

The Pinnacles

ISSUE 17 | MARCH 2015

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

Welcome



Read on at
www.princethorpe.co.uk/news/the-pinnacle

...TO ISSUE 17 OF THE PINNACLE, A CELEBRATION OF OUTSTANDING ACHIEVEMENT BY PUPILS ACROSS THE PRINCETHORPE FOUNDATION.

As usual, this issue showcases flair across all subjects and year groups as well as updates on our da Vinci programme. The design for our front cover comes from Year 13 Art student Samira Hassan. Samira's wonderful drawing recently achieved Highly Commended in the KS5 Drawing ISA Midland Region competition. We think you'll agree it makes a striking front cover for the magazine. Great work Samira!

We hope you like the mini *Minnacle* mag inside too, with inspiring examples of work from all ages and disciplines - there's something for everyone!



SAMIRA

Thanks go to: all staff at both Princethorpe College and Crackley Hall School for submitting such super student work; continued support from Marketing Manager Melanie Butler; photography by Year 9 student Patrick Carrington; the new Lower Sixth Editorial Team Joe Cannon, Lydia Ungless, Annabelle Pask and Katherine Hester; and the superb design work by Debbie at Dam Design Creative.

The *Pinnacle* is here to celebrate outstanding work, so keep sending in articles and news of success! We value every student's contribution and reward you all with plenty of house points. E-mail your work to: pinnacle@princethorpe.co.uk

Be inspired!

HELEN PASCOE-WILLIAMS

Co-ordinator of the da Vinci Programme

da Vinci Shield



Following the successful launch of our new da Vinci Programme in 2013, we decided to introduce a new award at Princethorpe's Prize Giving Ceremony: the da Vinci Shield. The shield

itself has an interesting and serendipitous story...having agreed to make this award, our Headmaster came across an existing Science shield in the College's trophy cabinet with an image of Leonardo's Vitruvian Man upon it. It appears to have been an old House shield awarded only once in 1978. In true 21st century style we have 'upcycled' this shield to serve as our new da Vinci award and are delighted that our new da Vinci initiative can be celebrated with a piece of the College's history.

Last year's recipient of this inaugural da Vinci award was someone who not only achieved the most da Vinci merits throughout the year, but who truly embodies the Renaissance ideal: she is accomplished in the Arts (she is a grade 4 violinist, has achieved grade 3 in ballet, enjoys singing, knitting and intends to learn the guitar); she is proficient in sport (she plays for the A team U15 in hockey, the B team U15 in netball and enjoys kayaking at Draycote Water); she is a keen linguist; an avid reader; and has recently achieved A* in both her Latin GCSEs and a Level 2 Higher Project worth half a GCSE. Her academic achievement is consistently outstanding; she works conscientiously and with a spirit of endeavour and demonstrates tremendous discipline in all she does.

Finally, what struck us most about this

wonderful young lady is her thirst for knowledge, her insatiable curiosity, vitality and eloquence. In

so many areas of her life she shines and yet she is modest and fervent about serving others. You will most recently have seen her mesmerising performance in one of the lead roles in the College's recent production of *Guys and Dolls*.

The winner of last year's da Vinci Shield was Year 10's Miriam Isaacs.



PERSPECTIVES

PERSPECTIVES COMPETITION

In this edition of *The Pinnacle* we are running a very special competition with an equally special prize.

Not only will the winner be rewarded with 100 house points, but you also have the never before opportunity to win the 'Fortnight Fast Track Ticket' which allows you and a friend to skip all queues to BOTH the refectory and the tuck-shop! To be in with a chance of winning this exclusive prize you must have handed in a piece of work to Mrs Pascoe-Williams by Monday 23 March inspired by the notion of Perspectives - interpret this in whatever way you like; whether that's through film, art, photography or a written piece, there are no boundaries to your creativity, as long as it has something to do with Perspectives.

