

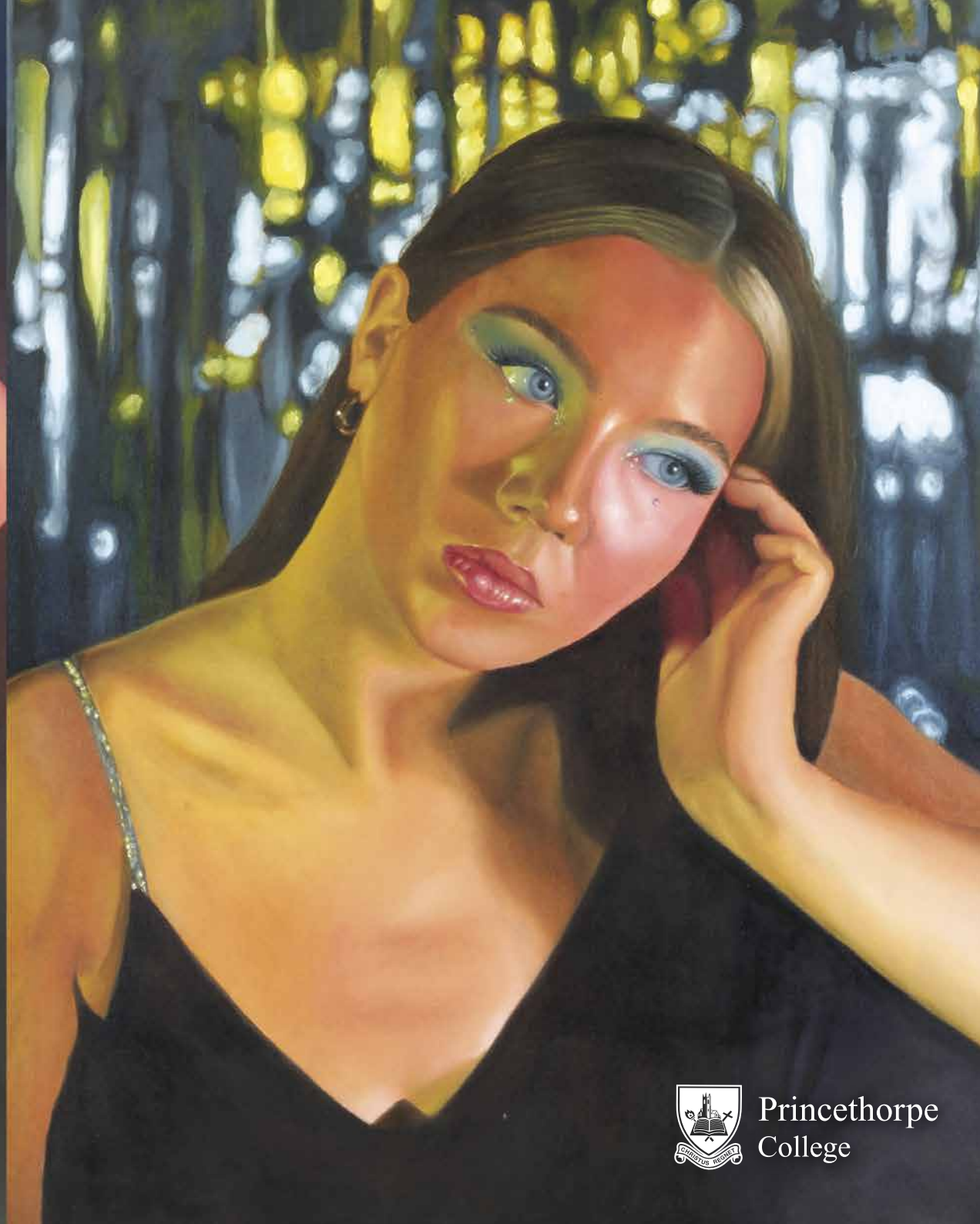
The
Pinnacle

"Painting is poetry that is seen rather than felt, and poetry is painting that is felt rather than seen."



Issue 32 | Spring 2023

Showcasing exceptional work
by pupils from Princethorpe
College, Crackley Hall School
and Crescent School.



**Princethorpe
College**

LETTER FROM THE EDITOR

WELCOME

2023 is already shaping up to be another busy and exciting year. Our new Head, Mr Grove du Toit, has quickly slotted in as an important and enthusiastic member of the Princethorpe family and the new Science Centre is due to open later this year...they weren't wrong when they chose the theme for the year to be one of 'change.' In the words of Cardinal John Henry Newman, 'To live is to change, and to be perfect is to have changed often.' I, for one, will embrace change this year as I turn my focus to being Head of English from September and relinquish my roles as Head of Project Qualifications, da Vinci, Learning Skills and *The Pinnacle*. I am confident that whoever takes on these responsibilities will enjoy the work and enhance what we have managed to achieve thus far. I will certainly miss editing future issues of *The Pinnacle* but am looking forward to new challenges ahead.



