

## The Westcliff Week

T: 01702 475443 E: [office@whsb.essex.sch.uk](mailto:office@whsb.essex.sch.uk) W: [www.whsb.essex.sch.uk](http://www.whsb.essex.sch.uk)

### WEEK BEGINNING 18 MAY 2020

#### THE GOVERNMENT'S PLANS TO REOPEN SCHOOLS

Welcome to the eighth issue of The Westcliff Week.

I was pleased to have the opportunity to write to parents at the end of last week regarding the School's response to the Government's plans for secondary schools to make provision for face-to-face contact for Year 10 pupils and Lower Sixth students from Monday 1 June. The Government has indicated that it will provide further advice to secondary schools on this matter during the coming week. In the meantime, the School has begun to put plans in place for meeting the requirements set out in the guidance available so far. As I indicated in my letter, in the event that these plans proceed, the School's arrangements will focus around the provision of meaningful educational opportunity, as well as ensuring that pupils and staff are operating within a safe working environment.

We have already commenced work on preparing the School site for reopening as, regardless of any arrangements this term, we have known that we shall need to be well prepared for the autumn term. Those plans include the introduction of one-way systems in buildings, hand sanitisers, signage regarding good hygiene and social distancing requirements, social distancing arrangements for the use of facilities such as the toilets, regular cleaning of facilities during the day and the provision of hygiene materials such as tissues in all classrooms. The School has also invested in contactless thermometers, and adjusted the layout of teaching areas to provide appropriate social distancing as per the current requirements. Inevitably there will be more to do in the weeks and months ahead, including further adjustments in preparation for the return of an increasing number of pupils.

In the light of those plans, we anticipate that we shall be able to adjust to complete those plans earlier as necessary with relative ease. Once we are in receipt

of the further advice from the Government this week, I shall write to parents again with further information.

Our pupils continue to meet and overcome the challenges posed by these unusual circumstances, and I would also like to take this opportunity to draw your attention to the WHSB String Quartet's wonderful performance of 'Moon Rover'. This can be viewed on the School's Facebook page. I wish to thank Henry, Jasmin, Cho, and Finnian for the time, effort and skill they invested in producing this beautiful music.

I wish to take this opportunity to remind all pupils that there will be no online lessons during the coming half term. I would also like to wish all pupils and their families an enjoyable half term holiday.

*Headmaster*



*The WHSB String Quartet entertain guests as they arrive for the WHSB Centenary Gala Ball at the Cliffs Pavilion, February 2020*



## COMMUNICATION AND CONTACT WITH THE SCHOOL



As the country begins to ease from lockdown and we enter the final two weeks of this half term, we wish to remind pupils and parents of the arrangements for contact with staff at the School.

We are delighted that the vast majority of pupils are working extremely well in extraordinarily difficult circumstances. Our pupils are working well independently, providing a secure foundation for continuing with their studies with little difficulty when normal schooling resumes. However, we are aware that there are a small number of pupils who have had difficulties with reliable technology, with health in the home, or with maintaining a routine or coping with feelings of isolation resulting from the necessary restrictions while we work together to deal with the COVID-19 virus.

It is important that, during this time pupils develop the self-discipline and organisational skills to ensure that the assignments set are submitted to their teachers by the deadlines given unless there are genuine and extenuating reasons for not doing so, and that those reasons are shared and understood by the School. Assuming and fulfilling this responsibility – that is to deliver what is expected from pupils – will stand them in good stead throughout their lives.

However, where genuine difficulties exist, it is most important that communication with the School is maintained, and we request that pupils and parents to communicate with the School using the appropriate means provided.

Pupils should maintain regular contact with each of their class teachers regarding the work set. They should make use of the various methods available through Microsoft Teams (Chat or individual Team walls), or their School email account. We urge pupils to be proactive in informing teachers of any difficulties they may have with work.

Pupils should also maintain regular contact with their Form Tutors, who may hold video or audio-conferences with tutees in addition to making direct contact with their tutees via individual messages or emails. The Form Tutor should be the first point of contact for pupils who wish to discuss any personal difficulties they may be experiencing.

Parents are also able to contact the School and this should be through the appropriate Pastoral Office using the email addresses below. They should do so in order to inform the School of any particular circumstances which may make it difficult for pupils to keep up with work set, or to communicate over any other concerns or challenging circumstances, for example illness or difficulties with technology. Please could we ask that parents do not email teachers directly in the first instance, or use their son's/daughter's School email address to communicate directly with teachers.

Pastoral Office email addresses are regularly monitored by the Pastoral Teams who, for the purposes of ensuring effective processes and communication, maintain oversight of issues affecting those pupils for whom they are responsible. This also ensures that, where a member of staff may not be available to respond to an email, for example in the event of illness, staff in the Pastoral Office will be able to respond appropriately.

We appreciate the difficulties of working under these challenging circumstances and hope pupils and parents are finding the arrangements outlined helpful in maintaining contact with the School at this time.

### **LOWER SCHOOL PASTORAL OFFICE:**

lspo@whsb.essex.sch.uk

### **MIDDLE SCHOOL PASTORAL OFFICE:**

mspo@whsb.essex.sch.uk

### **SIXTH FORM PASTORAL OFFICE:**

sfpo@whsb.essex.sch.uk

*Headmaster*

## V E DAY 8 MAY 2020

May 8<sup>th</sup> 1945 is a date etched in the memory of all who witnessed it and this year marked the 75<sup>th</sup> Anniversary of the end of conflict in Europe.

After nearly six years of war, Germany surrendered at 02:41 on 7 May 1945 when a delegate ordered by Adolf Hitler's appointed successor Grand Admiral Karl Dönitz went to General Eisenhower's headquarters in Rheims at 02:41 hours on 7 May and signed the military surrender documents ordering all German Forces to "cease active operations at 23:01 hours on 8<sup>th</sup> May 1945".

The announcement that the war was over was broadcast on the radio to the British people on the evening of 7 May, with a news flash indicating that the following day would be a national holiday. Conscious that war was still being waged in the Far East and Pacific, the day was called *Victory in Europe Day*, or as it has become known, *V E Day*.

Having been a member of the Westcliff High School for Boys Combined Cadet Force since Year 9, I have developed a keen interest and respect for the British Armed Forces and particularly the British Army - something I plan to continue after leaving WHSB this summer.



Part of the that interest stems from researching my Grandfather's Uncle, Warrant Officer Class 2 Company Sergeant Major William Adams, who was a career soldier with the Essex Regiment based, pre-war, at the Warley Barracks, Brentwood (later to become the Ford Headquarters, until recently).

He fought through the North African and

Italian campaigns until he was wounded during the Battle for Monte Cassino. He was killed in action on 13 July 1944 during the Battle for Arezzo and he is buried in the Commonwealth War Graves Cemetery at Arezzo.

It was 'Uncle Bill' who my family remembered during the 75<sup>th</sup> V E Day celebrations.

During my journey to and from WHSB for the past seven years, I have walked through my local churchyard (St Marys, Benfleet) where, each day, I pass the grave of Private Victor Samuel Ellen of the Essex Regiment, together with six others from



various branches of the British Armed Forces who died during World War II.



Having a connection to my Grand Uncle's regiment, and also the Royal Anglian Regiment with which the WHSB CCF is affiliated (and into which the Essex Regiment was amalgamated in 1964), it was Private Ellen to whom I paid my respects on V E Day, having

first observed the 2-minute silence at home.

*Company Sergeant Major (CSM) Daniel Barton*

I would like to take this opportunity to thank Daniel for this splendid article. In particular, I wish to commend him on his initiative in representing the WHSB CCF on VE Day in such a thoughtful and dignified fashion. Daniel has been an outstanding member of the CCF and has contributed greatly to the School as Deputy Head Boy. I thank him for his superb service and wish him well as he moves on to the next phase of his education and life.

*Headmaster*





## COVID-19 TAKES FOOTBALL CAPTIVE



The excitement, the adrenaline, the drama; we all miss it. Before the lockdown, football was something that ignited a passion and excitement, weaving through the whole country. The devastating

Coronavirus has taken much of the joy out of our lives, following the widespread suspension of football on 13 March. It was the people's game and, with morale continuously dropping during the UK's confinement measures, the Government and Premier League seem to be collaborating on a plan called *Project Restart* which aims to bring back top-flight football by 13 June, lifting the country's spirits by doing so. Despite this, will football really be the same?

Coronavirus has simply stopped football in its tracks and the impact goes far beyond the supporters. The suspension of the game has jeopardised the infrastructure that supports thousands of clubs, players and peripheral businesses. Football, as an industry, provides income for various organisations and groups of people, not just those within the game. Local restaurants and pubs, for example, located near home grounds of clubs all profit from significant match day sales which contribute towards the majority of their revenue. Furthermore, broadcasters have fuelled the global growth of football through vast sums of money being injected into the sport for television rights, so increasing media attraction and popularity whilst boosting the profile of the sport. With the ongoing suspension, the prospect of falling subscribers, viewers and advertisers is set to cause major disruption. Given this possibility, there is potential for renegotiation of broadcasting fees that will certainly have a knock-on effect for future seasons. This may lead to lower wages for players and increased admission fees. The virus, which has already triggered high volatility in the financial markets, could be the catalyst for a transformational period in the game.