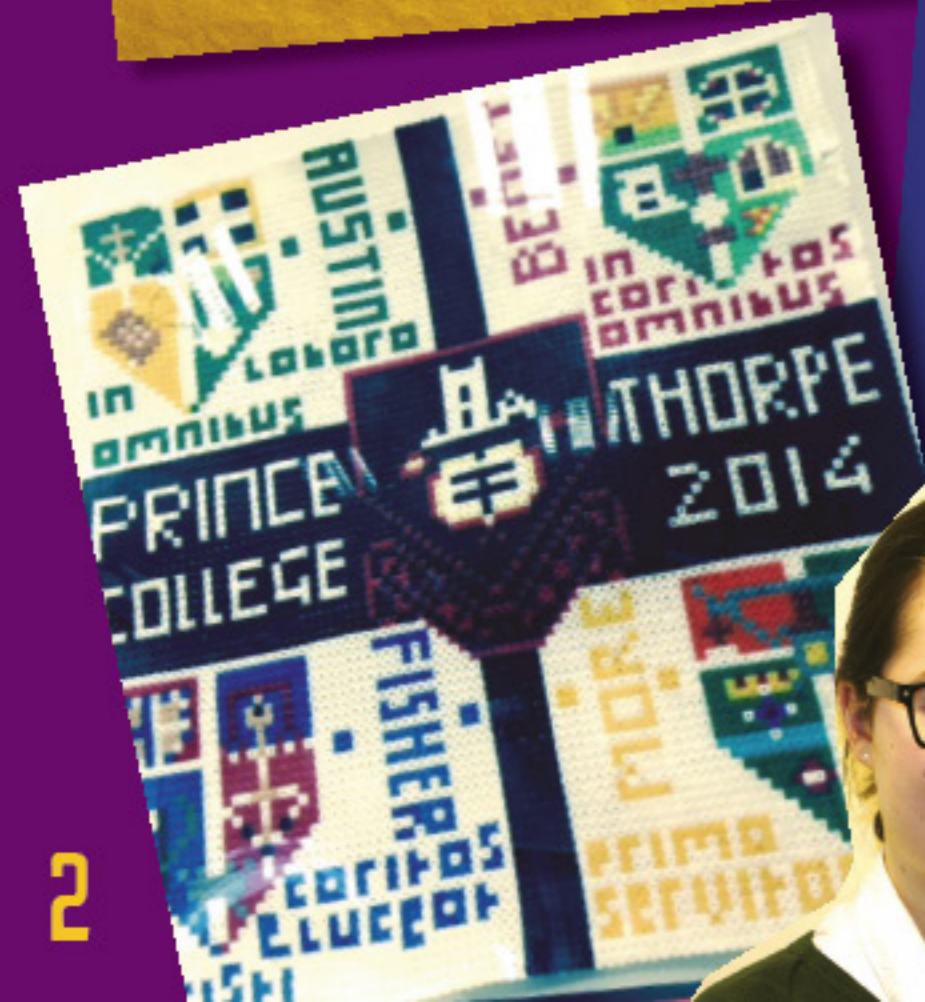
Good luck!

By Joe Cannon, L6
(Editorial Team)



CHRISTUS REGNET

Year 10 student Charlotte Ecclestone has demonstrated real creativity and task commitment in the making of a wonderful Princethorpe House crest made out of Hamma Beads (the beads that you offer as a gift to the College and will make a lovely display piece in the House area. The size and detail of her creation is truly impressive. Stunning work Charlotte! Thank you.



The way I see it
Isn't necessarily
The way you see it

Hockney Inspiration

Year 10 Art students Selin Hassan and Isabella Steane have produced some outstanding coloured pencil transcriptions of David Hockney's work this term. Colourful work girls. Da Vinci merits coming your way!



Selin Hassan, Y10



Isabella Steane, Y10

Lest We Forget

Lauren Mason, Y7



"Lest we forget" we always say
Eleventh hour, eleventh day.
To remember the fallen, the men we have lost
The soldiers who paid the ultimate cost.

All gathered together, we stand in the wind.
Our faces are solemn, our poppies are pinned.
The wreaths are laid, our hearts are bowed.
All thoughts of our ancestors who did us proud.

Some words of remembrance, the doggy can call.
The Last Post is played, and then silence falls.
"Lest we forget" we always say,
This is how we remember today.