As for the students, how wonderful it will be to see over one hundred Year 11s, Upper and Lower Sixth Formers head off on their multi-sport tour to South Africa this summer, after postponement caused by the Covid pandemic. This is such a formative milestone for our students, it's great to see it back in the calendar. We wish all the students participating a safe and enjoyable trip.

The front cover for this issue is the stunning work of last year's Upper Sixth Fine Art student Tillie Benford. Referencing local artist and Turner prize nominee George Shaw and Russian filmmaker Tarkovsky, Tillie explores the themes of nostalgia and sentimentality in this, her final Personal Investigation coursework element. The left panel shows how memories can become 'hazy' and distant with time; the right panel shows someone trying to remember (or possibly forget) a past event. Due a technical issue, Tillie's painting was not judged in the recent ISA competition. However, it was entered, and Mr Hubball felt it would have had a very good chance of winning if they had seen it. We wanted Tillie's work to be given the audience and acclaim it deserves, so we made it this issue's front cover. Well done, Tillie, this is very accomplished work indeed.

As always, there are pages and pages of excellent work in this issue from across the Foundation. It's always a pleasure and a privilege to bring everything together in one place and to see the thoughtful work you have all been doing. Well done everyone.

Thanks go to: staff at Princethorpe College; staff at Crackley Hall School (co-ordinated by Cat Hardwick); staff at The Crescent (co-ordinated by Louise Symons); the Marketing Team and Debbie at Dam Design Creative.

SEE YOU FOR ONE LAST ISSUE FROM ME IN THE TRINITY TERM!

HELEN PASCOE-WILLIAMS
EDITOR & CO-ORDINATOR OF THE DAVINCI PROGRAMME

Upper Sixth Form student Eleanor Page completed this research project independently. It is always wonderful to see such commitment and curiosity. Well done, Eleanor.

HOW CAN GENETIC DISEASES BE TREATED?

BY
ELEANOR
PAGE, Y13

THE PROBLEM

Around 1% of the world population are affected by single-gene hereditary diseases alone. Some of the most common genetic diseases are dispositions like Down Syndrome (affecting 0.1% of the population), Thalassaemia (0.043% of children are born with this annually), and Cystic Fibrosis (affecting 0.001% of the world's population). For centuries, diseases have been passed down from generation to generation, with no treatment or remedy in sight, yet now, scientific discoveries are allowing for the potential cures to these conditions to be trialled.(3)

These diseases impair the lives of the people afflicted greatly, and cannot be prevented by any normal means such as vaccine, or antibiotics. The patients are afflicted from birth, as the diseases are caused by mutations in the DNA of the parent, which is then passed down to the child either due to the disease being a dominant characteristic in the DNA or due to both parents being carriers of the disposition.

As often the parents are unaware of carrying the disease, as they are not affected by it, and so it can be an unexpected occurrence in the child – these diseases can often cause miscarriages, stillbirths, or the child to die shortly after birth, which can be incredibly hard for the parents.(4)

Up until recently, these diseases have been inaccessible to medicine – as the source of the symptoms are part of the gene code, it could not be eliminated as a pathogen, and the body had nothing to recognise as a foreign entity and so fight off. For a long time, nothing could be done, but now at least there are methods of managing these diseases to ease the lives of those afflicted, but a working 'cure' has yet to be used generally.

THE SOLUTION

A relatively recent discovery has been made with a process called CRISPR gene editing – CRISPR stands for Clustered Regularly Interspaced Short Palindromic Repeats(1). This is a process whereby the immune system of specific bacteria is utilised to 'cut' DNA. This is made up of two components – CRISPR-associated (Cas) nuclease, which is essentially the 'cutting tool', and a sequence of RNA (gRNA) that guides the nuclease to the desired location on the DNA strand. This was discovered while observing interactions between bacteria and bacteriophages, when it was found that as part of the bacteria's immune response, it would cut the DNA strands of the invading viruses, therefore disabling them.

To read more of any of the articles with



button, please scan this QR code.



EXCEPTIONAL SCIENTISTS THROUGHOUT HISTORY

Last term, our Lower Sixth STEAM ambassadors, Emma Sarkies and Joseph Newborough, invited students to participate in a STEAM competition to choose six famous scientists from a range of different backgrounds whose scientific achievements they believed to be exceptional.

They were then required to write a brief paragraph about each of the scientists, explaining why they selected them.

The new Science Centre, which is currently being built, has space for graphics on several of the wall panels which need to be designed and we are hoping for them to feature some of our students' favourite scientists. This is an amazing opportunity to have an input into how the new Science Centre is designed, as well as there being fantastic prizes up for grabs!