Some clubs in England have suggested that the effects of the global pandemic could cost them as much as £40 million, and with some clubs already experiencing an unstable financial structure, they are being pushed further and further towards the brink of bankruptcy. Revenue streams were diverse and robust, supported by various sources of income, however, with the potential money supply problems they are now experiencing, profits will become low, perhaps

becoming losses, particularly if owners do not inject cash into struggling business models. In addition to this, given the origin of the virus in China, and their country's GDP decreasing, questions are being posed over the security of clubs' financial status as there is sizeable Chinese investment in English club ownership. Many clubs pay wages that exceed their revenues and consequently they are highly vulnerable in the event of cashflow difficulties.

Football is a game that is most certainly powered by the fans: the roar through stadiums when goals are scored is unparalleled, especially at Old Trafford I must say, being a Manchester United fan myself. However, the return of football does not mean the return of fans into stadiums. Whilst there is certainly concern over the absence of an exciting atmosphere, there will also be the detrimental financial effects for clubs as their main direct source of income is lost. Across the English football spectrum, in the lower leagues, this may amount to 30% of their income, although for premier league teams this may be around 20%. Given the decrease in other streams of income, such as troubled sponsors and community backing through smaller businesses, the overall effect is simply devastating.



The crisis should prompt a reassessment of the financial state of the game, not only in England, but also throughout Europe through a more realistic wage structure and better provision for adverse trading conditions. Monica de Bolle, a recognised economist, stated that if the game is to get back on its feet, the Government will need to provide support through "liquidity injections, facilitated credit, subsidies and tax exemptions". Whether our government is able to implement such procedures is a question to be addressed. As much as we all know and love football, we must ask ourselves whether it will be the same when it returns.

For more from *The Westcliff Economist* please go to

<http://www.thewestcliffeconomist.wordpress.com>

Ryan Jakhu, 11C

## THE WHSB SCREENWRITING CLUB

The School's Screenwriting Team met for the first time since school lockdown and all seemed right with the world again.



The Team - comprising of Samuel Hughes, Jay Kesav, Noah Holland, Adam Lunniss and William Brown, all in Year 12 - has been working on an original film screenplay idea

and has submitted storyboards and scenes to Mr Keenan, who is overseeing their development. Once a script is finalised, it will be submitted for professional feedback and competition entry.

Samuel and Jay were on the call last week and, after discussing movies and shows they have watched over lockdown, they shared different approaches to crafting a plot. Mr Keenan stressed that an emphasis on 'story' (character and theme) is paramount, and Jay explained the methods he had used for his previous two first drafts, as well as his current one. The topic shifted to the future of the cinema industry, with ideas for Screenwriting Club trips to The Prince Charles Cinema left hanging in the air.

The Team has organised a leadership rota and members are exploring the process of team writing and working as a group.

Jay Kesav, Year 12

## CENTENARY LAUNCH: SEALED BID WINNER

The WHSB Centenary Gall Ball on Saturday 1 February 2020 was a roaring success in so many ways, for so many people. One such family that came away from the event with a permanent reminder of our celebrations, was the Turner family from Chalkwell. Dad, Tim, successfully won the sealed bid prize of a private flight, piloted by Dr Machacek, Senior Master Academic Studies, a private tour of the Air Traffic Control tower, followed by a delicious afternoon tea at the Premier Inn, at the entrance to Southend Airport. What a perfect day for father and son, James, to enjoy together!

Due to the current lockdown restrictions, James and Tim have not yet had the opportunity to enjoy their prize, however we conducted an online interview with

them to discuss this fantastic opportunity which they are both very much looking forward to.



### Interview with Tim

*What inspired you to apply for the sealed bid flying experience at the WHSB Centenary Gala Ball?*

"My son James is currently in Year 11 at Westcliff High School for Boys, has been a member of the Southend Air Cadets for a number of years and is very keen on flying. I thought it would be an excellent opportunity for him to go up for a flight with one of his teachers and see behind the scenes at Air Traffic Control."

*As an Old Westcliffian, what are your fondest memories of WHSB and what advice would you give your 16 year old, Year 11 self?*

"I was at WHSB between 1982-1989 and used to love playing sport, thoroughly enjoying the opportunities I was given at school. I was lucky enough to have some legendary teachers: Mr Harrison, Mr Cooper, Mr Anderson and Mr MacLagan, amongst others. The school cycling trips around Holland were also particularly memorable. I would tell my 16 year old self to stay positive and keep trying."

*How did WHSB assist and support your future career pathway?*

"The school taught me the value of hard work and perseverance - just because you do not succeed initially, it does not mean you should give up! It also helped me to realise the essential nature of teamwork and how important that can be in one's career."

### Interview with James

*Did you have any idea that your parents were going to bid for this marvellous experience?*

"No, it was a complete surprise to hear that my parents had entered the sealed bid. Just hearing about the prize was interesting, let alone winning. Having the chance to visit Air Traffic Control was exciting enough for me, but being able to fly with Dr Macachek was amazing. I have had numerous conversations with him in the past regarding aviation in general, so finding out that I could have the chance to fly with him, was incredibly exciting."

*What are your plans for the Sixth Form?*

"I plan to study Music, Spanish, French and English Literature at A Level. During my time in the Sixth Form, I hope to restart and recreate the Flight Club which Dr Machacek used to run, as it is something I would love to do, using my knowledge of aviation."

*What are your future career aspirations?*

"I hope to join the Royal Air Force (RAF) as a Transport Pilot, after Sixth Form. However, as only 1% of RAF Pilot applicants are accepted, my back-up plan is to become an Airline Pilot for a large airline (British Airways is my aspiration). Potentially, this could be following study at the Embry-Riddle Aeronautical University in Daytona, Florida. Having the chance to go flying in a light aircraft and visit the Air Traffic Control tower (an integral part of aviation) will only encourage me to carry on working towards my dream."

We would like to thank the Turner family, not only for their contribution to this article, but also for their donation to secure the sealed bid. We wish them well during this challenging time, and an enjoyable flight and day at the airport when the time arrives.

*Mrs N Weller, Careers Adviser*

## MUSIC BOX: A WORK A WEEK

This week's work is one of Music's greatest mysteries. Mozart's *Requiem* was the last piece that he composed before he died. His life ended before completing it, at the young age of 35, and there are many conspiracies about the piece. In the time he was alive he achieved greatness in the musical world but that did not stop his life from being riddled with depression, stress and jealousy.

Wolfgang Amadeus Mozart was one of the greatest composers of all time. He was born in Austria in 1756 into a musical family. His father was a composer and

violinist and he had a sister who played harpsichord. At the age of 6, he was composing his own music and he played the violin and piano better than anyone in his house. Mozart's father saw his talent and decided to tour Mozart around the country showing off his son to earn money for the family. At the age of 17, Mozart obtained his first position as a court musician which he found boring and low paid, so he moved to Vienna to compose and perform. He wrote over 600 pieces, right up until death. He was exhausted, depressed, overworked and feeling very ill, he died on 5 December 1791.



On his death bed Mozart was still writing his *Requiem*. The piece itself is depressing, with an overriding sense of death, representative of the state he was in at that time during his

life. It was finished for him by Franz Xaver Sussmayr, Mozart's pupil. He copied the entire composition to a new score and then completed the piece, so on the finished score there is no place where we can be certain Mozart finished composing. In the 1950s, however, the original manuscript was found. The last page was torn out.

The cause of Mozart's death will never be known; he himself believed he was poisoned, while others think he died of a disease. There is no way of knowing if either is true, but there are conspiracies. Mozart had one major rival; Salieri. He was jealous of Mozart as he did not have the same level of talent. In some portrayals, such as the film *Amadeus*, Mozart was told to commission the piece by a masked Salieri, who then poisons Mozart. The true commissioner of the *Requiem*, just like most of the pieces in this puzzle, remains a mystery and one for which we will never know the answer.

However, while the total authorship of the piece may be unknown, it is clear that it is a work of genius. As Beethoven said of the *Requiem*, "If Mozart did not write the music, then the man who wrote it was a Mozart".



Listen out for: This is a famous piece of music, and keen listeners will recognise the 'Dies irae' and 'Lacrimosa' sections in particular.

*Ben Dixon, Year 10*

## TAMIL MOTHER'S DAY

A few days ago I was set a task in which I had to create the felted heart which is seen in the middle of the card below, and seized the opportunity to use it to do something greater. The task was simple, follow the tutorial we were given and then stick our heart to a piece of card. However, recently Tamil Mother's Day took place on the 10 May (due to the Tamil calendar being different to the standard English one) and so I decided to use the card and heart to hand-make my own special Mother's Day card, following an aqua theme with the blue heart.



The script on the card translates *Happy Mother's Day Mum*, and it is accompanied by drawings of the seabed, a shell, a fish, a jellyfish, a shark, an octopus and a manta ray. I feel that this demonstrates how things that we learn at school which we think we may never use in life, can be used in life, for something other than getting a good grade.

*Reyan Karthikeyan, Year 9*

## GARDEN VOICES

Being an historian, perhaps I should have started Garden Voices with this bird. For the Goldfinch's most common rural nickname in the past was 'King Harry'. This is from the gold, creamy white, red and russet colourings of the bird that resemble the typical ermine

pelts that the most famous of all Tudor monarchs was often seen wearing. It, for me, was the prettiest of garden birds when I was starting my birding hobby in my teens and it was the most sumptuous bird you could see from your kitchen window.



