lindelwa Salman

It is that time of the year again when students undergo a lot mental, emotional, physical, spiritual, and academic challenges. This is because students tend to prioritize their studies and overlook the activities they used to engage in. Some even compromise their eating and sleeping habits due to academic pressures.

Here are some tips to keep yourself going as a student:

- You need to have a planned schedule, a to-do list that outlines what needs to be accomplished challenging to adhere to your to-do list, it is always the best thing to do.
- You need to stay motivated. Motivation is the driving force that helps you to persevere through challenging times.
- Set achievable goals and reward yourself when you achieve them.
- You need enough rest. It is essential for your physical and mental well-being. You cannot perform well academically if you are sleep-deprived or exhausted.
- Most importantly read. If you find that nothing seems to make sense, bury your nose in a help you to relax but also improve your vocabulary and comprehension skills.
- make use of them.

Being a student can be challenging, but it is essential to take care of yourself mentally, emotionally, physically, spiritually, and academically. As Nido Qubein said, "Your present circumstances don't determine where you can go; they merely determine where they start." Therefore, all the best to all students, and good luck taking care of yourself.



and at what time. This will save a lot of time and provide you with ample time to rest. It may be

book. Besides reading academic texts, you can indulge in novels or poems. This will not only

• Seek help. Remember that you are not alone, and it is okay to ask for help. The university offers free counselling at Emthonjeni Fountain of Student Wellness and Student Health Services, so

Term 1 | 2023

NELSON MANDELA UNIVERSITY PRESENTS **ADVOCATE TEMBEKA NGCUKAITOBI**

By Mfundo Ndima

On the 27th of March, the faculties of law and humanities partnered up to organise a sensational and exclusive educational masterclass in African Indigenous Jurisprudence.

Advocate Tembeka Ngcukaitobi was the keynote speaker, and Professor Barney Pityana was a respondent. Students, lecturers, and faculty management enjoyed the insightful session.

The law professor has two published books, one titled 'The Land Is Ours' and the other titled 'Land Matters'. He is also a member of the Judicial Service Commission (JSC) appointed by the President of South Africa - Cyril Ramaphosa. He holds an LLB from the University of Transkei and two LLMs, one from Rhodes University and the other from the London School of Economics.

In his masterclass, he educated the audience on how history and law go hand in hand. He stretched his argument to 1652, when Jan van Riebeeck landed in the Cape and how it was a political encounter. He further spoke about the intentions of the British to civilise the natives. This included teaching them English for communication and public works for production.

At the peak of his masterclass presentation, he outlined the pivotal role that the first generation of black lawyers played in determining the principles of a new world



order which is currently in operatation. He concluded his masterclass with a plea to both faculties to start producing scholars who will question and challenge the West rather than scholars who will regurgitate the current thinking.

I found the masterclass inspiring to students. The university holds similar events throughout the year so that students have a chance to engage with industry experts. It is an initiative that also serves as a motivation for students to excel in their studies.

THE SLOWLY DECREASING CRIME RATE



By Bantu Ndiki

The crime experienced in Nelson Mandela Bay is not something new, but is escalating to the extent that community members are taking a stand and fighting crime themselves. Very often on the streets of Central and Govan Mbeki Avenue, a Nelson Mandela University student is mugged or violated.

In response, some student residences, like Alpha, are devising plans and strategies that include the police and local municipal officers to fight crime together. This residence is one of the few affected. "I was chilling with my roommate when a three-armed man came to us and demanded phones" Kamogelo, one of the residents reported. Last year, the crime hotspots ranged in taxi's to and from Summerstrand, where students got mugged inside the moving vehicle. This was reported to the Taxi Association, and taxi drivers advised students not to ride in minivans that were not registered, have a sticker showing registration, or do not belong to a certain association. Since, crime has steadily decreased.

If the same route can be taken by central businesses, and student residences with the police, then crime could possibly dissipate. The Nelson Mandela Bay Municipality, Nelson Mandela University off-campus, and retailer's businesses that are currently operating in the streets of Central, Parliament Street, Govan Mbeki Avenue and Donkin Street, are the most powerful stakeholders to fight and combat central crime.