The first prize (a £50 Amazon voucher) was awarded to Year 7 pupil Noah Walker. Other outstanding entries were awarded da Vinci merits. Our highly commended and da Vinci merit recipients were:

CHARLES PACKE
ABIGAIL MANDAVA
JAKE MAINWARING
BEA BOAKES
DAVID IKUOMOLA
SEB HUME-CHIGNELL
LAMPROS PAPAIOGIANNAKIS
TOM LOMAS

VERY WELL DONE EVERYONE.

STEAM COMPETITION WINNER

NOAH WALKER, YEAR 7

Name: Katalin Kariko

Area of Science: Biochemistry

Katalin Kariko is a Hungarian-American Biochemist who changed the world by laying the foundation for the successful vaccines that shielded the world from the Coronavirus pandemic. She did this by thorough scientific research into RNA. RNA is a ribonucleic acid that is similar to DNA except that it is often single-stranded. It took a long time before the value of her work was recognized and praised by other scientists.



Name: Alan Turing

Area of Science: Mathematics and Computing

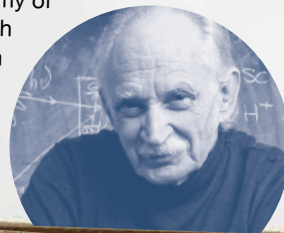
Alan Turing was a Mathematician and a founding father of the modern day computer. Turing worked on trying to crack Enigma - a German piece of equipment used for sending messages to German allies and forces. Turing spent day and night designing the bombe, an electromechanical machine that would break Enigma and help win the war. I believe Turing's works to be breathtaking, especially how he was persecuted just for being gay. It is estimated that Alan Turing's work shortened the war by two years saving countless lives.



Name: Allen Bard

Area of Science: Chemistry

Allen Bard is an American Chemist who is considered to be the creator of Electrochemistry. Electrochemistry is the study of chemical processes that cause electrons to move. Allen Bard has won many awards and honors, including Member of the National Academy of Sciences, Priestley Medal and was presented with the National Medal of Science for Chemistry from former President Barack Obama. Allen Bard is a truly inspirational scientist whom we should all look up to.



Name: Katherine Johnson

Area of Science: Mathematics and Astro dynamics

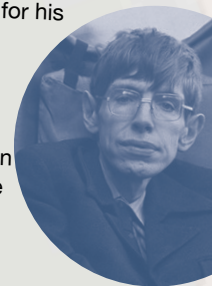
Katherine Johnson was an amazing Mathematician whose calculations proved critical for the success of the Apollo space missions. She was a pioneer in space science and computing. She was also one of the first African-American women to work as a NASA scientist. In 2015 she was awarded the Presidential Medal of Freedom. In 2020, Johnson sadly passed away at the grand old age of 101. Following her death, NASA's administrator described her as "an American hero".



Name: Steven Hawking

Area of Science: Physics

Steven Hawking is a theoretical physicist who is famous for his incredible scientific discoveries. One of his most famous theories is that black holes emit radiation, often called Hawking radiation. Hawking suffered from motor neuron disease- a disease that paralyses your body- he had this for decades before his death in 2018. I believe that Steven Hawking's scientific discoveries are exceptional and have opened a path for even more research into the unknown.

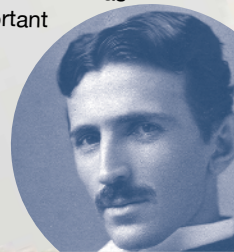


Name: Nikola Tesla

Area of Science: Electrical and Mechanical Engineering

Nikola Tesla was an inventor and engineer in electricity, best known for inventing the AC current. Tesla thrived in his studies of Physics, Mathematics and Engineering. The famous car brand Tesla was named after Nikola Tesla in honor of his works! I have chosen him as one of my six scientists as I believe that he was an important figure in STEAM.

I have selected these six scientists because all of them faced challenges in their lives, but they all strived to overcome them and changed the world with their incredible work. I believe that all of these scientists embody the renaissance idea of Leonardo Da Vinci.



SIX AMAZING SCIENTISTS THAT CHANGED THE WORLD

NOAH WALKER, YEAR 7

By Amelia du Toit, Y10

Simple Compound
An ionic bond is a bond between a metal and a non-metal. Sodium chloride is also known as salt. It is essential to our health. Some of the properties of ionic compounds are: they are brittle, they have high melting and boiling points, they are good conductors of electricity when molten or dissolved in water.

Covalent Compound
A covalent bond is a bond between two non-metals. Hydrogen chloride is also known as hydrochloric acid. It is essential to our health. Some of the properties of covalent compounds are: they are brittle, they have low melting and boiling points, they are poor conductors of electricity.

Did you know?
14% percent of our body weight is made up of Sodium chloride.