The Goldfinch is still easily spotted today across the country, especially if you have left some thistles alongside more cultivated areas in your garden. The goldfinch loves the seeds from this weed, so much so that even its Latin name *carduelis* derives from the word for thistle. Its thin, pointy beak has perfectly evolved to prise out the delicate seeds from the weed. The voice you need to listen out for is a liquidy, jangly series of notes, not unlike the related, but rarer, siskin or serin.

<https://www.youtube.com/watch?v=6TypeBqNdpl>

*Dr J Theobald, Teacher of History*

## THIS WEEK IN HISTORY

### THE MOST IMPORTANT BATTLE FOUGHT ON BRITISH SOIL

It is probably the most important battle fought on British soil that you have never heard of: The Battle of Nechtansmere. In your defence, it did happen a long time ago, on 20 May 685.

In the north of what later became 'England' (which did not become a single Kingdom until the year 927), the Kingdom of Northumbria dominated, but its domain stretched even further into what is now 'Scotland'. By the late 670s though, it seemed as though Northumbria's southern neighbour, the Kingdom of Mercia was becoming more powerful, having beaten the Northumbrians in battle in the late 670s; this created the conditions in which the Pictish peoples (a



confederation of Celtic-speaking people) of the north decided to assert their independence.



In an attempt to seize back the initiative, the Northumbrian King, Egfrith, attacked the southern Picts, led by King Bridei III in the year 685 'with all the strength of his army'. But they were lured north into the highlands, into an ambush, and there, caught off guard, they were subject to a devastating attack at a place called Nechtansmere or 'Nechtan's Lake'. As Bede, the famous Anglo-Saxon monk put it, "the king was drawn into the straights of inaccessible mountains, and slain with the greatest parts of his forces".

The long term significance of this battle was huge. Northumbrian influence in the north was drastically reduced, a large part of its army being either killed or enslaved. As the near-contemporary monk, Nennius, said, "the Saxons never again reduced the Picts so as to exact tribute from them". Had things been different, the boundary between England and Scotland that remains to this day may never have existed.

*Mr S Neagus, Teacher of History*

## WHY DO THE AMERICANS DO THAT?

### EXPLORING SOME OF THE DIFFERENCES IN THE AMERICAN AND BRITISH ATTITUDES TOWARDS GOVERNMENT AND POLITICS

American Poet John Godfrey Saxe arranged an ancient Indian fable into verse in his Poem "THE BLIND MEN AND THE ELEPHANT". In this poem Saxe writes:

"It was six men of Indostan  
To learning much inclined,  
Who went to see the Elephant  
(Though all of them were blind),  
That each by observation  
Might satisfy his mind."



The poem then continues to detail how each of the blind men took a different part of the elephant in turn and determined that the elephant was like a wall or a spear or a snake or a tree trunk or a fan or a rope depending on which part of the body they felt. Saxe continues:

"And so these men of Indostan  
Disputed loud and long,  
Each in his own opinion  
Exceeding stiff and strong,  
Though each was partly in the right,  
And all were in the wrong!"



He then concludes his poem with the following moral:

"So, oft in theologic wars  
The disputants, I ween,  
Rail on in utter ignorance  
Of what each other mean,  
And prate about an Elephant  
Not one of them has seen!"

Sometimes our differences in attitudes and approaches in politics, as in many other things, originate in a failure to see 'the whole of the elephant'.

Although Irish playwright Oscar Wilde once quipped that the British and the Americans "had everything in common.... except



of course, the language", the reality is that, while there is much to unite us, often these two extraordinary allies completely misunderstand each other's attitudes towards politics and their political psyche. This is despite media and a common language, and intertwined histories which give these nations on either side of the Atlantic Ocean considerable exposure to the other's culture.

The attitudes towards politics and the associated psyche can be traced through the narrative each nation constructs by its reading of its own history. In the UK, much of the narrative of history is one of eventual subjugation of the government to the people and development of a democracy which created



government provision of solutions to the population's problems. From Magna Carta (formally subjecting the sovereign and nobility to law and the creation of jury trials) to Cromwell and the English Civil War (cementing the sovereignty of Parliament and the establishment of a constitutional monarchy), from the establishment of working standards to the establishment of state education, and from the creation of National Insurance and the state pension to the creation of the NHS, the Government has been seen as a solution to problems.

Moreover, the British constitution is one of tradition and convention rather than a codified document laying out and limiting powers and responsibilities of government, so government, its roles and responsibilities evolve over time and change, usually gradually, without much notice being taken. Furthermore, in the UK, it is unusual for state institutions to be perceived as the enemy, and, consequently, it is far more likely here than in the USA, for demands to be made to politicians to provide a state provided solution to people's problems.

In the USA however, there is a powerful narrative than runs through the story of the establishment of that country which highlights the triumph of the individual over the state. Government is far more likely to be seen as the enemy of the people. American President Ronald Reagan said "The nine most terrifying words in the English language are: I'm from the Government, and I'm here to help". This may seem ridiculous to many in the UK who are the descendants of those who have been beneficiaries of the government led reforms which saved their ancestors. However, the antecedents of the American political culture begin with settlers escaping corrupt, oppressive or ineffective governments to establish themselves in a new land free of those issues. Even the American Revolutionary War began with the "Boston Tea Party" – a rebellion against the overreach of the government of British Empire trying to impose 'taxation without representation'.



The Declaration of Independence overtly states that governments derive their powers from the consent of the governed and "that whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government". It goes on to argue that it is actually a duty of a people to "throw off" government which over-reaches its powers. The American constitution was subsequently written specifically to codify and limit the power and reach of government. It was established so that amendments to that constitution are difficult to make (they require a two thirds majority in both legislative Houses of Congress). Moreover, the subsequent amendments to constitution which have been made nearly always form a legal block on a government from adjusting law or extending its power, further limiting the power of government. Indeed, one of the only exceptions, the 18<sup>th</sup> Amendment (which banned the sale of alcohol) was repealed by the 21<sup>st</sup> Amendment just over a decade after it was passed.

While the concept of those who govern being subject to the same law as the general population is familiar to us as it has been a core principle of English law since Magna Carta (signed nearly 1000 years ago), the concept of a government itself being limited by a legal framework is not something with which we, in the UK, are particularly familiar. It is convention, tradition and common law (i.e. judicial precedent) that limits British law, but this is infinitely malleable with enough time (or a large enough parliamentary majority).

In the UK 'rights' are often seen as things that the state has a duty to provide – the right to healthcare, the right to education and so on, but the term 'rights' in the USA often refers much more to protections from government control – for example, the right to bear arms, the right to freedom of religion.

American resistance to many things the British would take for granted can often be explained by this. To most British people the concept of widespread ownership of firearms, particularly when largely unregulated, seems reckless. However, to many Americans, the 'right to bear arms' is fundamental to the limitation of government. Bearing arms, to them, is their freedom to not only protect themselves and their family, but also to ensure that, through widespread firearm ownership, there is a check against any government which could over-reach itself and become despotic.

To most British people the concept that something as fundamental to life as healthcare could be determined by the content of an individual's bank account is close

to barbaric. However, to many Americans, universal state provision of healthcare is stealing from them something that is extraordinarily precious and personal, and is handing it to government control; it is a reflection of government over-reach at the deepest level. In the UK, it is seen as reassuring that, no matter what happens, the NHS is there to provide universal healthcare, free at the point of use. To many in the USA, the concept of having to go on to a government run waiting list to receive government approved healthcare which is rationed by how much the government is willing to spend on it is an anathema. They would prefer to keep the tax money and choose how to spend it on healthcare rather than lose the freedom to employ or fire the doctor they want to, even if that risks them having medical bills that they may never pay off.

Another quote from Ronald Reagan crystallises this attitude perfectly: "Government is not the solution to our problem, government is the problem."



In Harper Lee's classic novel, 'To Kill A Mockingbird', the protagonist, Atticus Finch, intones "You never really understand a person until you consider things from his point of view ... until you climb into his skin and walk around in it". It does us no harm here to understand somewhat better those things which divide us with the country which makes our biggest individual national trading partner (at 15% of total exports last year), our strongest military ally and a nation with whom more of its citizens share our first language than any other nation on earth. Perhaps by remembering these differences in psyche we can better understand those on the 'other side of the pond'.

*Mr J Bleakley, Director of Lower School*

## THE PHILHARMONIA ORCHESTRA *Performs Mahler Symphony 3*

In lieu of our usual termly trip to see a live orchestra, I can heartily recommend the Philharmonia Orchestra's performance of Mahler 3, which will be live-streaming on Friday 22 May at 7.00pm. Gustav Mahler's monumental Third Symphony embraces heaven and Earth, nature and love. He deploys a huge orchestra, choirs and a solo singer to draw his listeners into a rich and compelling musical landscape.



More information, including the link to the live-stream, can be found here: [tinyurl.com/y79cngm7](https://tinyurl.com/y79cngm7)

*Mr T Derrick, Director of Music*

## WEEKLY WATCH WITH MISS WILLIAMS

### *EVOLUTION OF EVIL - MAO ZEDONG*

*"The death of 3 million people is a price worth paying".*

An excellent online discussion was held last week tracking 2000 years of Chinese History. We were left on a cliff hanger with the fall of the dynasty in 1911, but what happened to make China the Communist superpower that is renowned as today?

This week's suggestion tracks China through the transformative 20th Century giving way to the ruthless leader, Mao Zedong. Famously quoted as saying "the death of 3 million people is a price worth paying", how did he secure power and enforce a reign of terror which



saw the death of millions of Chinese citizens? Watch the documentary to find out!

New members to the group welcome. Please contact Miss Williams if you would like to join.