By Lauren Mason, Y7



DISCOVERING AMERICA

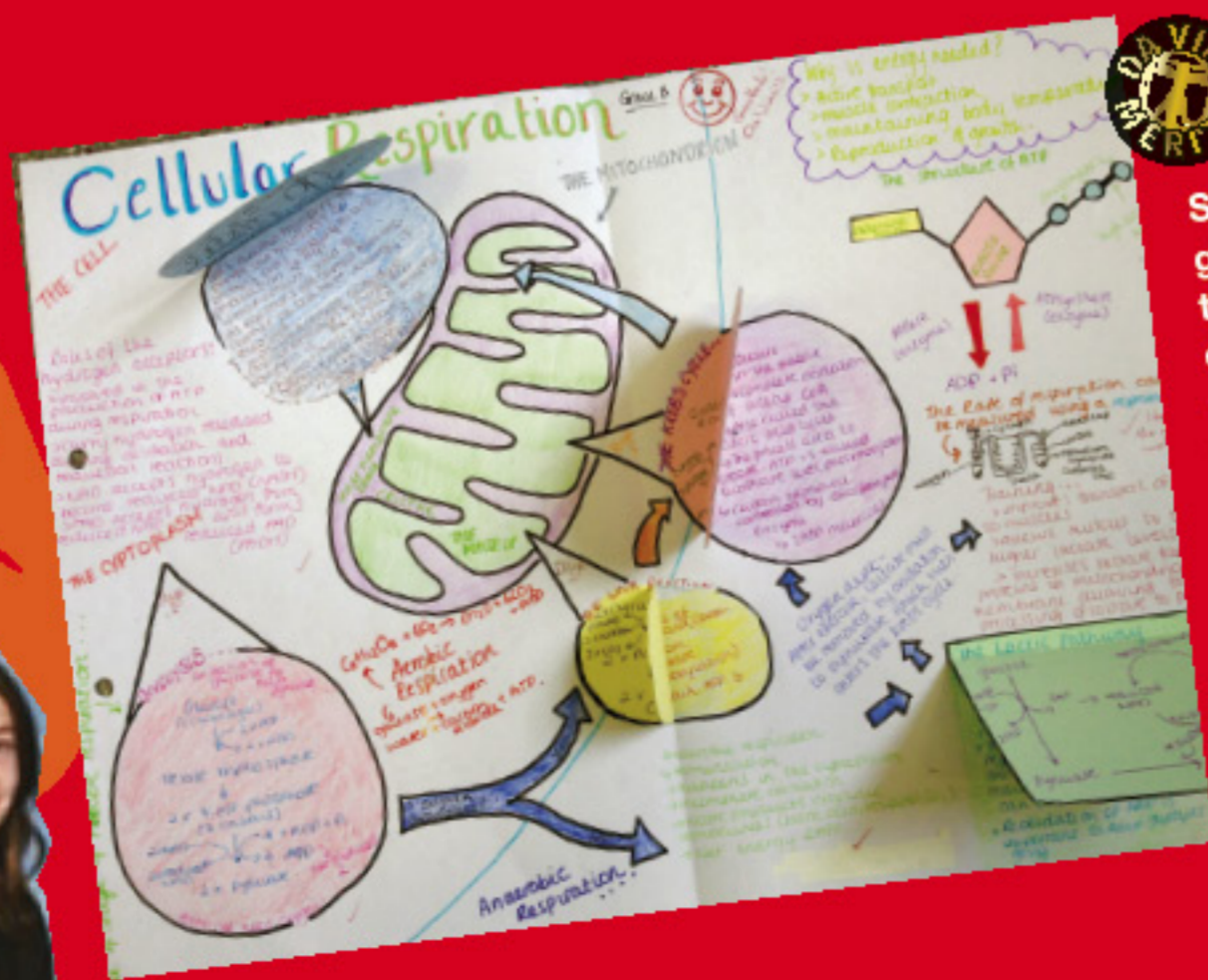
Last October half-term, a group of around 55 pupils and six teachers explored Washington and New York on the US History trip. After a six-hour plane flight, we landed in a bright and sunny Washington D.C. Awestruck pupils spent three days in America's capital visiting many culturally relevant places of interest, including Congress- where we gained access to the Senate; the black granite Vietnam War Memorial and the giant Lincoln Memorial Statue directly across from the Reflecting Pool - well-known as the sight of Jenny and Forrest's reunion in the 1994 Tom Hanks' movie *Forrest Gump*. We then travelled to New York for another incredibly busy week. It's impossible to describe in detail our entire stay at the Big Apple but one of the highlights, for me at least, was experiencing on a cold crisp autumn night the dizzying heights of the Empire State building, an iconic New York sight, and the incredible, dazzling view of the city that does truly never sleep. The group split to see two Broadway musicals, *Matilda* and *The Jersey Boys*, another massive hit and truly a once in a lifetime experience. Of course, being a History study trip we also had many invaluable learning experiences visiting world renowned museums, including the MET, and a very informative guided tour of the United Nations. Overall I think everyone on the trip would agree we had an extremely positive and educational American experience.

By Katherine Hester, L6
(Editorial Team)



Don't Forget to Breathe!