Covalent Compound
The atoms in a covalent compound share their outer shell electrons. This sharing of electrons is called a covalent bond. The atoms are held together by the forces between the shared electrons. This forces are called intermolecular forces.

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MARVELLOUS MAGNETS

BONDING WITH CHEMISTRY

Year 10 were given a homework challenge to combine research skills, their scientific knowledge and creativity to produce a model and information sheet to compare ionic and covalent bonding. Here are examples of the excellent work they produced.

By Abigail Mandava, Y10

Calcium

Chlorine

By Nell Tilstone, Y10

ionic bonding

covalent bonding

WATER (H₂O)



Year 7 pupil, **Eve Worthington**, has gone above and beyond in producing this wonderful revision task on magnets. We love this activity! It is scientifically accurate, extremely creative and looks very professional. Check out this fantastic video showing the game being played by scanning the QR code or visit www.youtube.com/watch?v=4FZNXhIUUEU. What a superstar!



ATOMIC STRUCTURE

Lower Sixth students have recently finished studying the topic Atomic Structure. They were then asked to model the s, p, and d orbitals and to use their learning to explain atomic orbitals and electron configurations.

JOE NEWBOROUGH, L6



All students rose to the challenge and produced work that included:

- 1 Photographs of their modelled s, p, and d orbitals created by them including some details on the description of the orbitals and the energy levels of electrons;
- 2 An explanation of the Aufbau's principle and Hund's rule;
- 3 The electronic configurations of atoms and ions to show the application of the Aufbau's principle or Hund's rule.

Joe Newborough's work particularly stood out for a few reasons, not least the cross curricular links between Chemistry and Computer programming. Excellent work Joe!

LOLA ASHLEY, L6

Atomic orbitals and electron configurations

S orbital
↳ 1 atomic orbital
↳ maximum 2 electrons

P orbital
↳ 3 atomic orbitals
↳ maximum 6 electrons

D orbital
↳ 5 atomic orbitals
↳ maximum 10 electrons

Order of sub-shells

Rules of electron configuration

↳ Aufbau's principle - electrons fill the lowest electron configurations first (except 4s fills before 3d, as shown on the diagram above, as it is slightly lower)

↳ Hund's rule - electrons fill atomic orbitals singly before sharing e.g. $1s^2 2s^2 2p^2$ before $1s^2 2s^2 2p^1 3s^1$

Examples of electron configuration

↳ $Mg = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$ } Aufbau's principle - 4s fills before 3d

↳ $Fe = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

↳ $Fe^{2+} = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^6$

↳ $Fe^{3+} = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$

↳ $Cr = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^5$ } The 3d subshell is unstable as 3d⁵ or 3d¹⁰

↳ $Cu = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$ } The 4s will sometimes swap or 4s¹

↳ $Kr = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4p^6$

There is also an F orbital
↳ maximum 14 electrons
↳ 7 atomic orbitals

Electron Configuration

As you can see, each orbital takes a different shape. The s-orbitals are spherical, the p-orbitals are dumbbell-shaped, and the d-orbitals are more complex. The energy level of an orbital is determined by its principal quantum number (n) and its azimuthal quantum number (l). The energy level of an orbital is also determined by its magnetic quantum number (m_l).

The Aufbau principle states that electrons fill orbitals in order of increasing energy. The order of filling is: 1s, 2s, 2p, 3s, 3p, 4s, 3d, 4p, 5s, 4d, 5p, 6s, 4f, 5d, 6p, 7s, 5f, 6d, 7p.

Hund's rule states that electrons fill orbitals of equal energy one at a time, with one electron in each orbital before any orbital gets a second electron.

Pauli's exclusion principle states that no two electrons in an atom can have the same set of quantum numbers.

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Pauli's exclusion principle states that no two electrons in an atom can have the same set of quantum numbers.

Examples of electron configuration

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↳ $Fe = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

↳ $Fe^{2+} = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^6$

↳ $Fe^{3+} = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$

↳ $Cr = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^5$

↳ $Cu = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$

↳ $Kr = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4p^6$

Henry's Wives

Year 8 pupil, Teni's Okusanya, has produced an amazing homework presentation on the wives of Henry VIII. Set as a mini History project over one week, this is all her own work and presentation. Great work Teni!



Henry VI | 6 Wives

Henry VI

BEHEADED- ANNE BOLEYNE

6 Wives

DIVORCED KATHARINE OF ARAGON

This was the first wife of King Henry who lived December 16, 1489 and died on January 7, 1536. Katharine was the youngest child of Spanish monarchs Isabella I of Castile and Ferdinand II of Aragon. She married Prince Arthur, King Henry VII's only legitimate son in 1501. After he had passed, she was betrothed to Prince Henry VIII's younger son. However, the marriage was postponed until her father succeeded to the kingdom in 1509. On January 6, 1533, she married Henry VIII and gave birth to a son, Edward VI. The couple enjoyed their happy life for a while but King Henry got dissatisfied when she didn't have a male heir to the throne and she refused to marry again.



