

Hearts and Wings

Issue 3: March 2022



Nauryz past and present

Written by Aniya



The first time I celebrated Nauryz in school, it was honestly stressful. As a procrastinator, I had to scramble to find a Kazakh national costume the day before we had to wear them in school, and my dad and I drove around the city to find a store that could rent one to us. Funnily, I saw many Haileybury students doing the same. Despite this hectic start to the school celebration, once everything settled, I really enjoyed the dress-up day. Our entire class had dressed up, and I thought all of the clothes looked amazing.

Dressing up in Kazakh clothes and accessories is an annual tradition to celebrate Nauryz in Haileybury Astana. Each year, there is also an assembly to celebrate the holiday, including songs, performances

and traditional Kazakh games. This year is no different. On the 15th of March, the Kazakh department held a Senior School assembly in honour of Nauryz, with a large number of pupils coming in with some form of Kazakh dress, patterns or accessories. I had something prepared to wear in advance, so I spent the night before at home, and not frantically going around Nur-Sultan.

The assembly included a range of activities and performances, often soliciting smiles and laughs from the pupils, encapsulating the spirit of Nauryz. Some pupils performed on their dombras, while others danced. I thoroughly enjoyed seeing students invested in and engaging with their culture. A really special moment

was when we were taught about Tusau Kesu, and mere moments later we witnessed a child take their first steps along the white path. Another sweet tradition that was talked about was Shashu, where candies are thrown in celebration of good events, and then gathered by bystanders. Everyone left the assembly with their own treat to brighten up their morning.

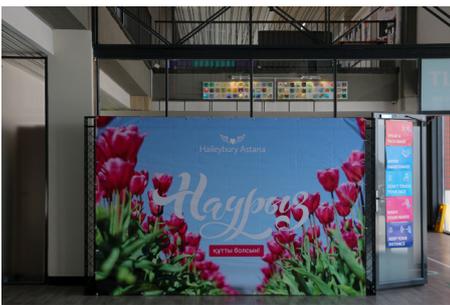
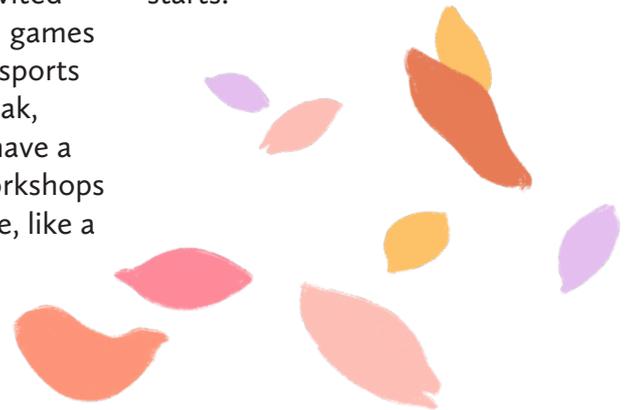
Throughout the day I saw so many different Kazakh patterns on all of the garments everyone was wearing. I began wondering what these patterns truly represent. I was appalled that I had never asked this question before, nor had anyone ever told me. Upon doing some research, I found out that most of them depict the everyday life of



nomadic Kazakhs; they are storytelling tools. There are a few base patterns that are combined to show certain scenarios. For example, the “muiyz” ornament uses base zoo morphene patterns to demonstrate a typical day of a nomadic livestock breeder. It can be varied to show different animals as livestock by using different base patterns. If this topic interests you, you can learn more here: <http://is.nkzu.kz/publishing/%7BA8D97433-F124-4AE6-818E-78C05CCADDCC%7D.pdf>

Nauryz celebrations are not limited to only a single day, they will occur for a whole month in our school. On Friday the 18th of March, students are invited to participate in a Kazakh games event taking place in the sports hall. After the Nauryz break, Junior School pupils will have a chance to take part in workshops centred on Kazakh culture, like a kurt making workshop.

On behalf of everyone on the magazine team: Happy Nauryz! May the emergence of spring bring new beginnings and fresh starts.