By Grace Buckley, U6

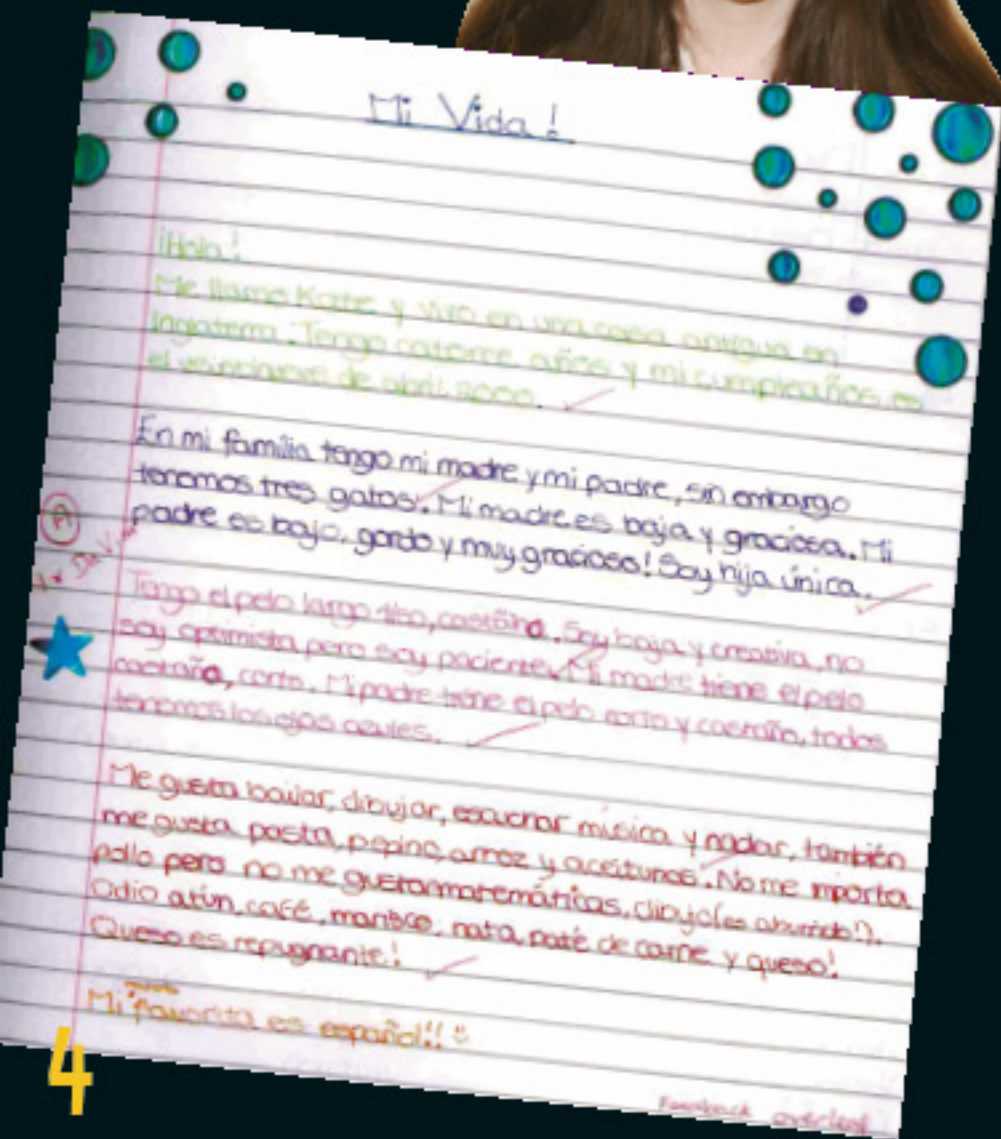


Sixth Form Biology students were recently given a half term homework to summarise the topic of respiration - including the four stages of aerobic respiration, anaerobic respiration, the role of ATP and mitochondria and measuring respiration rates with a respirometer. This is not an easy topic, and Grace really persevered to understand all the intermediate stages in detail. She has covered all important points and shown a very comprehensive grasp of the topic with A grade understanding and detailed explanations. Great work Grace! Thoroughly deserving of a da Vinci merit!

Accomplished Spanish

For their first written task of the year, students from Year 10 Spanish were asked to write a paragraph describing themselves and their likes and dislikes. Kate MacIntyre went above and beyond for this task. Not only did she present it beautifully, but she also included a lot of detail, while maintaining a high level of accuracy. She used connectives, qualifiers and different forms of the verb as well as justifying her opinions with adjectives. The time and effort she put in to this piece of high quality work is commendable.

Well done Kate!



COMET CRACKLETHORPE IS BANG ON TARGET

Do you know how to tell the direction in which a comet is travelling? Can you keep a cool enough head to deal with dangerous humidity and radiation levels in a space shuttle? Could you design and build a probe to intercept a passing comet? I know a few young people who can...

A TRIP TO THE NATIONAL SPACE STATION

On Friday 6 February, selected students from both Princethorpe College and Crackley Hall were chosen to go on a fun, interesting, interactive trip to the National Space Centre. We got involved in many different activities such as watching a movie in a planetarium and building a probe, which was to then be launched into space and hopefully rendezvous with Comet Encke.