<https://www.youtube.com/watch?v=WxaWmqgmJxs>

Miss R Williams, Teacher of History

## MR DOWDING'S MATHEMATICAL PROBLEM OF THE WEEK

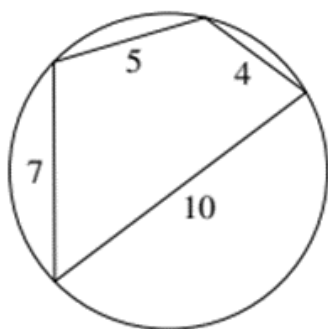
### Lower School Problem of the Week

A cyclic quadrilateral has all four vertices on the circumference of a circle.

Brahmagupta (598–670AD) gave the following formula for the area,  $A$ , of a cyclic quadrilateral whose edges have lengths  $a$ ,  $b$ ,  $c$ ,  $d$ :

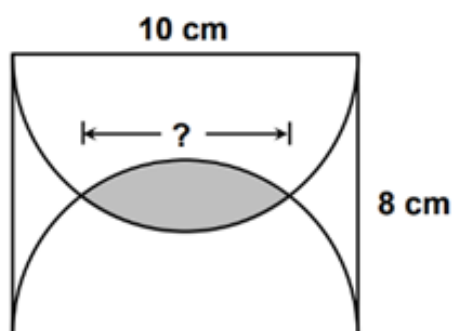
$$A = \sqrt{(s-a)(s-b)(s-c)(s-d)},$$

where  $s$  is half of the perimeter of the quadrilateral. What is the area of the cyclic quadrilateral with sides of length 4 cm, 5 cm, 7 cm and 10 cm?



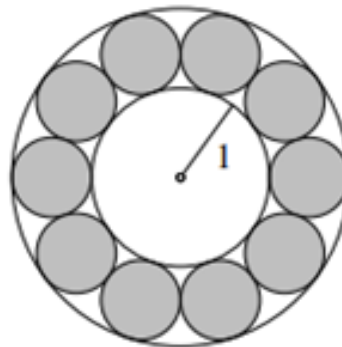
### Middle School Problem of the Week

Two semi-circles are drawn in a rectangle as shown. What is the width of the overlap of the two semi-circles?



### Sixth Form Problem of the Week

The diagram shows 10 equal discs that lie between two concentric circles – an inner circle and an outer circle. Each disc touches two neighbouring discs and both circles. The inner circle has radius 1. What is the radius of the outer circle?



Pupils are reminded that all solutions to these problems should be passed on to your teachers. Any pupils who are members of the respective societies are welcome to post their solutions on the Microsoft Teams pages for Mr Dowding or Mr Yeo to check and offer guidance.

Anyone wishing to join the societies can do so through the following team codes:

Lower School Mathematics Society (Years 7, 8 & 9):  
**sdev7q3**

Middle School Mathematics Society (Years 10 & 11):  
**hlrpl3v**

STEP Club (Years 12 & 13): **1rympr0**

## YEARS 7 AND 8 HOUSE FIFA 20

A House FIFA 20 competition will take place in the week commencing 25 May between 1.00-1.30pm. This will be open to all

pupils in Years 7 and 8 and we require two pupils per House per year group to participate in a knockout style tournament. This will take place on PlayStation 4 and entrants are required to be available to play during their lunchtimes during that week. If you wish to represent your House, please email myself with the following information: Full name, Year group, and School House. This will operate on a first-come, first-served basis.





Congratulations to Selorm Ahiadu in 9N who won the Year 9 and 10 event last week for Kestrel, scoring 16 goals and conceding 3 in his games. The results of the tournament are attached below.

Round 1			Semifinals			Finals		
1	1 Monty 8 Hayden	3 4	5	4 Hayden 5 Alfie	4 3	7	4 Hayden 7 Selorm	1 6
2	4 Chris 5 Alfie	2 3		7 Selorm 8 Mohamad	5 1		5 Alfie 9 Mohamad	1 3
3	3 Josh 7 Selorm	1 3	6	7 Selorm 8 Mohamad	5 1	8	5 Alfie 9 Mohamad	1 3
4	3 Mohamad 6 Harry	6 2						

Mr J Yeo, Head of House (Harrier)

## MR DERRICK'S FILM CLUB

Each week a film is selected for the club to watch. It can be watched at any point in the week but every Thursday a 'watch-along' takes place. After the film, dialogue and analysis is welcomed before a new film is selected.

This week's film is a return to the oeuvre of the Coen Brothers, with what many consider their finest work. Thriller *No Country for Old Men* (15), adapted from the brilliant Cormac McCarthy novel of the same name, won four Academy Awards on its release in 2007, including Best Picture and Best Supporting Actor. The latter award went to Javier Bardem for his portrayal of the terrifying hitman Anton Chigurh, whose pursuit of Josh Brolin's protagonist across the American West is followed closely by an aging sheriff, played by Tommy Lee Jones. The film is now thought to be one of the best of the 21<sup>st</sup> century so far, and is a masterclass in tension and minimalist storytelling.



The film is streaming on Amazon Prime. Watch-alongs take place every Thursday from 7.30pm, followed by a discussion on the Film Club Team. Staff and students (aged 15 and over) may join the group by using the code **db1v6ym**.

Mr T Derrick, Director of Music

## A VIRTUAL PERFORMANCE AT THE GLOBE THEATRE

The Globe Theatre's production *Macbeth* is now available on YouTube for one week, free of charge. This is an excellent way to access an amazing presentation of this play. Enjoy!



Please use the following link:

<https://youtu.be/PFwHmgA9nno>

Mr T Keenan, Lower School English Coordinator

## ONLINE QUIZZING DURING LOCKDOWN



Virtual pub quizzes, Zoom trivia nights and homemade contests on House Party have united the nation and provided light relief since the Covid-19 lockdown measures were announced. Google searches for "pub quiz questions" are up 710 per cent as amateur quizmasters have printed off games full of obscure facts, brain teasers and picture rounds that test our facial-recognition abilities. One way to exercise your mind during the lockdown is to try a quiz. Luckily, there are a host of online sources available including live streamed and interactive quizzes across a variety of social media platforms.

### The National Theatre Quiz

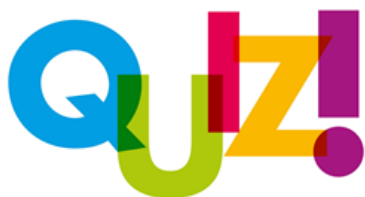
From 7pm on Monday 25 May, join hosts Imelda Staunton, Jim Carter, Lucian Msamati, Meera Syal, Simon Callow, Tamsin Greig and Jessie Buckley for questions on topics including Mathematics, Science and Nature, Literature and Theatre. The format is a 15 minute live-stream with short gaps between questions for you to frantically jot down answers. You can play along on the National Theatre's Facebook and YouTube pages. A sample question is as follows: Who was the first president to preside over all 50 US states?

The quiz follows the success of April's, which saw another quartet of stars – Dame Helen Mirren, Sir Lenny Henry, Lesley Manville, and Sir Ian McKellen – turn out for hosting duties and this is currently streaming on the National Theatre's YouTube page and Facebook  
<https://www.facebook.com/nationaltheatre/videos/712327126185143>

The National Theatre is planning to run the quizzes on the final Monday of each month, so there should be an opportunity to join again in June.

### Inquization

Join virtual friends for this Sunday night pub quiz (which runs until 14 June). Typically, two general knowledge rounds of 20 questions are sandwiched between a picture round, name the intro, mystery voices, famous quotes and more. This quiz is free of charge, and takes place on Sundays from 7.55pm.  
<https://www.facebook.com/inquizationquiz/>



### Virtual Pub Quiz

This popular quiz attracted more than 640,000 viewers when it debuted shortly after the start of the lockdown in March. Quizmaster Jay Flynn, who is raising money for NHS Charities Together, posts specialist rounds during the week (Kids, Star Wars, Technology), ahead of the live quiz. This quiz is also free of charge, and takes place on Thursdays from 7.50pm.  
[https://www.youtube.com/channel/UCLcSqjJWHJeDWd\\_SbdorBRw/videos](https://www.youtube.com/channel/UCLcSqjJWHJeDWd_SbdorBRw/videos)

### Spectacular Quarantine Quizzes

Bringing some light relief to lockdown, the team behind Spectacular Quarantine Quizzes has compiled a range of questions based on popular TV and films. Disney, Doctor Who and The Office are upcoming themes. The quiz is free, but charity donations are encouraged. Dates and times vary.

<https://spectacularpubquizzes.com/>

### Challenge the Brain (DIY Pub Quiz Questions and Answers)

Why not do it yourself by using Challenge the Brain's downloadable Pub Quiz Questions and Answers and connect with family and friends using Zoom, House Party, Microsoft Teams or Skype? This website provides free quizzes, suitable for children and adults, family and friends and they are ready made for anybody who wants to hold their own online Quiz Night. <https://www.challengethebrain.com/questions-and-answers-pub-quiz.htm>

*Mrs J Clarke, WHSB Community Development Office*

## MATHEMATICS AROUND THE HOUSE: PAINTING



This week's Mathematics around the House encourages pupils to consider how much paint would realistically be needed to paint a bedroom in the house (or perhaps start with a single wall). Initially, finding the surface area would be a tough problem, but moving on to estimating how many tins of paint (which are given as a volume rather than an area) and how much this would cost, including additional layers of paint, turns this into a tough problem indeed.

