

THE COLUMNS

by pupils; for pupils

HSD's Newsletter: Issue 89

With just a week before the October holidays, things seem to be ramping up all too fast. Whether it's exams, dissertations, personal statements or university applications, everyone seems to be very stressed around now. Breaks, as I'm sure we can all attest, are vitally important - so we're taking one next week so that the members of the team doing early applications can get them done. But it's certainly been a term to remember, from memorable house choir performances to the exciting co-curricular fair, and no matter how anxiety-inducing these last few weeks might have seemed, we've all found good times in amongst all the worries and deadlines. Make sure to make the most of your two weeks of holidays, and get some good quality rest so that you're ready for the next term ahead.



Editor, Izzy

HS2: The Failings of a Nation

Jack Mitchell

In 2003, the first high-speed rail line in Britain was completed: HS1. It connected London to the Channel Tunnel. It was generally seen as a success, and sparked ideas of what the future of high-speed rail could look like in the UK. Countries such as France and Spain have had these networks in place since the 1980s, while the UK had, until HS1, been severely behind in development.

The Labour government, under then-Prime Minister Gordon Brown, proposed a second high-speed line in 2009. This was taken on by the Conservative-Liberal Democrat coalition the following year. They proposed a 'Y'-shaped HS2 line that would run from London to Birmingham, and then fork just after to go to either Manchester or Leeds. The government announced that the track will still fork, but that it wouldn't go as far as Leeds. Two years later, the Transport Secretary announced that HS2 would go ahead, so long as the legislation for the building was passed. Five years later, the High-Speed Rail Act was proposed and passed both the House of Commons and the House of Lords. This authorised the construction of Phase 1 – which would take the line as far as Birmingham.

Phase 1 is currently under construction, and is set to be completed between 2029 and 2033. However, HS2 has a big problem: money. Various sources have reported different costs of building the line, but the BBC has said that estimated costs are £71 billion, though some government sources have reported more and many other respectable news sources throwing around the figure of £100 billion. Whatever it is, it is a lot more than it was projected to cost when it was first proposed, which was just £16 billion.

While the cost is substantial, there are many benefits. Once finished, HS2 will connect London with the major cities of the North and Midlands. The journey time between London and Birmingham will be slashed by almost half. It will also alleviate pressure on the existing network, which currently hosts intercity, local, and freight trains. The hope is that when considering a journey between London and a city that is part of the high-speed network, the train will be the obvious option. This will reduce emissions from other transport types: cars and domestic flights.

However, the cost simply cannot be ignored. Whether it is costing £70 billion or £100 billion, the country has a hefty bill to pay. Many say that this money would be much more useful if it were spent elsewhere. For instance, alleviating the cost of living, or upgrading the NHS. Also, the COVID pandemic and war in Ukraine have cost the UK economy hundreds of billions already. The original target completion points when the government announced their backing of the railway was 2026 for Phase 1 and 2033 for Phase 2. Not reaching this target only prolongs the wait for those who will be most reliant on the railway such as commuters.

HS2 has cost multiple times its already large budget, will not be ready until years after it was supposed to, and won't even benefit most Brits. It will also not benefit the North of England – for which the railway was created – nearly as much as it should. Fast-growing cities such as Manchester may have to wait decades for this upgrade.

This begs the question: will HS2 ever make financial sense and will it even help the people that it should?

Pricing Ethics

Sophia Kapelyukh

Have you ever wondered why it is that ethical products cost way more than other goods? Like, have you ever walked down the toothbrush aisle and were stuck on whether to buy the classic plastic white toothbrush with pink stripes, or whether to go for the cooler-looking bamboo toothbrush? You would probably think that bamboo is a way more environmentally friendly material than plastic, so you would reach out your hand to grab that one, when suddenly your eyes fall to the price...

Why is it the bamboo toothbrush costs so much more than the white one, and is that fair?

Well if you're a business, then your answer will most certainly be yes. After all, your goal as a company is to maximise profit and selling ethical products could just be the way to do that. Right now, friendly goods are the buzz among customers - they are considered organic, natural and of very high quality - who wouldn't want to brush their teeth with that? This premium image of ethical commodities is exactly what businesses rely on when setting their prices. Customers are willing to pay high amounts of money to own these honest goods, so businesses are just using this to their advantage. Premium prices encourage this exceptional image of ethical products, so it's all just a clever pricing strategy to entice customers to buy ethical products. Therefore it is fair that a business should use the customer's perception of high worth of their products even if the customers might exaggerate the value at times.