We separated into two groups and sorted out the different areas/problems that were fatal to the mission. We did this by communicating with each other, which then got us one step further to launching the probe.

Another fun activity we did was watching a movie about astronauts in a planetarium. What was really interesting was the way that the screen and images projected, but sometimes it also made me feel a bit dizzy and sick!

My favourite activity was launching the probe to Planet Encke, but during the mission we discovered another comet which we wanted to be named after our two schools combined together. We all voted for each different suggestion, but the conclusion we came to was to call it Comet Crackle Thorpe!

I enjoyed working with lots of new people that I had never met before. I had a great time and found the whole trip fascinating and extremely interesting. I would really like to go here again and learn even more forensic facts about space!

By Lucy Gribben, J6



BECKY REDMILE FACTFILE:

NAME: BECKY REDMILE

YEAR: LOWER SIXTH

Becky currently plays hockey for Leicester ladies 1st VI and is also one of our own. Her preferred position is mid-field but she doesn't mind dipping her toe in defence. Her versatility, team work and just cracking skills have got her through the gruelling trials of the England hockey system. This year, she got into her National age group academy and is working towards her advanced apprenticeship in sporting excellence.

I asked Becky if she had an idol in the sport and she replied 'Kerry Whitehead'. Whitehead represented GB and now captains the Leicester 1st VI. Therefore, Becky is playing alongside those who inspire her. It comes across when I speak to her that she is unbelievably passionate about it all. Whitehead isn't the only star though; Becky, at only 17, is the rising star. One day, she will be the inspiration for others. Her sporting journey is only just starting and she has opportunities ahead of her that can excite everybody. Next year, she wants to qualify for the England U18's squad and participate in the Sainsbury's School Games. Both of these will set her on the path for success, a success that could lead to Tokyo 2020.

I can vouch for Becky because her determination is so prominent that I can't see why success is not possible. What makes the topic wonderful to talk about, is that I know the hard work needed to achieve this. As an athlete myself, these goals can sometimes seem so far away that it feels impossible. But talking with Becky seemed to shrink the distances. It is the 'we can' that will get us through those days where we think success is fading away. I believe in anybody that has that light in their eyes, and Becky does. That light is the love of what they are doing. Becky loves hockey and I'm sure she will be doing for it for a long time.

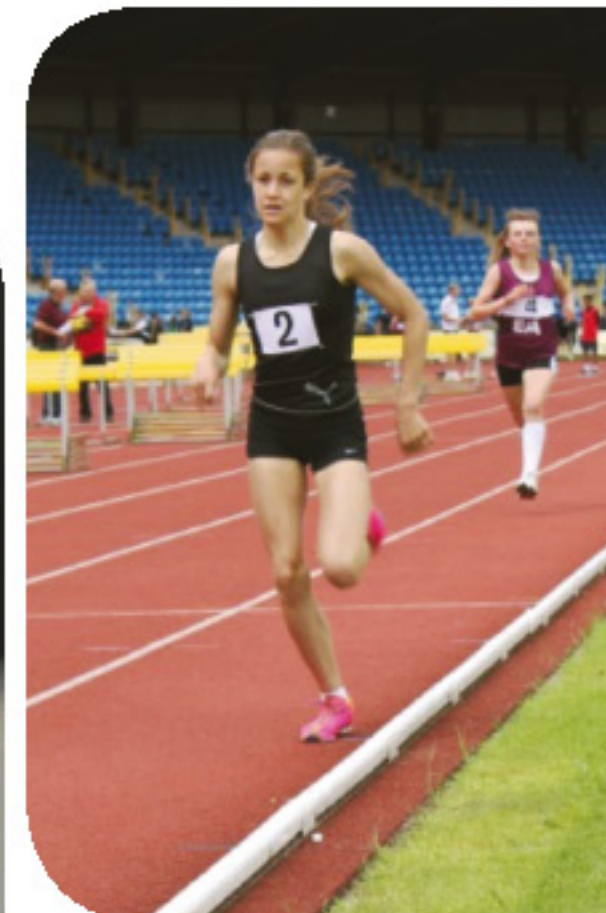
TRAINING PROGRAMME:

MONDAY: NATIONAL AGE GROUP TRAINING IN OXFORD
TUESDAY: AFTERSCHOOL HOCKEY TRAINING
WEDNESDAY: LEICESTER CLUB TRAINING
THURSDAY: GYM SESSION
FRIDAY: REST
SATURDAY: MATCH DAY (LEICESTER IS PART OF THE PREMIER LEAGUE)
SUNDAY: REST



ELLA ON THE CUSP OF NATIONAL SELECTION

She runs, she scores, and she celebrates. Ella is no stranger to scoring goals with playing centre forward for the U18 1st XI at school and progressing through county and regional teams. Well, what now? Ella recently played for the Mercia Lynx team in the England Hockey Futures Cup Tournament. This involved three hard and competitive games against other regional teams. Thanks to hard work, her team came up on top, winning the tournament and demonstrating great play. She has put herself in opportunity heaven, thanks to England selectors being on the scene at the tournament. That brings the possibility of national age group selection! "It would just be the best thing ever, there is a lot of pressure on me but it would be a dream come true if I could represent England." She has a lot of great things ahead of her.