Race for Head Pupil

Written by Naira

The slow shuffling of feet fills the air as senior school settles into the theatre. There is the gentle, low thrum of conversation as people shake off sleep, aware of the words projected on the screen before them. Near the stage, a cluster of Year 12 pupils eagerly await the start of

assembly, some hoping to get it over quickly, others looking toward the stage with excitement in their eyes. A quiet fills the theatre as Mrs Fraser takes the stage, and the words 'head student' remain lodged in everyone's mind for the next half hour.

This was the scene on a Tuesday morning in February where senior school students and faculty alike heard the first set of head student speeches for the year. This, however, was not where the process began, and is not where it ends.



The positions were first announced in January when the entirety of Year 12 was visited by Alima and Arina who were elected for the positions last year. Shortly after, pupils were given the chance to nominate either themselves or a fellow classmate for the vocation. All nominees were required to send in a CV detailing their achievements and accomplishments, exhibiting the qualities of a leader. This group of

students was then interviewed, individually, by Mrs Fraser.

Some would move on to continue the process from here while others were shocked to find they had been cut. One unlucky candidate was Uzeir. He shared that he felt betrayed upon receiving this information, but soon came to understand the decision, realising that he may not truly have been the best

option. He said "my heart was not in it", and shared his misgivings about being underqualified in comparison to fellow applicants. Looking back on the process as a whole and the students that have gotten farther than he, he applauds their effort, believing that any of the seven currently under consideration would make great leaders.



For those seven candidates, their hard work behind the scenes got a chance to shine with the head student presentations. This spanned two assemblies during which all of them got to share their manifestos and visions for the school. Each presentation was different; some were more formal while others took a more light-hearted approach, but each was met with hearty applause. When asked, candidates revealed that this was likely the most memorable part of the experience.

Bee was one of the candidates interviewed for this article: she has enjoyed the process thus far and looks forward to hearing the results. The presentation was the most daunting part of the process for her as she did not have as much experience with public speaking. She enjoyed the opportunity to develop her skills and speak to all of senior school, finding the experience less nerve-wracking than expected. One of her ideas was to have more cultural fairs and events in order to celebrate diversity present within our community. This was something that resonated with many people, some of whom have approached her, showing support. Currently, there is a lot of uncertainty for her as she is unsure who will get one of the two available positions. Bee sees leadership as a collaborative venture, one that includes everyone's contributions. A main focus of her presentation was collaboration through things



like the peer system, which she hopes to incorporate into the wider school community if she gets the role. She has said: "Whoever gets the position, I hope we can all collaborate, share our ideas and implement them in school. Everyone has such great ideas."

The response received by Korkem-Ay was just as positive. She claims that many teachers and students alike have approached her, sharing their thoughts on her presentation, often complementing her more business-like approach. She was met with some criticism in regards to it, which she accepted gladly, looking forward to utilising the feedback when she gets the chance. She also finds herself in the dark in regards to any potential forerunners at the moment, and is assured that any of the candidates will do well in the role.

Then came the exciting part – anonymous voting. Every pupil in senior school was given the chance to fill out a slip, ranking each of the seven candidates according to their preference. The teachers also got to have their say. Yet the process was not over yet. Mr Coles interviewed each of the candidates after they gave their speeches, and the candidates still have two upcoming interviews.

Among the students interviewed for this article, many have expressed concerns about student voice within the school. Some have claimed that choosing a new head pupil will not change this. Others claim that this will depend on who is chosen. While others still maintain that students should take full advantage of the opportunities provided here, taking the chance to speak up, saying "you do not need to be a head student to be heard, just the right opportunity or the right time".

Running parallel to this are house captain elections, but these are in the hands of the four housemasters. This position was open to more senior school pupils, not just Year 12, and is a chance for the houses to bond more after being on- and offline for the better part of two years.

Results for both of the head pupil positions and all house captain vocations will be known in early April when they are announced in assembly right after the Nauryz break.

The Spread of Singing Cheer: House Music Competition

Written by Korkem-Ay

The House Music competition, who doesn't love it?

But in all seriousness, the House Music competition has been a staple in Haileybury Astana culture for about as long as the school has stood.