This exercise provides an example of a real life problem and how complicated problems can be simplified – often through estimation (about 3 tins) or trial and improvement (driving back to the store to get more) - rather than planning exactly how much paint is needed. These processes both save a great deal of initial time and trouble (as there is little planning), but potentially at the cost of spending more money and more time in the future, for example returning to the shop. Is it worth it, and how do we decide when it is worth it? For example, would you use the same principles when building an entire house? Here, the left-over material could cost many thousands of pounds.

*Mr M Dowding, Head of Mathematics*

## KEEP CALM AND CARRY ON COOKING WITH MR MCGEE

This traditional Portuguese recipe is one of Mr McGee's all-time favourites, discovered when he lived in Portugal. He has been unable to make the full version of this recipe during the lockdown, as clams have become somewhat hard to find during this time. (He suggests that is very 'shellfish' of them!)

### RECIPE 8: PORCO ALENTEJANA

#### Ingredients

1 pork fillet  
1 chorizo  
1 onion - diced  
Coriander - fresh or dried  
1 lemon  
Four large potatoes  
Tomato purée  
Four garlic cloves or garlic purée  
Paprika  
Salt & Pepper  
Large glass of white wine

#### Method

Heat the oven to 200 degrees.

Peel and chop the potatoes into rough cubes. Place in oil and cook for 40 minutes as you would roast potatoes.

Chop the pork loin and chorizo into similar sized pieces as the potatoes. Fry the chorizo in a little oil and when browned lift out of the oil and set aside.

Fry the diced onion and pork in the chorizo infused oil, seasoning with salt, pepper and paprika. When browned add the coriander, garlic (sliced), tomato and wine. Reduce the heat and cook for 15 minutes.

Then add back the chorizo and roasted potatoes. Add a few slices of lemon and serve with vegetables of your choice.



If you managed to get clams, add them when you add the white wine.

Do not use any clams that are already open and do not serve any that do not open when cooked.

## UPPER SIXTH 2020 SIGN-UP TO THE SCHOOL'S ALUMNI COMMUNITY



We would like to remind all Upper Sixth students of the opportunity to sign up to the WHSB Alumni Network and the Old Westcliffian Association before they move on from the School this year. All we need are some basic contact details and your permission to be contacted by us following your departure from the School. To ensure that we hold the correct details for you, please visit the *Wufoo* form below and input your details, as requested. The form takes a couple of minutes to complete and we should be grateful for your responses no later than Friday 22 May 2020.

<https://whsb.wufoo.com/forms/alumni-network-signup-form-2020/>

Providing us with a contact email address will enable us to invite you to attend an informal get-together in December, date to be advised. This event will take place in the Sixth Form Centre and will enable you to catch up with members of staff and your contemporaries, whom you may not have had the chance to meet up with since leaving School. Complimentary refreshments will be available.

In addition, you would be welcome to attend the Old Westcliffian Association (OWA) Annual Reunion Dinner which is, at present, scheduled to take place in School on Friday 25 September 2020. Tickets for the Reunion Dinner are priced at just £17.50 for all those either leaving the School this year or those who are in full-time education, and can be purchased at <https://whsb.ticketsource.co.uk/>

Lifetime membership of the WHSB Alumni Network is, and always will be, free and ensures that you are kept up to date with day-to-day news about WHSB and its pupils, and opportunities to become involved and attend our networking events. Lifetime membership of the OWA normally costs £20.00, However, by signing up now (while you are still at the School) you will benefit from free membership for life.

Please contact the Community Development Office by email for further information.

We look forward to welcoming you to the School's Alumni Community and keeping in touch!

*Mrs J Clarke & Mrs N Weller, WHSB Community  
Development Office*



## MR MCGEE'S ALBUM OF THE WEEK

### Green Day's Greatest Hits

I have decided to adopt a different approach to my album column this week. I have taken the liberty of creating family friendly album that still delivers a pop and punk punch.

As many will know, I am far from being an impartial observer when it comes to Green Day's music. That said, I believe even the most ardent indie music fan, metal music devotee or hip hop aficionado would agree, when looking at it objectively, that Green Day's music defined a genre.

In a recent column I considered the Britpop explosion in the UK, as a reaction against grunge. In contrast to the UK, the development of music in the USA, particularly after the untimely death of Kurt Cobain, may be considered less cynical and more energetic. Pop Punk was visceral, simplistic and straight to the point. For me, the energy encapsulated within the three or four chords of a typical Green Day song picked up the **disaffected youth of a nation and hurled them against 'the man'**.

Green Day were not pop punk progenitors but they have been the mainstays of that genre for nearly 30 years. It might be said that the Band Blink 182's music might have had some anthemic moments but they fell apart during the last decade. Whereas The Offspring (another band from the USA) dominated the early pop punk music scene but lacked the consistency needed to dominate the genre. In the final analysis, it is only Green Day that managed to produce anthems for all of their albums, sell-out arena concerts for nearly three decades and, perhaps most importantly,

demonstrated an ability to evolve, from pop punk brats to composing an opera.



Below, I have included a list of tracks and the relevant album. I hope you enjoy listening to the music as much as I enjoyed putting the list together for you.

- Maria - International Superhits
- One of my lies - Kerplunk!
- Welcome to Paradise – Dookie
- Redundant - Nimrod
- Church on Sunday - Warning
- At the library - 1039/Smoothed out slapped hours
- When I come around – Dookie
- 2000 light years away - Kerplunk!
- 86 – Insomniac
- 21st Century Breakdown - 21st Century Breakdown
- Coming clean – Dookie
- Whatshepname - American Idiot

## PUPILS' CONTRIBUTIONS TO THE WESTCLIFF WEEK

We encourage pupils to continue to send in contributions for *The Westcliff Week*. We would be grateful if contributions could be made using a Word document(s), with any pictures also copied into that same document.

Pupils who wish to contribute to *The Westcliff Week* should do so by sending curricular articles to their relevant subject teacher for checking in the first instance. Contributions associated with an activity, for example Wargaming, CCF or Drama, should be sent to the teachers who have oversight of those activities.



## MENTAL HEALTH AWARENESS WEEK 18-24 MAY 2020

This coming week will be this year's Mental Health Awareness Week. At this time of social distancing and with our daily routines drastically altered, there has probably never been a more important time to consider mental health.

The World Health Organisation believes that mental health conditions account for 16% of the global disease and injury statistics in people aged 10-19. They also state that half of all mental health conditions begin by the age of 14, but are often left undetected and untreated at this stage.

However, research has shown that actively building emotional resilience and developing supportive routines can help to prevent the onset of mental illness. Why not try one of the following incentives to help boost your well-being.

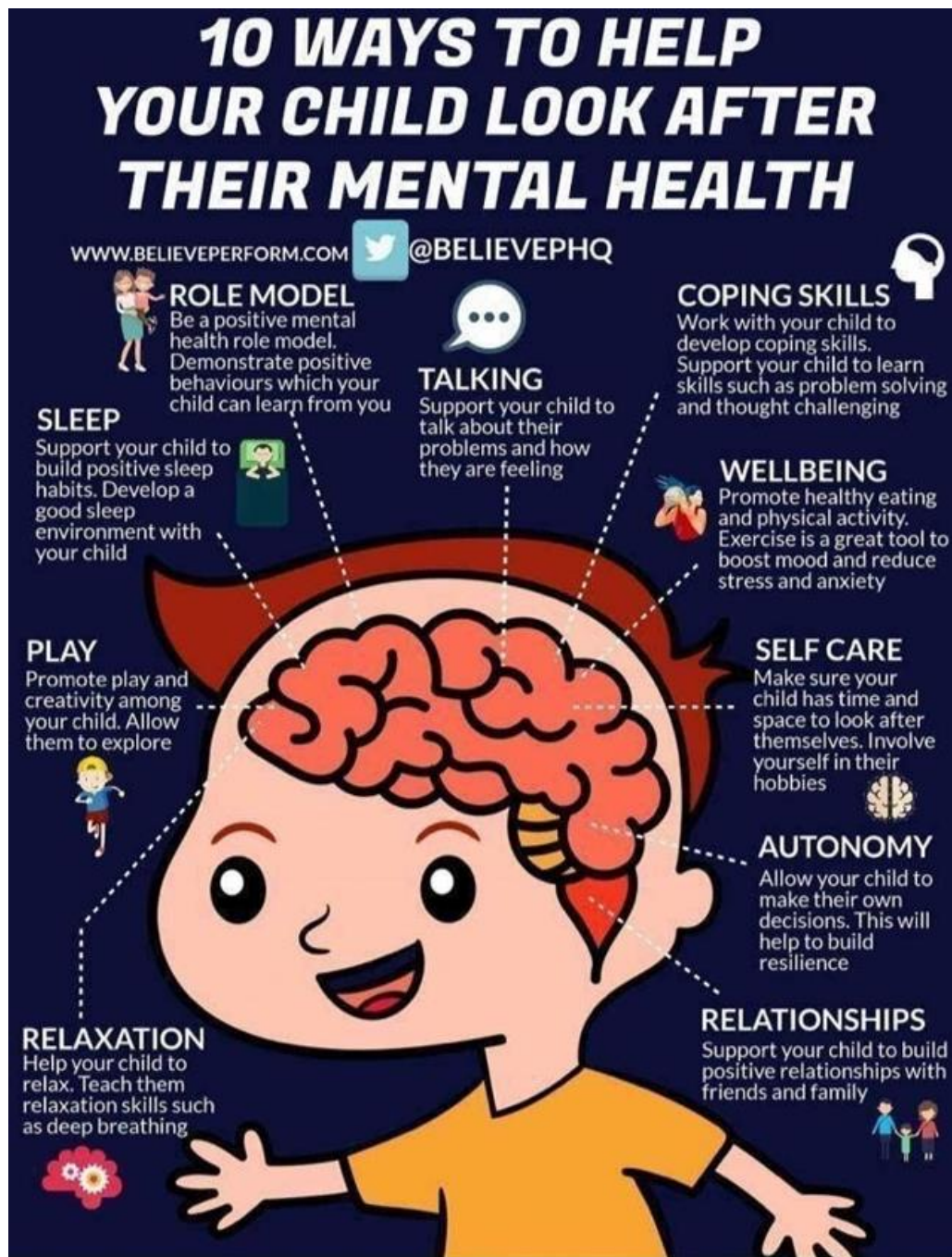
*Action for Happiness* is offering a 10 day online coaching program to help boost well-being during the lockdown. If you are interested in finding out more and signing up, you can do so here: <https://10daysofhappiness.org/>

[www.believeperform.com](http://www.believeperform.com) has also created some excellent visuals to highlight some key ways to maintain well-being for positive mental health, two of which are included below.