Sports Editor

Ten months on from being crowned U17 England Indoor Pentathlon Champion, Princethorpe College's Annabelle Pask not only achieved a promising 6th place in U20 Women's Indoor Pentathlon Championships, but also volunteered herself as Sports Editor for *The Pinnacle*. Not only does this girl hurdle like a champion, she can high jump, run and shot put with the best of them. She can write beautifully too!



Dibb Retains Regional Biathlon Title

"Modern Biathlon?" I hear you cry. Modern Biathlon is the multi-discipline race of swimming and running. Based on the modern pentathlon, competitors swim and run separately. The times are then converted into points and added together. Points obviously make prizes, so the winner is retained for having the greatest point score.

What you might not know, is that here at Princethorpe, we have a keen athlete of the Modern Biathlon. Not only is she a participator of the sport but also a winner! Mollie Dibb won the West Midlands Regional Biathlon championships for the second consecutive year in 2014. The day started with the 1600m track event first, where she finished a strong third in the fastest heat. This was followed by the 100m swim where she executed a personal best, clocking 1.01.12 giving her an impressive 1129 points. Mollie had to wait nervously for the final results, but the results were worth waiting for. Finishing first with a point score of 2308, Mollie demonstrated her strength and endeavour to stay up on top. Modern Biathlon star!

TABLE TENNIS CHAMPION

Year 8 student Ciara Hancox started playing table tennis only two years ago. She was on holiday and just happened to pick up a bat and start to play and really enjoyed it. Her mum decided to get her into a club (Freechurch Lillington) and since then she has gone from strength to strength. Last month she became Warwickshire U13 champion and will go to the nationals in April in Tipton, West Midlands. Ciara has such a love of the sport, 'It is a sport anyone can get involved in and enjoy at their own level, truly Sport for All'.



Good luck Ciara!

Shining Lights

The following are examples of reports produced for an Electronics project by Year 7 students Grace McGrory and James Gallagher. The standard of work was so high, the two students were awarded da Vinci merits. Excellent work! Well done!

My Desk Lamp Project
By Grace McGrory



What is it for?
This project is a desk lamp that light up when its dark and the LED

What have I done?
In 5 weeks I have made a desk lamp. I have put together soldered and cased a PCB. Designed a CAD design using 2DDesign and have put this all together to make a finished design.

"You did very well with the soldering and it is very neat. Well Done!"
Lauren Mason





My Desk Lamp Project





What have I done?
I have designed and manufactured a completely unique desk lamp. With the LED in place, the lamp is able to light up and change colour when placed in darkness. After putting all the different components into the right place on the PCB, I soldered them all together and have managed to make a successful circuit!

Purpose...
This product is used as a decoration for your bedroom to light it up at night. It looks absolutely fantastic when it up in the dark and I'm sure the person I've made it for will love it. The design will really interest her and there's a chance he may use it to look of all the time because he does find this type of thing interesting.

Circuit Design
The circuit consists of various components such as an LED to light up the acrylic; a battery (3 volts) to power the desk lamp; a resistor to slow down the current; a switch to turn the power on; an LED to make sure that the light only turns on in darkness; a variable resistor to adjust the sensitivity and finally a transistor to ensure the LED lights up at a high speed.

Converting the image...
Using the software 2D Design, you are able to complete your design so it is ready for the laser cutter. After putting my image onto the document, I vectorised it and then contoured it, so I could drag it into the hangings. I then personalised it with some text and it was ready to be lasered on the machine!

By James Gallagher


NATURAL DISASTERS

Year 9 student Molly Geehan was awarded a da Vinci merit for her research into natural disasters in Geography recently. Super work Molly!!



THE HAITI EARTHQUAKE

HOW IT HAPPENS:
Earthquakes usually occur when rock underground breaks along the fault. The sudden release of energy causes the seismic waves that make the ground shake. When the plates rub together, they stick a little, making the earth vibrate.