Continuously, the music event has joined members within houses by being the only competition where all years take part at the same time. It is judged by a panel of neutral judges, usually ones that do not belong to a house to make things fair. Moreover, some years the school has even invited people from outside of Haileybury to assess the competition.

Since the House Music competition has lasted for so long the cup usually gets passed around the houses pretty evenly, however, in the past few years Edmonstone has been winning the House Singing cup with their songs ranging from Moana's "How far I'll go" to Rihanna's "Diamonds". But even then, the most exciting part of the competition is not so much the awards but the culmination of seeing the houses perform their songs, usually with the accompaniment of entertaining visual effects and clever lyric changes.



If you were not present during some of the amazing performances, then do not fret, most of the competitions can be viewed on the Haileybury Astana Youtube channel: <https://www.youtube.com/user/HaileyburyAstana>

The songs for this year's competition do not have a set theme, and some houses have not yet decided on which one to pick, so all options remain fair game. There are a few novelties happening though. First off, the junior school and the senior school will be separated due to Covid restrictions, meaning that a good bulk of students would not be present during the competition. Furthermore, due to the Year 11s and the Year 13s having to prepare for formal examinations, those classes will be absent as well.



This will greatly reduce the number of participating students and might even work as an advantage by making the task more manageable or a disadvantage due to the lack of voice and volume. Ultimately, we would have to wait until the actual competition to see the consequence of the aforementioned changes, but it goes without saying that anything that the House Masters come up with will undoubtedly be incredibly fun and entertaining.

The battle for the cup this year is red hot, and many cannot wait to see which house will prevail while illuminating the stage this year.

IB Choice Night & General Advice

Written by Begim-Ana

On February 9th, Haileybury held an IB options evening, where students going into the DP programme next year could get information about the different courses on offer to study in sixth form. Overall, the International Baccalaureate programme offers subjects in 6 different categories, these are Group 1 - Studies in Language & Literature; Group 2 - Language Acquisition; Group 3 - Individuals & Societies; Group 4 - Experimental Sciences; Group 5 - Mathematics; Group 6 - The Arts or options subject.



In our school, students get a wide range of subjects to choose from, there is also a fantastic opportunity to opt to study a foreign language. For example, I am currently studying the IB Spanish ab initio course, which is a great course for beginners to get well versed in the Spanish language and learn a new language. I think that this opportunity allows for pupils to ensure that they choose a variety of subjects so that they will be able to vary their options when choosing subjects for university.

The depth of content we learn in the diploma programme equips us with the needed knowledge in all 6 subjects to go on and study a degree in one of them or another subject entirely. IB equips us with skills that we learn through acquiring knowledge from different subjects.

I think that this opportunity of presenting the IB subjects to students was a great way of informing them of what they could potentially expect from a subject, were they to choose it. An example of this would be the types of examinations within a subject and the levels of subjects they can choose from. For IB, the minimum number of higher-level subjects pupils need to choose from is three, the rest would be standard level subjects. I think that this allows pupils to dive deeper into areas which they are interested in, whilst also learning about other areas to broaden their potential as a knower.



Advice that I would give anyone planning on doing the IB DP programme would be to organise your time wisely and to make sure that you have a healthy balance of school life and personal time. Oftentimes IB can seem quite daunting, but it really depends on how you manage your time. As well as this, I suggest that pupils also take the IB core subjects (CAS, TOK, EE) very seriously as they are key components of your final IB grade. The IB programme is a very rewarding programme, and at the end of the day you are equipped with all the needed skills to continue your education and is accepted by most international universities, and highly sought out by some.

World News

Compiled by Korkem-Ay

Pi Day: Pi calculated to more than 62.8 trillion digits



Photo by lindaroisum/Pixabay.com

March 14 (UPI) -- Guinness World Records celebrated Pi Day on Monday by announcing Swiss researchers set a new record by calculating the number to 62,831,853,071,796 digits.

Pi Day is celebrated March 14 -- 3.14, the first three digits of pi -- as a means of celebrating the irrational number, which represents the ratio of the circumference of a circle to its diameter.