DIED- JANE SEYMOUR

This was the third wife of King Henry and was born somewhere in 1508 and died October 24, 1537. She was the mother of King Edward VI. She was successful in producing a male heir to the kingdom, something that Henry's previous wives had failed to do. When Henry visited Jane's father in Wiltshire in 1520, the two men became friendly and Henry decided to be his son-in-law. Jane readily consented to Anne Boleyn's divorce and her wedding to Henry VIII in 1533. Henry and Jane were married secretly on May 30, 1536.



BEHEADED- CATHERINE HOWARD

This was the fifth wife of King Henry and she was born somewhere in 1524 and died on 12 February 1542.



SURVIVED- CATHERINE PARR

DIVORCED- ANNE OF CLEAVES

This was the fourth wife of King Henry and she was born on the 22 September 1529 and died on the 16 July 1557. Henry only married her because he wanted to build a political alliance between him and the Duke of Cleves because he was the leader of the Christian of western Germany. On January 24, 1540, Anne arrived in England and just after 9 days the wedding was held and the king was very impressed at her color and beauty she was an attractive woman. Henry also had a private affair her having an fluency of the English language.



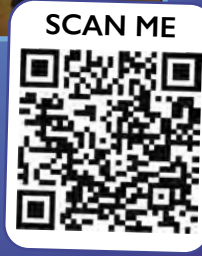
Henry's Wives
BY TENI OKUSANYA

AN EXTRAORDINARY MEETING WITH THE DOCTOR

Using all the Spanish we have learned so far, Year 7 pupil Arthur Reid (with the help of his younger brother), devised and acted in a Dr Who-themed YouTube video, with impressive special effects and excellent pronunciation. Fantastico Arturo!



Impossible



Check out this fantastic video Arthur made by scanning the QR code or visit www.youtube.com/watch?v=mr1Kwegf5Nc

SHAKESPEARE'S OTHELLO

~ REVIEW ~

Frantic Assembly took on the daunting task of recreating and reimagining Shakespeare's beloved classic, *Othello*. It was a triumph. Frantic Assembly was successful in investing *Othello* with a new fast-paced, chaotic energy that made it relevant to the modern era and refreshes Shakespeare's message on the frailty of the human condition.

Despite the apprehensions from theatrical classists, which I would include myself in, the audience was left mystified by the theatre's magic, dissolving at once any cynicisms. It serves as a testament to the company's success that a bus filled with students and teachers of every age, ethnicity and lived experience, could seemingly talk about nothing else than the cathartic experience they had just endured.

Through their recreation and interpretation, Frantic Assembly gave new power to Shakespeare's messages on equality, race, class, and gender in such a way it made a timeless play seem more relevant than ever.

LAMPROS PAPADOGIANNAKIS, YEAR 11



IT WAS A TRIUMPH. FRANTIC ASSEMBLY WAS SUCCESSFUL IN INVESTING OTHELLO WITH A NEW FAST-PACED, CHAOTIC ENERGY.



Sixth Formers Currently Sitting Seventh in Global Investment Competition

Six Lower Sixth students are currently sitting in seventh place in the Wharton Global High School Investment Competition. The prestigious competition, run by The Wharton School of the University of Pennsylvania runs annually, attracting teams from around the world. Last year 1,300 teams took part from 64 countries.

Starting with a virtual client and \$100,000 cash, students are tasked with working collaboratively to meet the client's long-term investment goals. Using the Wharton Investment Simulator and working with a defined list of equities, over the course of ten weeks, the students seek to grow their portfolios. At the end of the competition the boys have to submit a final report where they explain their investment choices.

The leading Princethorpe team, the Red Hot Chilli Peppers, have been following a cautious strategy and it has been paying dividends, now five weeks in, their portfolio is worth over \$117,000. The boys have chosen to stay away from stocks likely to be impacted by the current global turmoil and built a balanced portfolio with a range of smaller investments. They have also looked to invest in stocks that are sitting at a low point in their cycle. In a bear market, their strategy seems to be working.

Jacob Comerford, Guy Dawkins, William Harrison, Adam Ledbrook, Adam Lewis and Oscar Low are taking part in the competition as part of their Sixth Form enrichment activities, every Friday afternoon, and they are learning finance skills that will last them a lifetime.



Campaign Finance Reform

Upper Sixth student Toby Pearton has written a highly academic piece on campaign finance reform in the US. What a pleasure to read. Well done, Toby.