What will you do today to benefit your mental health?







Miss L Price, Teacher of Art

## SCHEDULING A ROUND ROBIN TOURNAMENT

In the Westcliff Week one fortnight ago, I set the challenge to find a way of scheduling a tournament in such a way that each team plays each other team once over the course of a set of matches.

I have not had any replies yet, however you are still welcome to send in ideas. Many advocate a computer based method which relies on guessing until it comes up with a schedule which works.

However, I have seen one very elegant, and visually clear method, which I would like to show you.



Suppose there are ten teams. We put them in two rows in a table, like this:

A	B	C	D	E
F	G	H	I	J

This gives the matches for the first week. A plays F, B plays G, C plays H and so on.

For the following week, we move the letters in a cunning pattern. A stays where it is, and the others circulate clockwise on the route shown by the arrows. This gives:

A	F	B	C	D
G	H	I	J	E

Thus, in week two, A plays G, F plays H, B plays I, C plays J and D plays E.

Each week, we repeat the circulation with A staying still each time. On the ninth week, we have the final set of matches.

If there is an odd number of teams, then we add an extra one called 'Bye', and then use the grid as before. Whoever is down to play 'Bye' that week has a week off.

The method works with any number of teams – you can schedule 20 just as easily as 10.

Happy Scheduling!

Dr A Machacek, Senior Master Academic Studies

## THE HOUSE SYSTEM – GET INVOLVED!

The results of the House Motorsport Competition are: Harrier in first place, Kestrel second, Osprey third and Merlin in fourth place. Thank you to everyone that has contributed.

This is a reminder that a number of House Competitions are **still open**. These include:

- PSHEE House Gardening (see Issue 4, pages 8-9) published on 20 April.
- PSHEE House Butterfly Survey (see Issue 6, page 20) published on 4 May.
- PSHEE House Housework (see Issue 7, page 16) published on 11 May.
- Natural History Museum House Breadth Studies Virtual Fieldtrip Report (See Issue 7, pages 10-11) published 11 May.
- House Find the Connexions Competition (see each Issue for a new set of problems).
- House Centenary PSHEE Photographic competition (See the House Team and e-mails for details).
- WHSB Centenary House Quiz (see the House Team and e-mails for details).



Please do get involved and support your House.

There are plenty of House Points and Senior Commendations available.

Mr R Barber, House Coordinator

## WHERE IN THE WORLD?



Congratulations to all those who correctly identified last week's location as **Cattedrale di Santa Maria del Fiore, Florence, Italy**. House points have been awarded to those who submitted correct answers.

I would like to thank those students that have been contributing to the Department's weekly student newsletter. These newsletters have been emailed out to Lower School pupils and those studying Geography at GCSE and A Level. Please check your inbox and take a look!

Your clues for this week's *Where in the World?* are:

- This location is found in disputed territory between two countries
- It is named after a famous sailor

Please submit your answers via this Microsoft Form by **Thursday 21 May**:

<https://forms.office.com/Pages/ResponsePage.aspx?id=N6W6gucuok-3-qnXxLzq5cGrPAnzszFDiqmfUFjxEshUME1RNTRZRkZLSE1JQzIRMVBVSDVJTVJOQy4u>



Mr L Norman, Teacher of Geography

## ROYAL GEOGRAPHICAL SOCIETY (RGS) YOUNG GEOGRAPHER OF THE YEAR COMPETITION

How can you remain globally aware in a national lockdown? Every year the Royal Geographical Society runs a national 'Young Geographer of the Year' competition. Students of all ages up to Year 13 from all over the country can get involved in what I believe to be the best geographical competition available in this country.

This year the theme is 'The World Beyond my Window'. Lower School and Middle School pupils are to produce an A3 sized project, and Sixth Form students an ESRI Story Map.



*Old Leigh. A world of wonder outside your window?*

It is an exciting competition which will certainly keep you busy during the lockdown. If you would like to enter then let me know and I will be able to give a small amount of guidance. The link below will give you much more detail. Make sure you read through it carefully, download and complete all the relevant documents.

<https://www.rgs.org/schools/competitions/young-geographer-of-the-year/2020-competition/>

I hope to hear that many of you have entered!



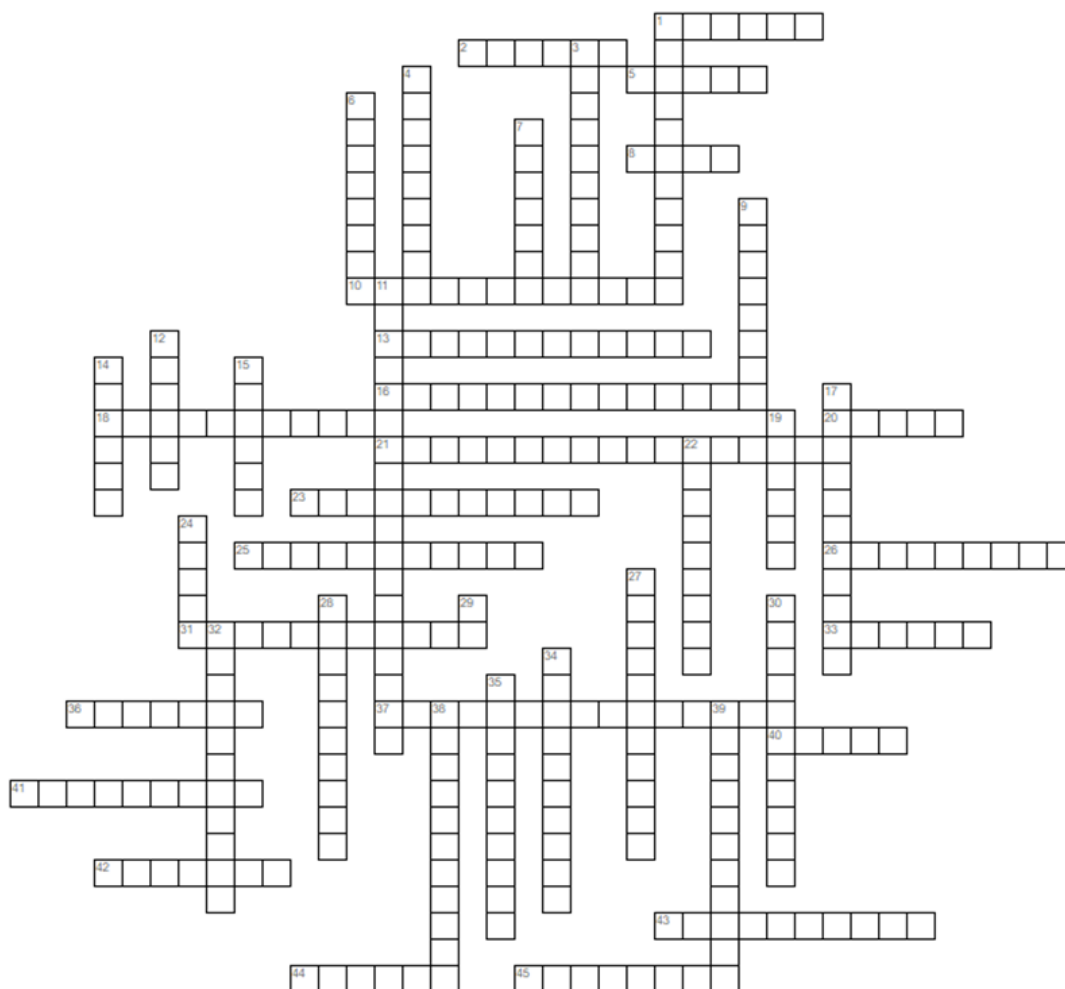
*The River Crouch. A world of wonder outside Mr Norman's window!*

*Mr L Norman, Teacher of Geography*



# MR JEFFREYS' HISTORY CROSSWORD 8: HISTORY OF MATHS SPECIAL

Answers next week!