Almost every student complains about the crime taking place now, even within daylight. Students are forced to leave their cell phones and laptops behind when attending class, which defeats the purpose of attending, because they need those devices to log into their module's contents. Recently, students were threatened by a certain car that parked next to their shuttle-stop with five men accompanied by guns. Students are urged to take all precautions to stay safe and protect themselves while the law enforcements try their best to assist as well.

WEEKENDS OR EXTENDED BREAKS?



By Nompumelelo Mculu

For some, weekends are a time for rest and relaxation - a break, but it can also be a valuable opportunity to invest in ourselves and our relationships. In a world where the university-life balance can be challenging to maintain, dedicating time to self-care, fitness, socializing and travel, can help us recharge and find fulfilment.

This article will explore five ways to spend your weekends, providing insights about the importance of rest and relaxation, and why this is important for your mental health. Spending time with family and friends can strengthen relationships and create lasting memories. It is important to prioritize these connections and make time for meaningful interactions outside of the demands of daily life. The value of weekends lies in their ability to provide balance and enrichment in our lives.

By taking advantage of this time, we can recharge our batteries, pursue or passions and connect with others in meaningful ways. Rest and relaxation is essential in maintaining good physical and mental health. When we rest, our bodies are allowed the opportunity to repair and rejuvenate themselves, which is crucial for overall well-being. Similarly, relaxation helps to reduce stress levels and promote a sense of calmness and tranquillity. Relaxation also has physical benefits like reducing muscle tension, improving sleep quality and boosting the immune system. When we are relaxed, our bodies are better able to repair themselves and fight off illness.

Overall, incorporating relaxation into our daily routines is essential for maintaining optimal mental and physical health. Whether it is taking a few minute to meditate, or engaging in a hobby we enjoy, making time for relaxation should be priority for everyone.

Here are five budget friendly places to visit in Port Elizabeth:

- Donkin Lighthouse for city views.
- South End Museum.
- Summerstrand Boardwalk Mall.
- Do the hobby beach park run on Saturday.
- Try a new restaurant or recipe.

By Nompumelelo Mculu

Improving your study habits can be a game changer for your academic performannce. Developing effective habits can help you retain more information, understand concepts better and ultimately imprive your grades. Whether you are in high school, university or pursuing any other kind of further education, taking the time to evaluate and optimize your study habits can pay off well in the long run.

Developing good study habits is crucial for As a student, reflecting on exam results achieving academic success and improving overall productivity. Good study habits also can be both enlightening and humbling. It offers the opportunity to evaluate one's help with alleviating stress associated with academic progress and identify areas of completing assignments and taking exams. improvement. Instead of simply accepting They teach one to break down complex the grade received, students could analyse material into manageable portions and establish realistic goals that can be achieved their performance in areas like time management, test-taking strategies, note through practice and determination. taking techniques and study habits.

Knowing your preferred learning style can help you tailor your approach to maximize retention and comprehension. It is important to reflect on your own learning experiences and analyse which methods are most successful for you to ensure that you are utilizing your time and resources effectively.

15

IMPROVE YOUR STUDY HABITS.

Creating a realistic schedule is essential for ensuring the successful completion of any project. A professional and well-planned schedule should consider all the required tasks and factors that may impact their completion. It should also consider the amount of time needed for each task. With carefully considered timelines, one can better manage expectations and ensure that deadlines are met. Setting goals and rewarding oneself with tangible rewards can help students achieve academic success and personal growth.

BE THE YOU THAT YOU NEED

By Boitshoko Mohale

Coming out to the public as gay, bisexual or anything other than the normalized heterosexual, or 'straight', can be difficult. There are many who criticize gay, bisexual and transgender people, and without support from family or friends, things tend to become unbearable at times.

Nelson Manela University's LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer/Questioning) Society consists of a group of individuals coming together to share their life experiences, and support, comfort and listen to one another. Luyolo Mapekula, a 21-year old man born and raised in Gqeberha, is a third year student in BSc Physical Sciences and Mathematics, and also the chairperson for the Nelson Mandela University Drama Society. He came out as bisexual, despite judgment and homophobia, and is now living his life the way he always wanted to.