The extract aims to discuss the extent to which campaign finance reform is needed in the US, presenting arguments like; Bipartisan Campaign Reform Act was “too little too late”; the fact money guarantees access and effectively weakens the voice of the poor; and the argument that the provisions have been largely undermined by subsequent Supreme Court decisions. However, the extract also presents notable counterarguments to these statements such as, the best way forward is to remove all caps, it is patently clear money does not buy votes or guarantee election victory and the first amendment means freedom of speech for all. One extract was written by an op-ed in the Washington Post in 2017, which is very much a left-leaning newspaper; the other extract was written by a Republican newspaper columnist in 2019 and thus is a right-leaning newspaper. Both extracts are designed to inform the reader so that they can make their view on campaign finance reform. Although the fact the extracts are written in 2017 and 2019 and therefore may suggest it is a recent source, the debate around campaign finance reform has only heightened since this time. Overall, this source can be considered credible because it provides a balanced argument from both perspectives of this emotive debate.

One argument presented in the extract is that the “Bipartisan Campaign Reform Act (BCRA) was too little too late”. This statement is suggesting that although the BCRA was a promising step forward in the issue of campaign finance reform, its provisions and measures are inadequate and out of tone with modern times. The BCRA was the first major amendment of the Federal Election Campaign Act of 1971, holding the primary purpose of eliminating the increased use of soft money to fund advertising by political parties on behalf of their candidates.



READ MORE ONLINE
SEE QR CODE ON PAGE 2



Economic Growth

Lower Sixth student Grace Isaacs has written a brilliant essay for history on economic growth. Read this for an example of excellence!

Technological innovation was the most significant factor in explaining economic growth in America between 1865 and 1877.

How far do you agree with this statement? 25 marks

The economic growth and boom in America between 1865 and 1877 stemmed from the Technological innovation of individuals, such as Andrew Carnegie who brought about changes in technology and business methods, which transformed industry. Large-scale industrial production — accompanied by massive technological change, expanding international communication networks, and pro-growth government policies — generated rapid economic development and business consolidation. Technological innovation is the element that links all of the factors. Technological advancements both aided and stimulated all the other factors effecting the economic growth, and was instrumental in forming a stable economy, and sustaining it through it's essential interactions and aid for industry, society and culture.

Technological innovation was an integral catalyst in the growth of the economy, as it facilitated advancements in industry and businesses, which sustained the economy. A general trend of mass production, standardized parts, and assembly-line production, transformed industry and labor and increased the availability of consumer goods, and encouraged the rise of industrial capitalism in the United States. This is seen in the revolutionary process of the Bessemer Converter which made the process of making steel cheaper. It was introduced by Andrew Carnegie, and was used in his steel mills, making his business expand rapidly. Carnegie dominated the US steel industry as he kept prices as low as possible and constantly re-invested in new manufacturing plants and equipment.



READ MORE ONLINE
SEE QR CODE ON PAGE 2



Inspired by Nature

This year GCSE Design & Technology students had to identify design opportunities within three contexts:

Nature, taking inspiration for the forms found around us from the natural world. Students had to use this to influence the form or function of a product. For example, hexagons from the honeybee.

Designers, by looking at the work of designers and taking elements from their work to help inspire the form of a product, taking of Philippe Starck's signature piece, the Juicy Salif and using the shape of the legs to inspire the form of a coffee table or by looking at the work of the Bauhaus to inspire the form of an item of furniture.

Solving everyday problems, the students spoke to others and identified issues and problems then proposed and realised solutions. For example, a grandfather who struggles to bend down to do the gardening, how to BBQ both sides of a burger and how to safely store weights.

The students had to generate solutions, model and test these then manufacture a fully functioning solution.



A-level Product Design Project work

As part of the A-level Product Design course students have to solve a real problem for a client. Once they have investigated the problem they generate a range of design ideas then manufacture one of their ideas. This is a selection of some of the work from last year's A-level students.



Portable dryer designed by James Jennings.

Designed for a client who loves the outdoors, enjoys camping and cycling. This product can be plugged into a power source in a car and will dry wet cycling clothing. Manufactured from aluminium this fully functioning product is light weight and has the capacity to dry clothing and shoes.



Koko-Accent chair designed by Dan Hatfield

This stunning crafted piece takes inspiration from modernist design. The bleached pine gives the produce a Scandinavian feel, highlighted by the light colour of material and simple yet sleek form. Dan produced both the product and the cushion displaying a high level of diverse practical skills. He also drew on his graphic design skills to produce a range of advertising posters for the chair.



Tailor made, gentleman's jewellery box designed by Joe England

This product was influenced by 1950's USA design, post streamlining. Joe used reclaimed material from a billiard table to manufacture this stunning piece. His brief was to produce a functioning yet beautiful product. All parts of the product were hand crafted including the signature parquet top. Joe also produced the textile cushions and incorporated a wireless phone charger giving this classic piece of work a modern twist. You can imagine Sean Connery's James Bond putting his Omega watch back into this after another successful mission.