Haiti

THE EARTHQUAKE

What: The Haiti Earthquake was 7.0 on the Richter scale. This is 10 times worse than a number 6.0.
When: The earthquake occurred on the 12th of January 2010.
Where: The earthquake was 19km below the ground causing a very big impact above the surface.
Why: This earthquake was caused because Haiti is situated on the north of the Caribbean Plate, on a transform, (conservative,) plate boundary with the North American Plate. The North American plate was moving west. This movement was not smooth so therefore it caused friction between the North American Plate and the Caribbean Plate.



The Impacts:




MATHS CHALLENGE

On Thursday 13 November 2014, Mr Uglow took four Sixth Formers to Warwick University for the regional finals of the Team Maths Challenge.

Taking part at the event were sixteen other schools including Warwick, Kenilworth and King Henry VIII, who proved to be serious competition. The evening comprised of three different rounds: the team round (working together on algebra, circle theorems and many other aspects of maths, all without a calculator); the Crossnumber round (a crossword puzzle with numbers instead of letters, with pairs only allowed to communicate via an invigilator); and finally the mini relay round (tackling questions and finding solutions in pairs). Overall we came fifth out of the seventeen teams, the best result the college has had so far. The team consisted of Mia Westbury, Max Dziurzynski, Rob Betts and Maddie Wigmore-Sykes.

BY MADDIE WIGMORE-SYKES, U6



PASTEUR: one of the most important scientists of all time

Human beings have made many large advances have benefited as a whole, in the field of Darwin's



of evolution, creation of vaccines by Edward Jenner and founding of modern genetics by Gregor Mendel to name but a few. However I think that the most important Biological advance of all time was the discovery of microbes by Louis Pasteur in the 1860s.

In the eighteen hundreds the idea of microbes that could harm human beings was pretty much unheard of. In the 1800s understanding of disease was primitive. Many people, including the members of the medical profession, thought that disease came about from an imbalance in the body that could be caused by a number of different things, like evil spirits for example. Sanitation procedures were poor, with doctors not washing hands before performing surgery or between dealing with different patients. All of this led to high death rates in hospitals and rising infant and adult mortality rates.



By Callum Panton, U6

TAKEOVER DAY!

CHILDREN'S COMMISSIONER'S TAKEOVER DAY 2014

On 21 November 2014, I spent the day with part of the Warwickshire Police force at Rugby Police station, and seven other students from schools around Rugby to help solve a mock murder case. I wanted to attend this event as I am considering a career in law, and thought it would be interesting to see the perspective of a detective on a murder inquiry.

We arrived at the police station at 0800h to begin a very long day of collecting evidence, interviewing witnesses and at the end of the day, arresting and convicting our suspect of 'murder'.

Throughout the day we each got to interview witnesses to the crime, family members of the victim and question our suspect(s). From the outset we worked hard to form 'actions', e.g. to collect intelligence on our victim, to send a forensics team to the crime scene and to 'bring in' friends and family to take statements from.

We were taught techniques to use when interviewing, to extract the maximum amount of information from suspects and witnesses, and to empathise with family members. We had to search for possible murder weapons, scour reports and statements for links between the victim and suspects - eventually uncovering links to a drugs ring, and a gang member who was involved with our victim. This gang member turned out to be the murderer, as we found with conclusive evidence.

This evidence happened to be disproving his alibi, a neighbour hearing his voice at the crime scene, finding a boot print on the top of a dustbin in the back garden (where he managed to hurdle the fence) and his DNA all over an Xbox lead which he had used to strangle our victim, and then dropped under the dustbin as he tried to run away.

We had to collate a very large amount of information in a short time and spent, what felt like a very long time, questioning our suspect who refused to budge (with a very persistent attorney), and doing this left us all exhausted-but satisfied at the end of the day when we put our criminal in to custody.

By Amy Cook, Y11



The Ghost of Christmas Past

Some Year 8 students have been 're-imagining' A Christmas Carol, using Dickens' original prose to inspire modern versions of the characters. Here is Lillian Robinson's description of the Ghost of Christmas Past who visits Grey Phantomhive - her modern Scrooge...



The Ghost of Christmas Past

She came at midnight. The first warning was the curtains, gently starting to blow when the windows were so obviously shut. Phantomhive trembled and sat up slowly, "Show yourself!" he yelled, "Show yourself you-" he would have gone on but the door creaked open, the sound of traffic and the light outside faded away and- for a moment - Grey was submerged in darkness, then she peered round, her glowing beauty seemed to bring calm to everything around her. She stepped inside.

Although her arms were bare, her dress flowed down to the floor which sighed and groaned as she came towards Grey. Her voice sounded distant, though she was near, as though she was trapped in the past. A single pink rose, wrapped and woven through the child's hair gave the only sign of colour to the monochrome figure. The beauty and brightness were cast out from the darkness and dullness of her eyes.