Yet some of the toothbrush market would not be able to afford the superior bamboo brush. Sadly, one in six people in the UK live in poverty, and would have to stick to the bare minimum of what can be afforded. To make a real impact on the environment, we should all have access to ethical choices. Each person, no matter their socioeconomic status, should be able to buy ethically and do their part to make our planet better. If only the fortunate few who can afford friendly goods buy ethically, we won't get very far in our mission to make the world greener. Businesses are an integral part of society and have a responsibility to do their part to help society move forward, they should encourage more people to buy ethically by setting their prices reasonably so more can afford it. It shouldn't be all about profit, because money by itself can't save the environment.

But perhaps businesses need this profit incentive to even think about producing ethically. The costs of making green products is significantly higher than those of making unethical ones. For companies with profit as their main objective and hundreds of shareholders to satisfy with promising dividends, producing ethically can be a big risk, as a lot of capital will be needed and there is no absolute guarantee that their ethical products will break even from the costs of research and development. This is a risk not many would be willing to take, but they will be encouraged by the possible high mark-up of ethical products. This may sound cold, as companies should already have ethics as their top priority, but if under pressure to make as much money as they can, the high return could be the thing to persuade companies to run ethically. And this incentive is very much needed for multinationals that need to be pushed towards ethical production.

On the other hand, I believe green washed companies don't deserve the extra profit at all. I think we have all been in that situation: you've had a very long, very tiring day, so you take a trip to McDonalds to try to resurrect yourself. Having managed to grab the last strawberry smoothie before the machine breaks down again, you fall into your seat and start sipping the refreshing drink while it's still cool. But before you know it however, the once-perfectly hard straw turns into a mushy mess in your mouth. Yuck. And, I'm so sorry to tell you, but that paper straw isn't even recyclable - the one comforting thought of saving some turtles by drinking from the yucky straw isn't even true - McDonalds had simply wanted you to believe that. Businesses like McDonalds change specific aspects of their products to make their brand seem more conscious about the environment, which appeals to ethically-minded customers, and the business will enjoy the profits those consumers are willing to pay.

But this isn't fair at all.

As with the infamous paper straws, companies can deceive consumers into believing their whole brand cares about ethics and the environment when in reality it's barely true. Another example of this is H&M. The brand is striving to better the environment by selling environmentally-friendly products, with some goods even using recycled materials. This upgrades the brand's image, and customers will believe the company is trying its best to run ethically. But this is H&M greenwashing their image. They are making their customers forget about the constant allegations against the brand of unsafe working conditions, and very unethical suppliers. Customers are fooled into seeing a company as ethical

because of one small, friendly aspect the company put in place, whether that be paper straws or recycled hoodies, but the rest of the company's ethical stance is ignored. This is why it is so wrong for those businesses to charge a higher profit from customers, because they certainly don't deserve it.

So, is the bamboo brush fairly priced? No, I don't believe it is. Businesses should produce ethically to better our world and should charge fairly to better our society – that is their responsibility. There should be other incentives in place to motivate businesses to sell fairly, profit shouldn't be it because it will harm the customer – taking more money away from them than is necessary. I believe a world in which businesses aim to serve the most customers in the most ethical way - a world in which everyone can own a bamboo toothbrush - is a world in which we can truly call businesses ethical.

STRICTLY'S BACK!

Izzy Clark

It's the return of the greatest show on TV!

No, it's not Legomasters (as my dad would claim), or Masterchef (as my mum would claim), no, it's Strictly Come Dancing! Look, I'm not claiming that you have to enjoy Strictly, or that it's any good (even if that is my wholehearted belief), but you do have to admit that it's pretty big. All that glitter, sequins, feathers and fake tan make for a truly eye-catching spectacular, even if sometimes the level of talent doesn't match the level of glamour.