Happy Catz, Automated cat feeder designed by Pablo Scopes

Pablo worked closely with his client, Samu the cat, to produce a mechanised device for dispatching food for her at pre determined times. The device can be set to dispatch food at a set time or remotely from a smart phone via an app. This means Samu will never go hungry! Pablo designed and manufactured the control system, 3D printed the internal distribution system. The system is cased in plywood, the form was influenced by the iconic Kenwood food mixer, designed by Sir Kenneth Graham.



Mocha Table designed by George Crean

The Mocha Table was inspired by Latte Art. George represented the foam and coffee with layers of different hardwoods biscuit jointed and planed to form a board. This was attached to a mild steel frame. The ergonomically designed table would make a stunning centre piece to any living space.



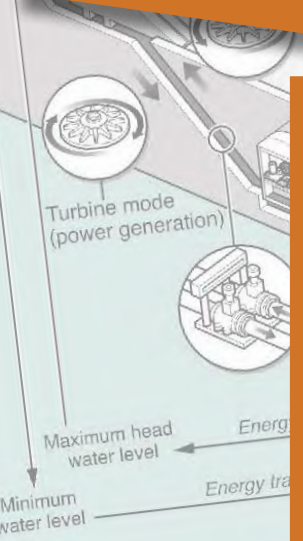
Clean grip designed by Alastair Caris

The pandemic has thrown up an array of opportunities for design. Alastair investigated the problem of hand sanitising and using door handles. Clean grip dispenses hand sanitiser as the user touches a door handle. With a view to batch production Alastair designed and manufactured the control system and 3D printed the casing.



The Parcel Protection Unit, design by Charlie Bracken

Charlie investigated the growing problem of 'Porch Pirates'. As people return to work deliveries are often left in porches or the open giving an increase in opportunities for theft. This stylist product can be sited outside a property and provides a secure location for deliveries to be left in. The form was inspired by a 1950's US mailbox.



WEATHERED AND WORN

BEA TAYLOR, Y10



CARA RIDD, Y10



PIP EVANS, Y10

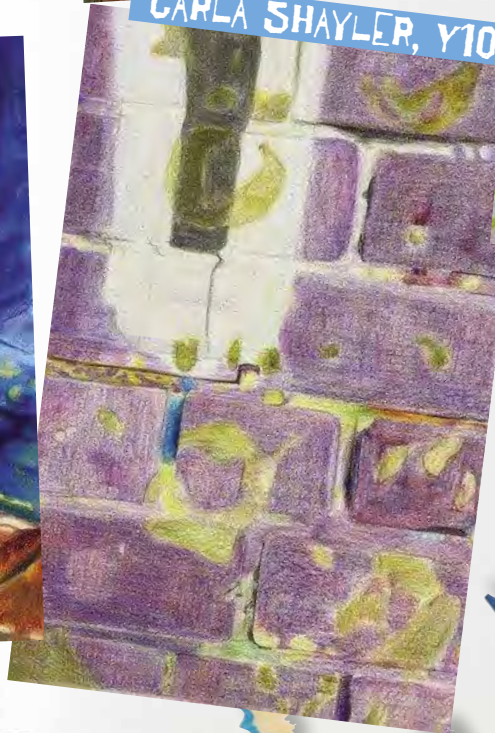


Year 10 Art students have composed some beautiful coloured-pencil drawings on the theme of Weathered and Worn.

ROXY GLENN, Y10



CARLA SHAYLER, Y10



ISLA LACEY, Y10



JAMIE DICKENS, Y10



National Poetry Day Competition Winners

Since 1994 National Poetry Day has engaged millions of people with poetry throughout the country. Each year the day is given a new theme and the theme for National Poetry Day 2022 was The Environment. To celebrate, the College ran its own internal poetry competition. We received many wonderful entries; well done to everyone who took part. Here are the winners and runners up.

Winner

Winner

Deatly Climate, by Genevieve Slater-Tucker, Year 11

Deatly Climate
 We cannot hear her silent weep,
 That echoes through the shallow ocean.
 Her wailing screams of melancholy sadness
 Silenced by the humans greed.

Where once was beauty, now lies ash.
 Where once were oceans, now lie trash.
 The flowers now no longer bloom.
 Swallowed by the inevitable doom
 That shall be cast upon humanity
 If we do not stop the cycle soon.

Mother nature, once again,
 tries to warn the shallow men:
 Their minds so overcome with greed
 fail to see the fatal consequence
 of the destruction of the seed.

The Environment Needs Us Now (ACROSTIC)

The environment needs us now!
 Her beauty is fading:
 Earth may cease to exist.

Every day we live and grow,
 Nobody notices though.
 Very quickly, Earth's health is declining,
 International damage from deforestation to mining.
 Rainforests losing their trees far too quickly,
 Oxygen reducing as nature becomes sickly.
 Never should our planet face such pain,
 Maybe we can help, we don't need to train,
 Earth is calling with hurricanes and floods,
 Now is the time to grow new buds,
 To change how we treat earth and sustain our beloved planet.

