

ISSUE 2 – 1ST APRIL 2025

OSA INSIGHT

Student Newspaper



Community Action Day

BY HENRY GOWER

Community Action Day is more than just a break from lessons; it's a powerful opportunity to make a difference in our local community. By setting aside a day to volunteer, we step out of our regular routines and engage directly with issues affecting our neighbours. For example, writing letters to older people who may feel isolated not only brings joy to them, but it also strengthens the bonds within our community.

Taking part in Community Action Day helps us understand the importance of empathy and responsibility. It reminds us that even small actions can have a big impact, whether it's brightening someone's day or contributing to a larger movement towards a caring society.

This initiative encourages us to be active citizens, fostering skills like communication, teamwork, and leadership which are essential both in school and in life beyond the classroom.

Moreover, by coming together for a common cause, we learn that we are not alone in our struggles or in our efforts to help others. The shared experience of working side by side builds a sense of unity and mutual support, making our community a better place for everyone.

Community Action Day thus represents hope, resilience, and the belief that change is possible when we work together.

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Composer/Artist of the Month- Sufjan Stevens

BY CARA Y12



Sufjan Stevens is an American singer, songwriter and instrumentalist. Releasing 10 albums spanning the genres of Indie, Pop, Electronic, Lo-Fi and Folk, Stevens has accrued many achievements such as a Grammy and Academy award. The artist contributed to the soundtrack of the 2017 film 'Call Me by Your Name', leading to both aforementioned awards. While in school, Stevens studied the Oboe and Cor Anglais, before learning the guitar during university. Initially, the artist went into a career of graphic design in New York, enjoying the artistic side of education which had been evident since early primary school: Stevens only learnt to read age 8. Primarily inspired by his religion whilst writing, Stevens' music explores his faith, sorrow and love as well as themes of death and serial killing in one of his later albums, 'Illinois'.



In 2023, Stevens suffered from Guillain-Barre Syndrome, in which the body's immune system attacks the nerves. "Last month I woke up one morning and couldn't walk," he wrote. "My hands, arms and legs were numb and tingling and I had no strength, no feeling, no mobility." Since then, the artist has mostly recovered, releasing 3 more albums since the illness. Stevens is still able to play all 8 instruments he has learnt over his career, and explores his progression through music in his life through social media and interviews, in which "I sang songs in the privacy of my dorm room, behind closed doors, pillows and cushions stuffed in the air vents so no one would hear. And then I almost failed Latin class, my grades plummeted, my social life dissolved into ping pong tournaments in the residence halls, and, gradually, my interest in music (or anything divine, creative, fruitful, enriching) completely waned". Despite this low point in his musical journey, Sufjan Stevens allowed himself to explore his old collection of tape cassettes, 4-track recorders and forgotten boxes towards the end of university, which led to renewed interest in music and eventually large amounts of fame and success! Sufjan Stevens song recommendation: Fourth of July

To vote for who the next composer/artist of the month should be, please fill out this form: <https://forms.office.com/Pages/ResponsePage.aspx?id=pGcNtDFve0GB0B6WvxpVXEJercPWKe9Akf06HiluOpBUQkFZRU1PMzBQRko5REQ3MIhNNVZSUKe1QS4u>
Or email: 19cgarrow@oxfordspires.anthemtrust.uk



Crafting Magic: The Art of Turning Rejection into Revelation

BY HENRY Y12



Sarah Ann Jukes has a way of making writing seem effortless, even though she admits it's no walk in the park. She described writing as entering a sort of flow where she's completely immersed in the story, it's as if she becomes the story, much like a musician lost in their music. Her early days were humble; coming from a working-class background, her first encounters with books were in the local library. It wasn't until a teacher asked her why she wasn't already an author that she began to see the possibility of a future in writing.

She's incredibly honest about the challenges, too. For her, every stage of writing comes with its own set of difficulties. From the endless rounds of editing to the pressure of following up a successful book, she reminds us that creativity isn't always glamorous. In discussing her work on "The Storm Seal," she explained how the weight of expectations can be overwhelming, yet these pressures push her to explore new ideas and add layers to her storytelling. Even when the process feels like an uphill battle, she finds that each struggle enriches her work in unexpected ways.

What really stands out in her work is the deeper message behind the narrative. Sarah stresses the importance of reaching out for help when things get tough, a lesson drawn from her own experiences with volunteer work. Her stories are not just about entertainment; they carry a reminder that no one should suffer in silence, and that facing challenges head-on can lead to growth. This blend of personal insight and creative expression is what makes her writing resonate, especially with those who have a passion for stories that reflect real-life struggles and triumphs.



For anyone who loves reading and harbours a dream of writing their own books, her advice is both practical and inspiring. She believes that the best way to develop as a writer is to read widely, absorbing every style and narrative she can find. Despite the inevitable rejections and setbacks, she insists that perseverance and a willingness to learn from criticism are key to improving one's craft. In her cosy home office, where she sets herself small rewards after every 1,000 words, she demonstrates that even the toughest challenges can be managed with a bit of discipline and a lot of passion.