Guinness World Records said

Thomas Keller and his team at the Center for Data Analytics, Visualization and Simulation, or DAVIS, used the software y-cruncher on a machine using the Ubuntu 20.04 operating system to create their precise calculations.

Keller said it took his team about three days to assemble their computer and 108 days and 9 hours to perform the computation that resulted in pi being calculated to the 62,831,853,071,796th digit.

The previous record, more than 31.4 trillion digits, was set by Google employees in 2019.

"The main challenge is the enormous amount of data this calculation produces and to keep the computation running over several months without data loss," Keller told Guinness. "I did a lot of test runs, calculating pi to lower numbers of digits, to get a firm idea on what to expect during a record attempt."

Revolutionary heart transplant procedure carried out on a toddler could lower the risk of organ rejection

A baby born with severe heart defects is recovering well after becoming the first ever recipient of a pioneering new transplant technique carried out at Duke University in North Carolina, USA.

Easton Sinnamon was born with several heart defects as well a deficiency in his thymus – a gland found behind the breastbone that plays a key role in the immune system by creating a type of white blood cells known as T-cells. His condition left him in need of a heart transplant and a thymus tissue transplant.

Under currently available procedures, transplanted hearts have an average lifespan of between 10 and 15 years thanks to the damaging effects caused by the immunosuppressant drugs used to prevent them from being rejected.

However, researchers at Duke have been pioneering a technique of using donated thymus tissue to increase the possibility of a transplanted organ being accepted.

As the thymus gland stimulates the production of T-cells, which attack foreign substances that enter the body, implanting tissue taken from the thymus gland of the same donor as the transplanted organ could help the body to accept it.

The approach has shown promise in previous animal studies, but Easton's rare combination of conditions led to



Easton celebrating his first birthday with his sister © Sinnamon family

the researchers attempting it on a human subject for the first time.

“This has the potential to change the face of solid organ transplantation in the future,” said Joseph W Turek, Duke’s chief of paediatric cardiac surgery and a member of the surgical team.

“If this approach proves successful – and further validation is contemplated – it would mean transplant recipients would not reject the donated organ and they would also not need to undergo treatment with long-term immune-suppression medications, which can be highly toxic, particularly to the kidneys.

“This concept of tolerance has always been the holy grail in transplantation, and we are now on the doorstep.”

Easton received both procedures in August 2021 when he was six months old and as of 172 days since is said to be doing well.

“It was one of those things where it could help him, and if it works, it not only helps him, but it could help thousands of other people as well with their children who need transplants,” said Easton’s mother, Kaitlyn.

“When we talked about it, it was like ‘Why would we not do it when we can make a difference for all these other people?’”

Why is the ISS being retired and what will happen to it?

NASA has set out a timeline for the last decade of the ageing space station's life that includes private occupants, movies and a watery grave.



© NASA/ESA

It is one of the most iconic pieces of space hardware in history, but the days of the International Space Station are now officially numbered. NASA has announced that the curtain will finally fall on the ISS in 2031. The football-pitch-sized orbit outpost will be decommissioned, brought crashing back to Earth before splashing down in a remote part of the Pacific Ocean.

The ISS has a rich history. It has been continuously inhabited since November 2000, with crews of astronauts swapping in and out for typical six month stays.

There are some adults who can now say that there has been someone in space for every single day of their lives. There are children who watch the ISS pass overhead on Christmas Eve, told by their parents that's it is Santa and his sleigh.

It was designed as a home away from home. A tentative first toe into the celestial waters. A place to test out how to live in space for months at a time still relatively close to the safety of the Earth. The lessons we've learned about living in microgravity have set us up with the confidence to return to the Moon later this decade and then to venture out to Mars after that.

Yet, as with everything in life, nothing can last forever. In September last year Russia warned that at least 80 per cent of their section of the ISS has in-flight systems that are passed their expiry date. Cracks have started to appear in the Zarya cargo module. There has also been a series of air leaks in the crew's living quarters.