She glided towards Grey and whispered, quietly and rather shyly, "Grey Phantomhive, I am here to show you life. I am the first ghost that has been promised to you. The ghost of Christmas. And the ghost of your past." Grey didn't speak or mutter a word, transfixed by the child, as she led him away into the light.

Year 9 student Caitlin Scully's spontaneous response to the November exams was also outstanding, especially considering she only had 25 minutes! Great work Caitlin!



The Present

I don't know what I was so apprehensive about, it was just a crumpled, torn up, coffee-stained letter I had found on her old house's wooden floor. I was simply returning it. There would be no laughing or tears of elated joy or any emotional exchange whatsoever. And, under no circumstance, could this insignificant piece of parchment be described as a 'present'.

My head was thumping so loudly I was sure the exhausted staff and deluded patients could hear it. My palms were sweaty, ears were ringing and I was sure my eyes were blinking profusely like they always do when I'm nervous. I hadn't seen her in years and now I was turning up on her birthday with a letter I had stumbled across when I broke into her house. Maybe I was as mad as she was, maybe I deserved to be locked up and given medication too. Of course I wasn't as crazy as she, and this shred of paper couldn't possibly be described as a present or even a letter. It simply read;

I do not have much time to write this letter - you know why. Don't trust everyone we know, stay safe and know that I love you.

K.B x



Iggy is a no fee global educational social network designed to help gifted and talented young people aged 13 -18 realise their full potential. IGGY is part of the University of Warwick, so members have access to great educational resources and get to work with top academics and other gifted and talented young people around the world.

Members can create their own profiles, make friends and collaborate internationally. They're helping create a great site for gifted and talented young people to exchange ideas, debate, learn and explore in a safe environment.

On Tuesday 27 January, 50 Princethorpe students and their parents were invited to attend a launch of IGGY in the College's Sixth Form Lecture Theatre. The invited students were 13-18 year olds who had achieved four or more da Vinci merits. Jamie, a student mentor of IGGY from Warwick University currently in his third year as a Physics and Chemistry PhD student, delivered the lecture. The evening consisted of a one hour presentation and refreshments, followed by an hour long interactive session where the students logged on for the first time and explored the site.

This is a superb and exciting opportunity for our da Vinci students. Not only is it a reward for them, for working so hard and achieving so highly, but it is also a way of stretching them further and exposing them to different ways of learning (not just within the classroom context). It is vital that we find plenty of ways of feeding their curiosity and challenging them; IGGY provides just such an opportunity.

IGGY is just getting bigger and better. The more Warwick University continues to raise the profile of IGGY, the more other universities will acknowledge the contribution of IGGY members and see them as exactly the type of students they will want to offer undergraduate places to (this has already happened for the Extended Project Qualification and I am confident the same will be true of IGGY in the near future too). Well done everyone!

By Helen-Pascoe Williams

"This is a superb and exciting opportunity for our da Vinci students. Not only is it a reward for them, for working so hard and achieving so highly, but it is also a way of stretching them further and exposing them to different ways of learning."

THE ORIGINS OF EVIL

Year 11 student Gemma Rees has produced a really thoughtful, carefully researched and well-argued essay on the origins of evil. Such a response would certainly be a credit to an AS level student of Philosophy and Ethics. Superb work Gemma!

How convincing is the idea that evil can be blamed on factors such as a person's upbringing, psychological make-up, their genes or even the devil?

'Evil' can be described as either a person or an event where there is profoundly immoral and wicked act. It's a force or the personification of a negative power that is seen in many traditions as destructive and against God. An evil act suggests a deliberate cruelty done in the full knowledge that it is wrong. It also can be argued that evil cannot just come from an act but from the person they are due to many different factors.

Some people think that a person's upbringing and childhood experiences can lead to a future of evil. An example of this is Myra Hindley; an English serial killer. The Moors murders were carried out by Ian Brady and

Myra Hindley between July 1963 and October 1965. Characterised by the press as "the most evil woman in Britain." Her father drank heavily which led to beating up Myra and her Mother. Myra was sent to live with her grandmother when she was just four years old. One thing her father did teach her was how to fight and so like her mother, Myra learnt how to defend herself against males her own age. Age 15 her close friend died, which led her to become obsessed by sights from which others would recoil.

By Gemma Rees, Y11



Princethorpe College

Princethorpe, Rugby, Warwickshire, CV23 9PX
Tel: 01926 634200 E-mail: post@princethorpe.co.uk



The Princethorpe Foundation

The Princethorpe Foundation, Company registered in England & Wales and Limited by Guarantee No. 4177718 Registered Charity No. 1087124 © 2015