Sarah's journey is a powerful reminder that while the path to becoming a writer might be fraught with obstacles, it's also filled with moments of joy, discovery, and personal growth. Her story encourages us all to embrace the messy, unpredictable process of writing and to keep pushing forward, no matter how daunting the task may seem.



7 Reasons to Start Exercising Daily

BY ALEC Y12

Now that spring has sprung upon us, it's the perfect time to start making exercise a daily habit. With the warmer weather and longer days, there's no better opportunity to step outside, stretch our muscles, and embrace a more active lifestyle. As students, it's easy to get caught up in schoolwork, assignments, and exams, often leaving little time for physical activity. So, here's 7 reasons why daily exercise is so important:

1. Improves Focus and Concentration

Exercise increases blood flow to the brain, which enhances cognitive function, memory, and problem-solving skills. Which helps you to concentrate better in class, retain information more effectively, and improve your overall academic performance.

2. Increases Motivation and Discipline

Committing to daily exercise helps build self-discipline, which can carry over into your studies. The determination and consistency needed for physical activity is also shown to improve your ability to manage time and stay on top of schoolwork.

3. Reduces Stress and Anxiety

Schoolwork, exams, and deadlines can be incredibly stressful. Physical activity causes the release of endorphins, which are natural mood boosters that are proven to reduce stress and anxiety. Even a short walk everyday can help to clear your mind and reduce fatigue.

4. Boosts Confidence and Self-Esteem

Feeling stronger can improve your self-image and confidence. Whether it's achieving a fitness goal or simply feeling healthier, exercise helps you develop a positive mindset that can significantly benefit other areas of your life.

5. Improves Sleep Quality

A good night's sleep is crucial for students as it helps with concentration, which ultimately improves academic performance. Regular exercise helps regulate sleep patterns, making it easier to fall asleep and wake up feeling refreshed.

6. Enhances Creativity and Problem-Solving Skills

If you're stuck on a difficult assignment or struggling with writer's block, physical activity can help. Exercise stimulates brain function, allowing for more creative thinking and improved problem-solving abilities.

7. Makes You Happier

Exercise stimulates the release of serotonin and dopamine, which are neurotransmitters that promote feelings of happiness and relaxation. Even a short workout can boost your mood for the rest of the day.

Milgram's Study and Ethics in Law Enforcement

BY MILA AND SOPHIA Y12

Stanley Milgram's (1963) obedience study revealed disturbing insights into human behaviour, demonstrating how ordinary people could follow orders to harm others under authoritative pressure. His research, though ground-breaking, raised significant ethical concerns, such as deception, lack of informed consent, and psychological distress. Participants believed they were administering real electric shocks to a learner, leading many to experience extreme stress. Today, such methods would violate ethical guidelines protecting participants' well-being.

Milgram's findings have profound implications for ethics in law enforcement. His study helps explain why officers sometimes obey unethical commands, such as excessive force or racial profiling, even when they personally disagree. The hierarchical structure of policing, like the experiment's authority figure, can pressure individuals into compliance, sometimes at the expense of moral responsibility.

To prevent abuses, modern law enforcement must emphasize ethical training, accountability, and the duty to question unlawful orders. Ethical guidelines, like those protecting research participants, should ensure that officers prioritize justice over blind obedience. By understanding Milgram's study, law enforcement agencies can work toward a culture that values ethical decision-making alongside discipline, preventing unethical actions from being justified as merely "following orders."



THIS MONTH IN HISTORY: APRIL

BY CORDELIA AND RUTH Y12

Welcome to This Month in History, where we cover historical events that happened each month. From famous births to groundbreaking discoveries, we'll explore what made April unforgettable!

Births

23rd April 1564 - William Shakespeare was born, playwright of 38 (possibly 39) plays - multiple of which are familiar to OSA, including Macbeth, Romeo and Juliet, and A Midsummer Night's Dream. Fun fact: many of our idioms today were first used by Shakespeare, such as 'eat(ing) me out of house and home' (Henry IV part II), 'the world is your oyster,' (Merry Wives of Windsor), and 'wear your heart on your sleeve,' (Othello)!

9th April 1806 - Isambard Kingdom Brunel was born, inventor of Britain's railways; the BBC graciously labelled him the 2nd greatest Briton of all time (after Winston Churchill... Hm...).

2nd April 1914 - Sir Alec Guinness came into the world! An actor with significant merit and a hobbyist smoker, many will know him as Obi Wan Kenobi in the original Star Wars trilogy - what many won't know is that he hated Star Wars with a passion, believing it was a silly concept.



Deaths

5th April 1994 - Kurt Cobain, the lead singer of Nirvana, died. Despite the success of his band, Cobain was actually averse to stardom and believed that all of his fame should have been attributed to his friends' band, the Melvins.

7th April, 1739 - A familiar name to our GCSE historians was hanged on this date: Dick Turpin!