'Being in the closet is like locking yourself up in your house because you are afraid of all the dangers in the world. It is stressful and depressing. I remember crying myself to sleep every night. It was so tense that I even lost weight, and not only that, my mental health was also at risk because I was fighting myself. Overall, being in the closet is overwhelming, depressing and stressful. I am glad that I am here today living my life the way I always wished to."

This serves as a reminder and inspiration to everyone. Live your life the way you always wanted to, and be true to yourself. Come out of the closet, only if you want to. Remember, you are doing this for yourself and nobody else. Do not come out if you don't want to. Do what makes you happy. Do not allow society to manipulate you into doing something that you do not want to.





HOW HOBBIES HELP US DE-STRESS

By Siphosethu Seplane

There are certain hobbies that are beneficial to our health. Hobbies overall play a significant role in our lives, allowing us to relax our minds and sometimes escape reality. Hobbies differ amongst people according to levels of enjoyment, in both individual and group settings.

Listening to music can be very calming and emotional to people, dependent on the type of music. Music is therapeutic and helps many unwind, relax and enjoy themselves, awarding the brain as it brings peace to the soul, assisting in brain function.

Writing is an outlet where people can express their emotions. Some days are better than others, but during the worst days, sometimes writing down all your emotions, experiences and goals can help relieve stress and tension. We sometimes prefer to bottle up our emotions and not share them, so writing is a very viable outlet.

Traveling introduces us to unfamiliar places, new environments, and sometimes breath-taking views. It improves our mental health, calms our mind and allows us to become more positive about ourselves and thoughts in general. Traveling makes us feel as though we are restarting our lives, even if it is just for a while. It reduces stress and anxiety.

Meditation is also a very useful anti-stress exercise for our day-to-day lives. Throughout meditation, you can train your mind to achieve a state of calm and inner serenity, which offers a lot of benefits to combat stress, among which you can find increased self-esteem, a rise in creativity and solution against insomnia.

Looking after yourself is very important.

17

TEMPERATURE VERSUS HEAT



By Akahlulwa Radana

Heat and temperature are closely linked, however, they are not the same. In this article we are going to distinguish what it is that makes them different so that we can gain a broader understanding of how the two are related but not identical.

As mentioned, heat and temperature are closely linked and often, we tend to conflate the two due to this very reason. Due to this link, we can view it as; a reduction in temperature is the removal of heat. While we are on the topic of heat, let us define it.

Heat is the overall energy that drives the molecular motion of a substance whether it is a liquid or a solid. On the other hand, temperature is a measurement of a substance's molecular movements. A measurement of the molecular movement of water particles for example. Heat is reliant on certain variables including the number, size, and speed of the particles.

Unlike heat, temperature is not affected by any of these variables. As an illustration of this, we are going to contrast a bathtub of water to a cup of water. The two may share the same temperature but the water inside the bathtub will contain more thermal (heat) energy due to the volume of its particles, this resulting in the bathtub having more heat than a cup of water in spite of them having the exact same temperature.

Heat and temperature are also measured in different units – heat in Joules and because of its dealing with thermal energy and temperature in Celsius due to its involvement with molecular movement.

And that is all there is to it, really. So, the next time the lecturer asks what is the temperature of x and y liquid, please do not tell them it is hot – just show them this article!

By Akahlulwa Radana

Nuclear fusion stops when a star exhausts all of its hydrogen fuel, which causes gravity to draw the star inward on itself, causing it to explode and give rise to supernovae.

Supernovas have the potential to glow much brighter than the Sun. Billions of atoms are released into space during the creation of a supernova, creating what is known as a nebula. Nebula, the sizable dust cloud - not Nebula from the Guardians of the Galaxy. The stars that collapsed into supernovae produced the elements that are present today.