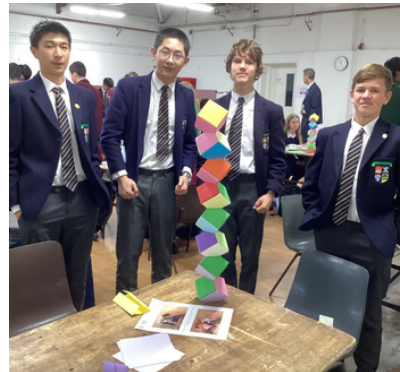
This year, Strictly opened its live shows with a suitable amount of pizzazz, with all the characteristic drama, lycra and shine as ever. Whilst the launch show (September 16th) only introduced us to this year's fresh crop of celebrity contestants, the following week's show treated us to the (sometimes alarming) sight of actual dancing. For the show's 21st annual season, the celebrity competitors are: Adam Thomas, Amanda Abbington, Angela Rippon, Angela Scanlon, Annabel Croft, Bobbie Brazier, Eddie Kadi, Ellie Leach, Jody Cundy, Krishnan Guru-Murthy, Layton Williams, Les Dennis, Nigel Harman, Nikita Kanda and Zara McDermott.

Saturday's show treated us to the highs (and lows) of Strictly, as the celebrities and their long-suffering professional partners performed (to varying levels) a variety of cha-chas, quicksteps, tangos, foxtrots, sambas and paso dobles. Actress and presenter Angela Rippon, the show's oldest ever competitor at 78, wowed us all with her surprising flexibility, stage presence and sense of rhythm, performing a startlingly-good cha-cha with her partner Kai, scoring an impressive 28. On the other end of the age spectrum this year, youngest competitor actor and model Bobbie Brazier stunned us all with a lovely foxtrot with partner Dianne Buswell, netting 29 total points. One of the highlights of the show had to be actor Layton Williams' excellent samba with his partner, Nikita Kuzmin, which, whilst not the most technical, was certainly one of the most eye-catching performances we've ever seen on Week 1.

Topping the leaderboard at the end of the night was star of stage and screen Nigel Harman and his partner Katya, who produced a 32-point worthy paso doble to Nirvana's "Smells Like Teen Spirit" that needs to be seen to be believed. Rounding out the bottom of the leaderboard, however, was comedian Les Dennis, who received a disappointing 16 points after a somewhat-lacklustre tango with partner Nancy.

No one was eliminated this week, as is tradition for Week 1, but anyone could be at risk this Saturday...

This Week in Pictures



Pretty little liars

A book recommendation by Maisey Lafollette



Many people know the TV show “Pretty Little Liars”, but what most don’t know is that it is also a book, written by Sara Shepard. The book series has 18 books and was originally written in 2006, whereas the show came out in 2010. The series was even on The New York Times Best Seller list for 62 weeks.

The book series follows four teenage girls named Aria, Emily, Hanna and Spencer. These four girls were best friends in eighth grade, but when the leader of their group - Ali - disappeared, they all drifted apart: never to speak again - or so they thought. These four girls have their own secrets to hide, as well as shared ones such as “The Jenna thing.” Ali knew all their secrets and they’re almost relieved she can’t tell anyone, but in high school all of them receive texts and notes from the mysterious ‘A’.

Aria’s family then moved to Iceland where she became confident and popular. Spencer became an overachiever; whether it be for hockey, grades or clubs. Hanna became popular at their high school. Emily was one of the most successful members of her swimming team. But sadly, not all good things can last: Spencer likes her sister’s boyfriend, Hanna’s popularity is causing her to act out, Aria likes her English teacher, and Emily develops feelings for the new girl at school. As soon as these girls get in trouble, ‘A’ contacts them, saying she knows everything and is only waiting to reveal their secrets.

“Pretty Little Liars” by Sara Shepard is an amazing book series that keeps you hooked with all its mysteries: what’s “The Jenna thing,” what other secrets do they have, will ‘A’ reveal their secrets? And who is ‘A’?



Health Blog: Why should we be wearing Sunscreen all year round

Maya McColgan

One of the easiest ways to protect your health and delay the effects of ageing is to protect your skin. Our skin is the largest organ in our body and one of its functions is protection.

The skin is damaged by the sun's UVB and UVA rays. This damage can cause sunburn, skin cancer and premature ageing.

Most broad-spectrum suncreams provide protection against both UVA and UVB rays.

The SPF in sunscreens stands for Sun Protection Factor. The number tells us how long the sun's UVB rays would take to burn your skin compared to the amount of time without sunscreen. For example, if you apply an SPF 30 suncream properly, it would take 30 times longer for your skin to burn than if you used no suncream at all.