15th April 1865 - Abraham Lincoln, the 16th president of the United States, was shot by John Wilkes Booth while attending a satirical play, Our American Cousin. His legacy consists of successfully ending the American Civil War, 'ending' slavery, and allowing African Americans the opportunity for civic and economic freedom (although many did not obtain it for decades after).

26th April 1989 - Lucille Ball, leading actress in American sitcom 'I Love Lucy,' passed away. As part of a sponsor contract, characters in 'I Love Lucy' were required to smoke cigarettes by Phillip Morris every episode - Lucille, however, hated the brand and so substituted the cigarettes in every episode!



Firsts

6th April 1896 - The First Olympics of the modern era was held in Athens after a 1500 year long break. Unsurprisingly, compared to the modern Olympics, the Classical Olympics were only ever held in Greek city states and were not open to foreigners (aka hoi polloi) participating.

10th April 1633 - Bananas go on sale in England for the very first time! Though many of our readers may be on the side of disliking them, you wouldn't even have been able to try them were it not for Thomas Johnson...

12th April 1606 - the Union Jack is used as the flag of the UK for the first time. Prior to the commission of this flag, Saint Patrick's cross was used as the flag of the UK. Go on, google it (in your own time)... Aren't we all thankful that King James I commissioned a new one?



HISTORY

Events

4th April 1949 - the NATO treaty is signed and formed following the end of the Second World War. As a better, more functional iteration of the League of Nations, the organisation was assembled to end subsequent wars. However, the success of this is debatable...

21st April 1509 - Henry VIII becomes the King of England. Unfortunately, as he was crowned after his brother's death, he inherited everything from him - including his wife!

30th April 1945 - Hitler commits suicide in his bunker following the invasion of Berlin by the Allied powers. Marking the end of the Second World War, he died only 10 days after his birthday!

And that's it! Stay tuned for next month, when we'll be exploring exciting Mays across history. However, it's impossible for us to summarise every event, so if you discover something interesting, why not send it in? You might just see your contribution in next month's article!

To do so, email either
19rconmy@oxfordspires.anthemtrust.uk or
19cscottermainprize@oxfordspires.anthemtrust.uk.

Curiosity and the Kat

BY KATRINA Y12



Set Theory - Introduction

Set theory is about the different types of numbers and how they can be arranged into groups. This is useful for understanding the difference between different numbers, as well as understanding more complex mathematical ideas such as infinity.

The following notation denotes sets:

$\{ \}$ contains a set.

$\in$ or ϵ describes how numbers are sorted into the set. It is a way of saying "is an element of".

$:$ is used to separate the declaration of a variable and the rule that decides whether that variable is in the set. It is a way of saying "is such that".

Sets can be represented with letters, like so: $\mathbb{N}$ represents the natural numbers.

All of the above notation can be combined to declare sets like so: $\{x:x \in \mathbb{N}\}$, said like "x is such that x is an element of the natural numbers".

Additionally the cardinality of a set is the size of its contents.

There are other parts of set notation, but they go beyond the scope of this article. In order to learn more about them, visit [this page](#).

Set Theory - Important Sets

There are a few sets that you might have heard of, due to their importance in abstract maths as well as real life. Here are a few examples:

- The set of Natural Numbers ($\mathbb{N}$)
- This set consists of every integer (full number) above 0 (positive).
- It can also be represented by $\mathbb{Z}^+$.
- The set of Integers ($\mathbb{Z}$)
- This set consists of every full number, positive and negative (and 0 as well).
- The set of Rational Numbers ($\mathbb{Q}$)
- This set consists of every number that can be represented as a fraction, positive and negative.
- Also referred to as the set of quotients.
- The set of Real Numbers ($\mathbb{R}$)
- This set consists of every number that can be represented without including $\sqrt{-1}$ or i in its definition.
- (Basically just the rationals, but including all of the numbers that cannot be expressed in fractions like π).
- The set of Complex Numbers ($\mathbb{C}$)
- This set consists of every number that can be represented with or without including $\sqrt{-1}$ or i in its definition.
- This set includes imaginary numbers, real numbers, and numbers with real and imaginary parts.

CHALLENGE

Computer Science

Below are 3 challenges of increasing difficulty, related to the maths theory above. Solutions to these puzzles will be provided in the next Computer Science article, written in python, with explanations.

Challenge 1 - Easy

Write a program to find the set of prime numbers that are less than 1000. You may start with the first two primes 2 and 3.

Challenge 2 - Medium

Given a file containing a list of comma-separated numbers, write a program to find the longest linear sequence it can within those numbers.

Upon request via an email to 19rwebster@oxfordspires.anthemtrust.uk, you will be sent a file containing this list.

Challenge 3 - Hard

Prompt the user for two numbers, then give them some amount (the more, the more difficult) of rational numbers in between those two numbers.

Want your solution to be featured in next month's article? Email it to 19rwebster@oxfordspires.anthemtrust.uk with a few words about the notable features of your approach!