Scientists actually hold the view that all of the gases discovered on Earth, including carbon, oxygen, nitrogen, silicon, and iron, are products of supernovae. Supernovae have a finite lifespan, just like everything else. When they meet their end, the star can then change into a neutron star, white dwarf, or a black hole.

Smaller stars are the stars that become dwarf stars and they resemble the Sun in size. The stars that are medium in size – i.e. possess masses that range from two to five times those of the Sun – develop into neutron stars. The large stars – these are the stars that have a mass five times more than the Sun – develop into black holes.

Do we recall the 2019 black hole? Well, it was initially a large star. Gravity is so strong inside a black to the point that no light can escape – however we are not centring this article on black holes. Supernovae are a wonder born from a collapsed star and they are responsible in part for the air we breathe. Therefore, I think it is appropriate to say, "Reach for the Stars!"

19

LET'S TALK ABOUT SUPERNOVAE!

Term 1 | 2023

Image Source: Pexels.com

THE POWER OF TECHNOLOGY

By Phuthego Precious Nthoke

With the evolution of technology, we find ourselves in the 4th Industrial Revolution. Advanced analytics, advancedmanufacturing technology, connectivity and automation has evolved further in the past twenty years, than we could ever have dreamed of. Unfortunately, an everpresent discussion will always involve the dangers of Artificial Intelligence (AI), which can be used to create generated synthetic media, well-known as 'Deepfakes'.

Artificial Intelligence is the field wherein robust databases and computer sciences can be used to solve problems, and touches on deep learning and embraces machine learning. TechTarget defines it as "a stimulant of human intelligence by which it can be processed by machines to conduct a specific application process natural language and recognize speech".

Artificial intelligence can be used to generate and manipulate media, for example – creating pictures from just words and altering videos to change the speech, the movement of the mouth and the actions of the people depicted in the videos.

Take TikTok for example, where you can create images of yourself using an by using an AI filter, readily available on the Chat AI. This technology uses synthetic generated AI to create pictures by using a group of words or a description of something.

Synthetic generated Artificial Intelligence can be beneficial, as it assists with criminal forensics, accessibility, film production, artistic expression and within the educational field.

With every good form of technology, comes the increasing responsibility of having to keep it from being used for things other than their intended purposes, and with the



Deepfakes can psychologically impact victims, and can be used to intimidate and threaten them. More regulation is needed, as well as media literacy. The public can educate themselves on how to avoid being a victim of this, by always fact-checking the information they share, so that they can be part of the solution and not problem.

PSA EXTRACTS POSITIVES FROM CAMPUS LIFESTYLE FESTIVAL

By Aphiwe Bonga

It was a gloomy day for the Premier Student Accommodation (PSA) Ladies Football team at the Campus Lifestyle Festival, as a late arrival to the tournament meant they would have to forfeit their first match. Losing is not something the team is used to, but a slight miscommunication error handed them an automatic 2-0 defeat in their opening game.

"We were told that our first game for the day would start at 10:30 am against the New Res Ladies team. We arrived at 10:00 am only to hear that we've lost our first game for arriving late," one of the players commented. However, the ladies did not hang their heads for too long as they went on to win their second fixture by 2 goals to nil against eventual champions, Kings Student Accommodation.

The tournament had two groups, each containing 3 teams. This meant that each team would play only two games before the winners of each group faced each other in the final. Unfortunately, the 2-0 win was not enough to allow the team in the final as they needed a minimum of seven goals to win their group. This was due to the dominant performance by the Kings Student Accommodation Ladies team, winning 4-0 against New Res – giving PSA a mountain to climb in their second fixture if they were to go through to the final.

Although this proved to be a mountain too steep for the ladies, their captain, Lerato Motloheloa had some positives to take away from the experience."Overall, we did very well in the fixture we got to play. We just need to keep it up, work hard and practice together. Although we did not go to the finals, the ladies did their best. Our short-term goal now is to compete in the res league," PSA Football Ladies coach, Malibongwe Mtshali, also showed confidence in his team for the season ahead."I am impressed by the whole team. We have some good new players and I believe we can defeat any team we play against if we train hard and commit ourselves," he said.



21

Term 1 | 2023