Nations are buckling under a weight which
 Every country is nurturing.
 Eco-friendliness is a foreign language.
 Day after day, resources are wasted,
 Saviour! Saviour! cries Mother Nature.

Under the sun there is a solution,
 We can support Earth by stopping pollution.

No more damage means no more problems,
 On our planet, everywhere could be peaceful and happy.
 We must band together: the environment needs us now!

Damilola Ajagunna (Dami) ABG.

The Environment Needs Us, by Damilola Ajagunna in Year 7

Rain, by Evie Johnson in Year 7



Rain:

Pitter-patter pitter-patter rain falls on the

Leaves.

Split-split splat-splat rain falls on the

Trees.

Crashing thunder lashing rain,
 Middle of the storm.

Then the sun comes out again,
 The sky is bright and warm.



Evie Johnson Y7 BJP

Runner up

Runner up

The Wind

The wind is a swooping owl flying with all its might,
 It flows and it flaps through the cold, dark night,
 It creeps up to walls and crevasses so tight,
 Until the early glimpses of morning light,

It rests upon its perch in the tough, cosy tree,
 And waits until its full rested, you just wait and seel

The owl is cunning and wise but never speaks a word,
 But when it's quiet here, it will never go unheard
 It may seem minuscule or not very smart,
 But now whenever the wind blows...

You'll feel it in your heart.

The Wind, by Alex Ainsworth in Year 7

Move Over Jamie Oliver!

Year 9 pupil Alex Lloyd has produced a superb project about Spanish food, including video footage of him cooking. Alex demonstrated both linguistic and culinary expertise. Well done, Alex



FOODS – A THREE COURSE MEAL

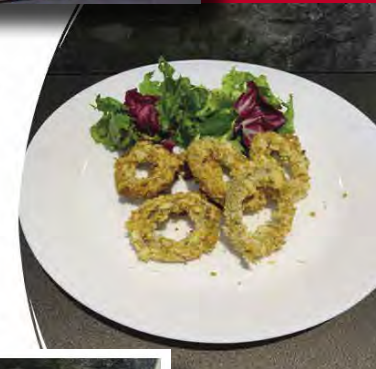
Meal 1 – Starter – Chorizo and Manchego cheese brioche buns – Castillo de Mancha
Meal 2 – Main – Jambon Iberico and Patatas Bravas and Olives
Meal 3 – Dessert – Galician Filloa
Drinks – Sangria



Year 9 pupil Ewan Pearce has also produced a superb project on Spanish food demonstrating linguistic and culinary skills.

Starter – Calamares fritos, Andalucía

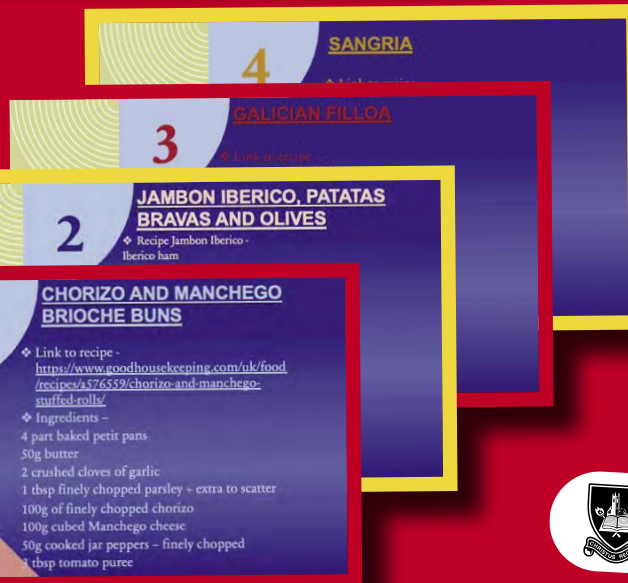
Cuando en España visito Andalucía en avion y cuando llegué fui a un restaurante moderno. Una vez me senté, pedí calamares fritos ¡fue genial! También el personal fue muy amable.



Ingredientes

- Hojaldr
- Carne molida
- Queso
- Puré de tomate
- Cebolla picadas
- Sal
- Pimentita
- Orégano
- Tomillo
- Ajo polvo
- Cebolla polvo
- Pimenton
- Ajo pasta

READ MORE ONLINE
SEE QR CODE ON PAGE 2



Artist Studies

Year 9 have been studying the work of John Piper using watercolour, pen and ink to create artist studies of their chosen paintings. Lovely work!

Annie Leigh, Y9



Arabella Drinkwater, Y9



Penelope Jones, Y9



Cassia O'Hanlon, Y9



Mia Petrucci, Y9