So, who should be wearing sunscreen? Well, according to skin experts, we ALL should. Furthermore, we ALL should be wearing sunscreen ALL YEAR ROUND.

Skin experts recommend that we use a broad-spectrum SPF 15 or higher, daily (if mostly indoors) and a broad-spectrum SPF 30 or higher (if mostly outdoors.) This should be applied to all exposed skin.

Why is this important?

Well its not just to stop painful sunburn, wrinkles, fine lines and other signs of premature ageing. Regular, daily use of broad spectrum sunscreen can reduce your risk of skin cancer by 40-50%.

There is no denying that regular, daily use of sunscreen will protect the skin. With skin cancer incidence in the UK set to rise 9% over the next two years alone, protecting yourself with daily use, broad spectrum sunscreen everyday is surely one of the easiest ways to protect your health.

What is the cost of supporting Ukraine?

Charlie Grewer

On the 21st of September the Polish Prime Minister Mateusz Morawiecki announced that his country would no longer be sending its weapons to Ukraine. The move is an understandable one, given the amount of weapons already sent and the need for Poland to defend itself against Russia, but the Ukrainian President Volodymyr Zelensky, visiting the USA for the first time since last year, criticised the move at the United Nations General Assembly saying that the dispute was political, due to the fact that Ukraine has stopped its supply of grain to the country.

The Polish Prime Minister said two days after his initial announcement, “I want to tell President Zelensky never to insult Poles again, as he recently did during his speech to the UN.” Since then the situation has calmed down but it raises the important question ‘should countries supply weapons to Ukraine at their loss?’ It is a question that must be at least taken into account if the West is to continue supporting the Ukrainian forces, because, of course, no one has an unlimited supply of weapons. While no actual troops have actually been deployed, the USA has given over \$45 billion worth of military equipment and training to the Ukrainian army.

This is a massive amount of money that could have been spent elsewhere if the Russian invasion had not gone ahead. I am not suggesting that we should pull military and financial support for Ukraine, the West has invested far too much in this war for Ukraine to lose and us to walk away unharmed, but the cost must be taken into consideration. In the event of the UK entering into an unconnected war with another nation, how harder would that hypothetical conflict be without what we have sent to the Ukrainian forces. While no serving members of the British army are currently fighting, what good are soldiers without weapons? In this aspect, Poland’s decision makes sense. If the war were to stop, whatever the outcome, Putin’s sights would be set on Poland and they need to make sure they are well-defended as a nation.

Furthermore, we cannot give away too much or we leave ourselves defenceless to any attack. And how effective is the military aid? How much of that support is sitting, rusting in a muddy field in Donetsk? How much of the financial support has been used effectively? There is an unfortunate history of corruption in the Ukrainian army. But the support has yielded results.

British and American weapons are proving the backbone of Ukraine’s ongoing counteroffensive and results are coming through. Just on Monday, Ukraine claimed to have taken out the command of the Russian Black Sea fleet in a recent missile attack on its headquarters. So I believe that while we should undoubtedly continue to support Ukraine, we must be careful not to leave ourselves defenceless.

90 seconds to Midnight



Meagan Dailly



In 1947, Albert Einstein and several other scientists developed “The Doomsday Clock” as a way of interpreting the imminence of nuclear disaster. Since then the clock has been in the care of the Bulletin of the Atomic Scientists, and has grown to monitor nuclear risk, climate change and technologies. As the closer the clock gets to midnight, nuclear war is more of a threat. Over the last decade, the minute hand has been ticking precariously closer to midnight, and now, as of January 24th of 2023, the Bulletin of the Atomic Scientists changed the time of the Nuclear Clock to 90 seconds to midnight.

“A time of unprecedented danger.” Since the clock’s inception in 1947, we have never been closer to midnight. The Science and Security Board at the Bulletin of the Atomic Scientists moved the Doomsday hand forward “largely (though not exclusively)” due to the Ukraine War. Russia has threatened to use nuclear weapons throughout their attack, but there has been more discreet nuclear activity more internationally.