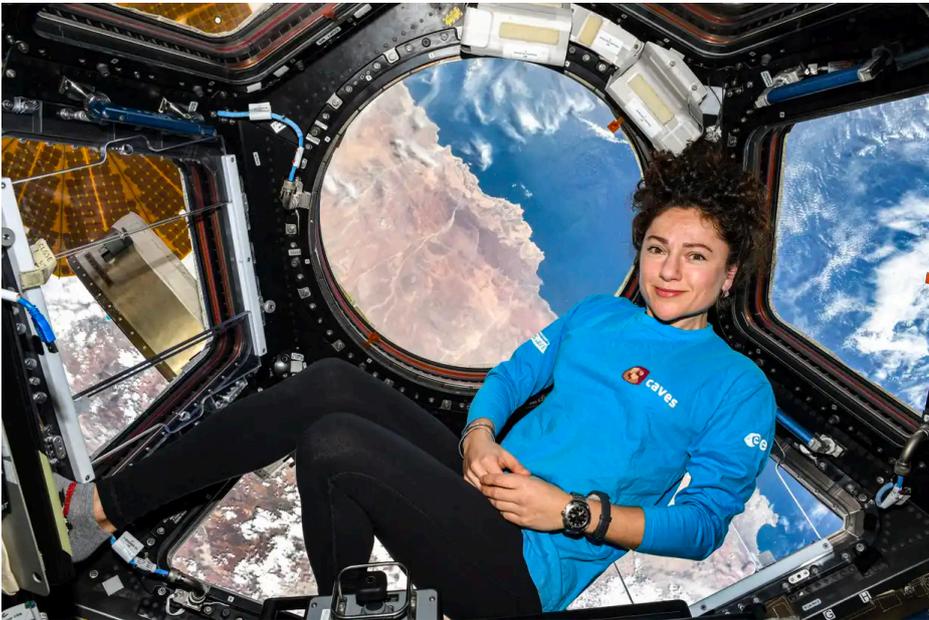
This structural fatigue is part of the reason the ISS will be vacated in 2030 and de-orbited

the following year. NASA made this plan official in January when they released an updated International Space Station Transition Report.

With eight years left before the last crew leaves, there will now be a shift in emphasis. The last few years have seen a growing collaboration between publicly funded space agencies like NASA and privately owned businesses like Elon Musk's SpaceX.

The rest of the 2020s will see the increasing commercialisation of the ISS, with habitable modules available for private space travellers to stay in. December 2024 should see the launch of a six-metre-wide film studio called Space Entertainment Enterprise-1 (SEE-1). It will be a place to make Hollywood blockbusters in weightlessness, with Tom Cruise widely reported to be shooting a film there.





Astronaut Jessica Meir spent 204 days in space from 25 September 2019 to 17 April 2020. She completed three spacewalks, including the first all-female spacewalk alongside ISS crew member Christina Koch.
© NASA/ESA

Then comes the tricky part: what to do with it. Leaving it in space would pose a significant danger. The ISS is the biggest thing orbiting the Earth after the Moon. If it was hit by a piece of space junk it would create a shower of debris that would threaten all of our satellite infrastructure in low-Earth orbit.

So the ISS will join a host of other retired space hardware in a watery grave in the Pacific Ocean. It will be brought down in place known as Point Nemo, or the Oceanic Pole of Inaccessibility. Situated between New Zealand and South America, it is 2,688 kilometres from the nearest land. So the falling debris poses very little danger to humans.

There are other concerns, however.

“There are potential impacts to the marine environment,” says Vito De Lucia, from the Norwegian Centre for the Law of the Sea, and co-author of a report into protecting the marine environment in the so-called spacecraft cemetery. “But those seem to have been generally neglected by space agencies.”

One key issue is that toxic or radioactive materials may survive atmospheric re-entry, something NASA itself concedes.

“Once the debris enters the ocean, it would be expected to settle to the ocean floor and some would become encrusted and incorporated into the sediments,” a NASA spokesperson says.