## Across

- 1 Egyptian venue where first numbered tags were found in 3,000BC (4,1,1)
- 2 The base number of the Mayan vigesimal system (6)
- 5 Alexandrian who first recognised possibility of negative numbers possessing square roots (5)
- 8 Symbol developed in Seleucid period by Babylonians for empty positions - it was like nothing ever seen before (4)
- 10 Ahmes' instruction manual of 1650BC for arithmetic and geometry (5,7)
- 13 Symbols first introduced in a printed book Summa Arithmetica by Pacioli (4,3,5)
- 16 Generally thought a relatively good mathematician (6,8)
- 18 Indivisible quantity first understood in about 500BC (5,6)
- 20 Nation where Sulba Sutras are the oldest mathematical records (5)
- 21 Problem where you take a number, divide by 2 if even, times by 3 and add 1 if odd, and you always get 1 (7, 10)
- 23 Collection of ancient Egyptian texts discussing mathematical topics discovered in 1889 (5,6)
- 25 Female German mathematician of 1882-1935, known for connecting symmetry and conservation laws (4,7)
- 26 Current 'Principes mathematicorum' of WHSB (2, 7)
- 31 Islamic scholar who wrote first systematised study of algebra (2,9)
- 33 First portable calculating device developed by the Romans (6)
- 36 Religious sect of missionary Matteo Ricci who brought Chinese maths to Europe (7)
- 37 Theory pioneered by Richard Hamming in the 1930s - no, sorry, make that the 1940s (5,10)
- 40 19th century German mathematician hailed as 'Principes mathematicorum' (5)
- 41 It's true he Austrian but theoretically he thinks I can never prove it (4,5)
- 42 German with 23 problems? (7)
- 43 To sum him up, a bit of a Greek square? (10)
- 44 Greek mathematician of Miletus hailed as the first true mathematician (6)
- 45 19th century Irish mathematician who invented quaternions in 1843

## Down

- 1 Most successful ever Maths book, written at Alexandria to introduce the axiomatic method (3,8)
- 3 Maths school founded by Plato in 387BC at Athens (3,7)
- 4 Modern name for Leonardo of Pisa, used to describe sequence where each number is sum of its two predecessors (9)
- 6 Can be Roman, Julian or Gregorian and depends on mathematical calculations (8)
- 7 First woman mathematician in recorded history (7)
- 9 Can be Egyptian, vulgar, decimal or unit and is basis of Egyptian maths (8)
- 11 The founder of trigonometry from second century BC (10,2,6)
- 12 Mathematical term deriving from Indian Sanskrit 'kojiya' or 'curved end of bowstring' (6)
- 14 Mathematician who first formulated laws of planetary motion (6)
- 15 Maths book written by Apollonius of Perga to introduce parabola and ellipse (6)
- 17 The Mathematician's equivalent of a Nobel Prize, awarded by the IMU (6,5)
- 19 The Prime thinker of 300BC? (6)
- 22 City known as Auld Reekie where a Mathematical Society was founded in 1883 (9)
- 24 Nation where the Zhoubi Suanjing is its oldest Maths text book (5)
- 27 Problem that led to a solution for George Szekeres and Esther Klein? (5, 6)
- 28 Concept introduced by al-Jayyani's 'arcs of a sphere' book in 11th century (3,25)
- 29 3.1457 to Liu Xin (2)
- 30 Upper Paleolithic baboon fibula used as primitive tally stick (7,4)
- 32 The findings of de Fermat when considering how to divide a square into two squares (4,7)
- 34 Greek considered the Father of Algebra (10)
- 35 Eureka! Hand me that towel. (10)
- 38 Chinese system of using distinct ciphers for 1-10 and additional ciphers for powers of ten (3,8)
- 39 Father of English Maths/Physics who specialised in calculus and laws of Physics (5,6)

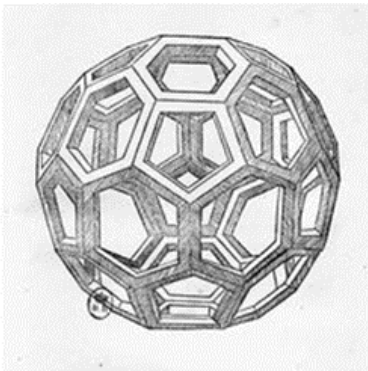
[illegible]

The grid is used with small A5 images up to gigantic 8ft by 4ft canvases, and this is a technique professional artists have adopted from ancient times to the present day. Escher's work is often a means by which Mathematics teachers, such as the fantastic Mr Dowding, enjoy art. They love the mathematical complexity of Escher's optical illusions, and the masterful way in which he uses a ruler and perspective, and vanishing points to create a world that is almost inside out and back to front. Some people consider Escher's work is devoid of soul or expression, however for me I am always impressed and moved by what I see. Can you work out how Escher created the images on the follow page?



Escher: Mathematician and Artist

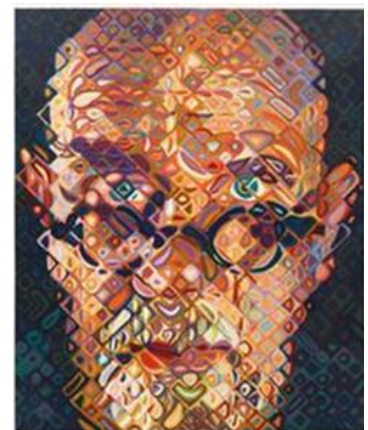
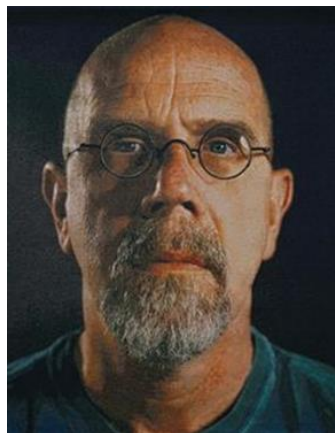
Léonardo da Vinci was not only an artist, but an engineer and the figure head of the Renaissance. A gifted mind, responsible for bringing the 3D world into existence on a flat canvas. Whilst more famous for painting the Mona Lisa, the contents of his sketch books or codices demonstrate his understanding of the complexity of vanishing points and optical illusions. When he painted large Murals like *The Last Supper* he would have made preparatory drawings and 'gridded' the wall so that he could compose the image in the space provided.



Leonardo da Vinci, *The Last Supper*



Chuck Close is an amazing contemporary American Super-realist Artist we often use in WHSB units of work. He uses the grid system to its boundaries, and within his paintings are some very clever optical illusions. Chuck Close uses a very fine grid to plot out even his photographic-like paintings.





A local Artist, John Bulley, creates a billboard style of painting, rather like the Pop Artist, James Rosenquist. The paintings are put onto the sides of buildings, with both Artists using a grid to make the images fit.



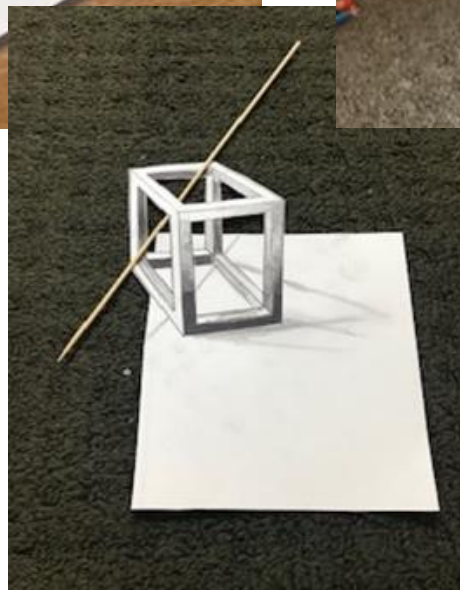
James Rosenquist



John Bulley Camden Lock  
and Captain Mainwaring  
Southchurch



The work of SinArt is varied, yet the grid and clever optical illusions are of particular interest. How are the following floating and mesmerising masterpieces created? Perhaps Mr Sinnott will share that with you in next week's issue of *The Westcliff Week*!



*Mr T Sinnott, Head of Art and Sixth Form Progress leader*



## PYTHAGOREAN TRIPLES AND TRIANGLE AREAS

Can we find a right-angled triangle, whose sides are all rational numbers, which has area 157?

It was this problem that inspired me to study some work on how Pythagorean triples work (that is positive integers that satisfy the condition  $x^2 + y^2 = z^2$ ) extended in to rational numbers and what impact this has on areas of triangles. Starting with the most basic Pythagorean triple, 3, 4, 5, we get a right-angled triangle with area of 6. Could I find a right-angled triangle with area of 7 that is a Pythagorean triple? Or 8? Or 7.5? Well we can see that we can generate a lot of areas using rational versions of the 3, 4, 5 Pythagorean triple, for example  $\frac{3}{5}, \frac{4}{5}, \frac{5}{5}$  leads to a triangle with area  $\frac{6}{25}$ , but how could I find one with area  $\frac{6}{24}$  or  $\frac{6}{23}$ ? Although it is true to say (and easy to prove) that if I start with a rational Pythagorean triple, I will end up with a rational area, it is not clear whether I can start with an area and find a triple linked to it.

To illustrate this further, we did not look far to find a triangle that worked for area 6, but what about one of area 5? It takes a long while to come up with the rational Pythagorean triple  $1\frac{1}{2}, 6\frac{2}{3}, 6\frac{5}{6}$ , and I found this by looking at the Pythagorean triple 9, 40, 41 and fractional versions of this.

What about an area of 157? Well, using Microsoft Excel I searched all reasonable decimal numbers up to 20 digits and came up with no answer. Not happy with a “trial and improvement” method, I went about proving this does not exist – there are no rational Pythagorean triples that lead to an area of 157. I was confident as well, given my search to 20 decimal places.