Over the last 5-6 years the three countries that have most of the world’s nuclear weapons have been starting to rebuild test sites. Satellite images have shown evidence of the Chinese, Russian and American militaries increasing activity in old testing sites that haven’t been used since the early 90s. Images of the Nevada desert (US), Xinjiang region (China) and Novaya Zemlya (Russia) show that there have been huge expansions to each of the sites. More buildings for housing military personnel, equipment and warheads have been built alongside both rebuilt and multiple new underground tunnels for nuclear testing. Although this doesn’t mean imminent nuclear testing, it certainly sends a message at a time when the relationships between the three countries are very strained.

Since Russia’s invasion of Ukraine early last year, the Russian military have had a very poor performance, which might be part of the reason for Russia restarting nuclear testing. Russia has also given tactical nuclear weapons to Belarus, with President Lukashenko saying that “Minsk would be willing to use them in the face of foreign aggression.” Belarus has been pivotal in Russia’s attack on Ukraine, which is probably part of the reason Moscow has given them nuclear weapons.

With the Doomsday Clock now rapidly progressing toward midnight, the threat of nuclear attack increasing, and three of the most volatile countries at each others’ throats, it seems like the apocalypse is imminent. Our only chance of preventing midnight is by encouraging all nine of the countries with a nuclear arsenal to have the vital conversation about regulations which will protect our planet from catastrophe.

UNRAVELLING THE GENDER GAP IN PHYSICS

Megan Beckham & Rowena Seenarine

Throughout its extensive history, the High School of Dundee has produced an endless number of talented and driven young minds. These pupils often then leave the school and continue to excel at whatever path they have chosen to follow. Many of these pupils are girls who have their sights set on impressive careers in law, medicine, or simply delving deeper into a subject they grew to love during their time at HSD. However, one particular subject is often neglected when it comes to our female students... you guessed it... physics.

So why is it that the field of physics and engineering seems to remain so stubbornly dominated by men? Some could argue that physics simply "isn't attractive" to female students and while yes, it's important to acknowledge that the point isn't to force people into studying something they're not interested in, but given that the national percentage of women studying physics at a university level is just 20%, there's clearly more to the matter than just personal preference.

Role modelling plays a vital role in shaping career aspirations. It's hard to imagine yourself pursuing something when no one who represents you is seen thriving in that field. Consider a scenario where you spend your whole adolescence at a school where the physics department has remained all-male for pretty much its entire existence. This isn't just a local issue; when we spoke to David Finch, physics teacher at HSD, he shared that his experience teaching at various schools revealed a consistency of all-male physics departments. Interestingly, research has shown that girls who attend single-sex schools are more inclined to pursue traditionally male- dominated subjects than they are in co-ed schools, regardless of the gender of the teacher. This suggests the significant influence of social factors on girls' choices of subjects.

We inquired with Mr Vicat-Brown, who teaches both physics and engineering, about whether or not he has noticed any significant differences in the way in which male and female students approach the subject he responded with this, "I think female pupils feel a lot more pressured to get it all right from day one, and if they're finding it challenging they take it on themselves a lot more." Since physics and engineering is a field where there are such small numbers of women, it's plausible that some may feel a need to already be good at it, to earn your place there, in a way. But if your studying, aren't you supposed to be learning it? Getting things wrong and thinking, not trying to single-handedly prove you can do it or getting things all right from the start, and not letting your doubts overrun you.

You might be wondering, why bother? What's the harm in leaving it to the men? The reason is simple: men and women are inherently different, which means they often think in different ways. This can be an advantage, especially in engineering and physics. These distinctions offer diverse perspectives, which are often essential in creating solutions that will cater to the entire human population, rather than half of it. Additionally, we can't forget that women have been making contributions to physics for centuries, but it was often the case in the past that female scientists were discredited.

In conclusion, closing the gender gap in physics and engineering requires a collaborative effort from all parties. It involves creating an atmosphere where everyone, regardless of gender, can flourish and offer their viewpoints. Diversity is not only morally required, but also necessary for creativity and advancement. On the way to a more inclusive and fair future in these fields, we must keep challenging prejudices and stereotypes, recognising successes, and supporting to one another.

"It is imperative that girls and women are represented and make their contribution to the STEM- skills shortage... girls, we need you!" -Dr Nicola Kiernan (Head of Chemistry)

Scotland Vs England

Eilidh Acford

On Tuesday 12th of September, old foes Scotland and England met once again at Hampden Park for an International friendly to celebrate their 150th centenary match.