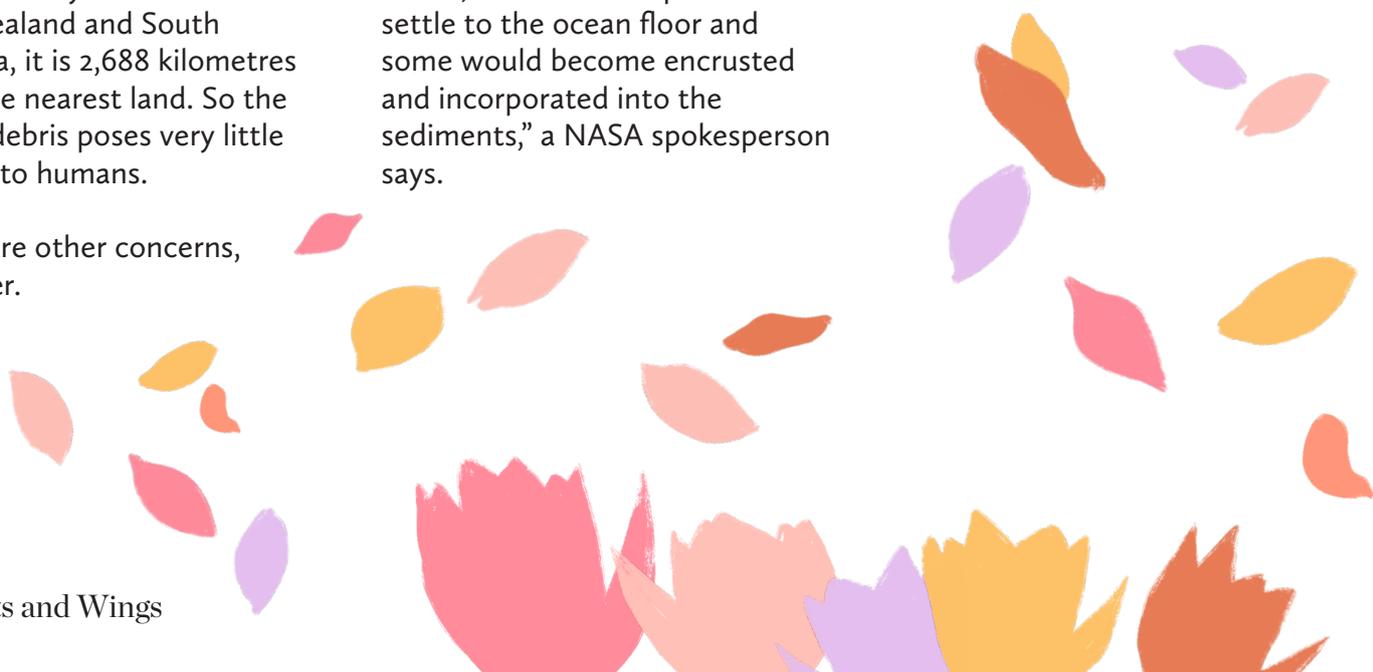
“Although unlikely, some leakage could occur from previously sealed containers that remained intact through reentry and impact. However, no substantial long-term impacts would be expected.”

That may not be the end of the matter, however. De Lucia says that a new international treaty is currently being negotiated to tackle the issue of marine biodiversity conservation in areas which are in international waters, like Point Nemo.

“This new treaty may be adopted and perhaps even enter into force within a time frame relevant to the re-entry of the ISS,” he says.

NASA may have to tweak its plans.

Whatever its ultimate fate, the ISS has paved the way for the future of human space exploration. NASA is planning to build a similar station – called Gateway – in orbit around the Moon. Astronauts will live and work there, using it as a staging post for trips to the lunar surface. That wouldn’t be possible without the valuable lessons we’ve learned from decades of the ISS.





Haileybury Astana

Featuring contributions from

Writers:

*Aniya
Begim-Ana
Korkem-Ay
Naira*

Editor:

Aniya

Photography:

Maria

Cover Illustration:

Anara

Design:

Naira

Special thanks to

*Begim-Ana
Korkem-Ay
Uzeir*

For their interview
responses

Mr Bell

For support as the teacher
supervisor

For more information contact

Aniya
Editor-in-Chief
aboranbay@haileyburyastana.kz

Mr Bell
Teacher Supervisor
d.bell@haileyburyastana.kz