As the two teams lined up for their respective anthems, tensions were running high at Hampden for the Scotland fans with their team not beating England since 1999. After a cheerful rendition of 'O flower of Scotland', and a slightly less joyful chorus of 'God save the King' the two teams took off to their respective sides, and the match kicked off.

Steve Clarke had put out a strong team for the match, however Southgate's determination to succeed meant that the Scottish boys were facing some of the best strikers in the world, with Kane, Bellingham, Rashford and Foden all starting, so tensions were high between the two sides.

Despite Scotland's best effort, they couldn't fend off the strikers as Foden fired a screamer into the net in the 32nd minute. Only 3 minutes later, Bellingham caught a skipper slip-up from Robertson, and it was almost too easy for the ball to pass by a frazzled Gunn's hands. A very defeated Scotland departed the pitch at half-time for team talks with manager Clarke in hopes of a brighter second half. One singalong to 'Loch Lomond' and a 'Yes sir I can Boogie' and the boys were back on the pitch, and filled with an energy and desire that had been lacking in the first half, and so the game began again.

Renowned England defender Harry Maguire had been subbed on at half-time. When announced, there was a roar of approval from the Scotland fans in the hope that he would slip up and live up to his reputation as one of the unluckiest footballers in the premier league, and indeed the world. A slow start to the second half and all of a sudden Scotland were off. Skipper Robertson was firing down the wing, assisted by Celtic captain McGregor and Arsenal defender Kieran Tierney, and all of a sudden it seemed like Scotland had a chance. In a mad scramble in the box, Robertson took a wild kick at the net, and miraculously the ball found its way into the net. No one could quite tell how it went in though, because with the angle that Robertson was at there was no way he could've struck gold. Then, in a phenomenal replay, it was discovered that, Scotland's saviour, Maguire had deflected and kicked the ball straight past Arsenal goalie Ramsdale. On realisation, the stadium erupted into cheers and howls of glee and delight at Maguire, inevitably, living up to his reputation. The Scotland fans couldn't cheer for long though, as Kane scored in the 81st minute once again stretching England's lead by two. Due to this the final score was 1-3 to England. It was an upsetting event, as many truly thought Scotland would be able to come back and scrape at least a draw but sadly, Maguire had no more goals left in him.

This defeat will not dampen Scotland's spirits though, as with Euros 2024 qualifying just around the corner and Scotland being top of their table, with 5 consecutive wins despite being in the hardest group, this loss will certainly not take anything away from their confidence and qualifiers, and Clarke will find a way to bounce back and make sure his team are fit to take on their final three qualifying matches.

Up to d8 - the Topical Columns Quiz

Up to d8– The Topical Columns Quiz - (Issue 89)

Are you up to d8?! Answer the following questions correctly and email your answers to

dmfinlay@highschoolofdundee.org.uk. First pupil to send in a correct set of answers receives a prize! (Answers in the next issue of The Columns)

Entertainment

1. TikTok sensation ‘Tube Girl’ is so-called for what reason?
2. What is the sub-title of the most recent animated Spiderman film?

Science and Nature

3. A rare dinosaur skeleton is to be sold at auction in Paris next month. Named Barry, to what kind of dinosaur did it belong?
4. In a nod to popular culture, what did NASA name their most recent collection of photos taken by their space telescopes?

Sport

5. How many tries did Scotland score against Tonga in the recent World Cup clash?
6. What was the result of the recent Solheim Cup competition?

Politics

7. King Charles became the first ever British monarch to address what country’s parliament this month?
8. Name the controversial rail link project that is continually in the news because of regular setbacks, overspending and other issues.

Issue 88 answers:

1. 21
2. Tess Daly
3. Le Gavroche
4. Mexico
5. 10
6. Jenni Hermoso
7. ULEZ
8. Liz Truss.

EDITORS’ NOTE

I always have trouble writing the editor’s note! It’s a difficult piece of writing which never fails to challenge my capabilities; much like personal statements. For everyone applying early applicant to UCAS, congrats, you’re almost done! To everyone who’s not written one yet, good luck in the future. This is the columns last edition this term, but the columns can’t wait to get back to writing after the October break!

Editor Ruby

Have a fab weekend!

THE COLUMNS TEAM