I was also wrong. After some algebraic searching I came up with the triple:

$$\frac{411340519227716149383203}{21666555693714761309610}, \frac{6803298487826435051217540}{411340519227716149383201}, \frac{224403517704336969924557513090674863160948472041}{8912332268928859588025535178967163570016480830}$$

However, after this algebraic exploration, I did determine that not every area has corresponding sides. A quick look on google to see if I was on the right tracks led me to finding out some definitions; if an integer is the area of a right-angled triangle with rational side lengths, they are called congruent numbers, the first few being

5, 6, 7, 13, 14, 15, 20, 21, 22, 23, 24, 28, 29, 30, 31, 34, 37, 38, 39, 41, 45, 46, 47, 52, 53, 54, 55, 56, 60, 61, 62, 65, 69, 70, 71, 77, 78, 79, 80, ...

So I was on the right track – my belief that not every integer could be the area of a right angle triangle was correct. Proving it would be far from simple and a task for later.

This is when it struck me; if we convert this to the case with area 1, we are considering a case of  $x^4 + y^4 = z^4$  (A level Mathematicians may be able to show this), which is a case of Fermat’s last theorem in which he proved that this was not possible. Hence, I have a proof (or rather Fermat did) for the case where the area is 1 that there are no rational side lengths that make this possible. You may smirk and say it’s only one case, but often if you can prove that one case doesn’t work, the process can be manipulated to show that a number of cases would not work.

I have not yet come up with a proof of formula for what determines a congruent number; I will be spending my next week studying and exploring that further. If you followed this article and are interested I suggest you spend some time searching Fermat’s Last Theorem, Pythagoras, or (for the more adventurous), the Birch and Swinnerton-Dyer Conjecture.

Mr M Dowding, Head of Mathematics

## PERSONAL, SOCIAL, HEALTH AND ECONOMIC DEVELOPMENT (PSHEE) HOUSE VE DAY 75<sup>TH</sup> ANNIVERSARY PHOTOGRAPHIC COMPETITION

Thank you to everyone that has submitted photographs sharing your experiences of VE Day. It has been fascinating to find out how you have celebrated. House Points and Senior Commendations have been awarded to the students that entered for their 'Contribution to the School Community' and for being 'Collaborative and Supportive', which are both aspects of the WHSB Learner Profile.

Freddie Dawson, Osprey House (8N), hung Union flag bunting all around his street and observed the two-minutes silence at 11 o'clock. Later in the day, he listened to the speeches by the Queen and Winston Churchill on loud speakers. There was a challenge for his street to make a *Super Marine Spitfire* from materials they had around the house (see photographs below). Freddie really enjoyed designing and creating his aircraft and was very pleased when it was announced he had won! Freddie played street bingo, with everyone remaining on their drive to observe social distancing measures. In the evening, he listened to war time songs and finished the day with a singalong to 'We'll Meet Again' by Vera Lynn.



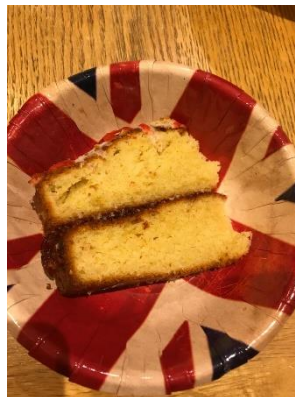
Joseph Holland, in Kestrel House (7L), decorated his house with red, white and blue bunting, made a cake and drew a spitfire of a war time plane (see photographs below).



Continued on page 27



Peter Hazell, in Harrier House (7N), celebrated in a number of ways. Like others, he decorated his house with Union flag bunting, both indoors and out! He laid a table in the front garden with a Union flag table cloth, where they had afternoon tea, homemade cakes and sandwiches (see below). He also listened to Winston Churchill's speech at 3pm, which was broadcast back in 1945 on the wireless (the radio). After this, they played songs from the 1940s, including Glenn Miller and Gracie Fields. Peter even spotted a 1945 Morris 8 car driving down his road.



Peter's family also taught him about the history behind VE day. He learned that his grandad survived the war, but nearly died on VE Day itself. He discovered that on the night of the VE celebrations, his grandad was cycling home when a bolt of lightning struck a metal manhole cover that he was cycling past. He was knocked off his bicycle and shot through the air! Luckily, he only received a few cuts and bruises.



Peter's other grandad was in the Royal Air Force serving on Avro York aircraft. This is a photograph of him to the left.

Thank you to all students that have submitted their photographs celebrating VE Day. This competition is still open, so if you would like to share your experiences, then House Points and Senior Commendations will be awarded.

*Mr R Barber, House and PSHEE Coordinator*



## FAREWELL TO THE UPPER SIXTH

In normal circumstances, it is around this time each year that I have the opportunity to meet with the Upper Sixth as a group to say farewell and to give them my best wishes. It is always a bitter-sweet moment. Increasingly, I find myself wondering whether it really can be nearly seven years since many of the pupils sitting in front of me were sitting in my study in groups of six or seven eating cake, drinking squash and telling me all about their plans for their 12<sup>th</sup> birthday! Equally, if those seven years have gone by so quickly, then it seems a mere 'blink of the eye' since I was meeting the boys and girls new to the School in the Sixth Form to find out how they were settling in.

After the best part of thirty years as a teacher, I know that each cohort of students has its own unique character. For the majority of students, their seven (or two) year journey at WHSB is smooth and involves much success and personal growth along the way. For a few students, the road has involved a few diversions. Indeed, there are sometimes one or two decent (although rather misguided) students who, shall we say, test the Pastoral System to its limit, and then see whether they can go a little further still! Some of those students have contributed very generously to the greying of my hair across the years. That said, experience tells me that as they progress and leave the School, they will be fine making their way in the world.

I have thoroughly enjoyed working with the outgoing Upper Sixth. At the risk of generalizing, they are a resilient, dynamic, talented and energetic cohort. They have worked hard and I admire each one of them for it.

This cohort has immense academic strength and when they took their GCSE Examinations they broke the School's GCSE record, achieving strong results. In sport, be it rugby, football, basketball, athletics, they have done their School proud. In the Arts and Humanities we have enjoyed success, and performances in music, debating, public speaking and drama have been outstanding. There is, of course, much more to this cohort and I look forward to chatting about 'old times' and future plans during better times.

I have previously mentioned the Alumni and Old Westcliffian Association (OWA) to our Upper Sixth. Once again, I would encourage members of the outgoing Upper Sixth who have not signed up already to join both the Alumni and the OWA. Membership to both organizations is free and provides an opportunity to stay in touch with school friends. The OWA annual dinner (usually September each year) also provides an opportunity to catch up with old friends from across the years.

I hope that we shall return to something resembling normal life in the not too distant future and, that being the case, I intend to invite all Upper Sixth students back to School (perhaps just prior to the Christmas holidays) to have the opportunity to catch up with friends and teachers. Please ensure that you are signed up to the Alumni Network to receive details and/or check the School's Facebook page nearer the time.

I also want to take this opportunity to thank all of our Upper Sixth teachers this academic year. I particularly wish to thank the Sixth Form Pastoral Office team. Dr Machacek, a WHSB legend, has had overall responsibility for the progress of Sixth Form students and he has been ably supported by Mr Sinnott, Upper Sixth Progress Leader, a great artist, musician and teacher, and someone who cares immensely for and about the outgoing Upper Sixth cohort. I also offer my sincere thanks to Mrs Holley and Mrs Wells, who joined us at the start of the academic year; they have kept the Sixth Form Pastoral Office running like clockwork. I would also like to give a special mention for Mr McGee, recently appointed Director of Sixth Form and another superb musician, for his energy and empathy in supporting both Lower and Upper Sixth students. Equally, we are much indebted to Mr Stevens for his superb work with the Upper Sixth in relation to their applications to Higher Education, and to Mrs Weller who has provided our students with excellent careers guidance. They are a superb team and our students are fortunate to have their support.

I deeply regret that the dreadful coronavirus has meant that my colleagues and I have not had a proper opportunity to say farewell to our Upper Sixth. However, to those students, I have no doubt that I will have the pleasure of meeting you again in the months and years ahead. I offer each and every one of you my best wishes with all of your future endeavours. I close by sharing with you the advice I give to each departing Upper Sixth Cohort. Never give up on yourself and, whatever the challenges you encounter, do the right thing and persevere.

*Headmaster*



# THE WEEK AHEAD

## WEEK BEGINNING 18 MAY 2020

Please see inside The Westcliff Week for details of further activities. Clubs and Societies Team code xkzlh2s.

Day	Date	Time	Activity
MON - SUN	18 – 24 May	N/A	WHSB Lockdown Gallery 2020 (page 22)
		N/A	<i>MacBeth</i> (page 12). Other online Theatre events available (further details - issues 2 & 3)
		N/A	Music Theory Tuition – YouTube 'itchy2learn' (see issue 5)
		N/A	PSHEE Centenary House Competitions (page 18)
		N/A	Upper Sixth: Opportunity to sign up for Alumni Community (page 14)
		N/A	Southend Youth Council Logo Redesign Contest (see issue 6) Deadline 20 May 2020
		N/A	Natural History Museum Virtual Tour (issue 7)
		Various	Online quizzing opportunities (page 12)
MON - FRI	18 – 22 May	N/A	RGS Young Geographer of the Year Competition – register interest (page 20)
		N/A	Wargaming Team: Bloodbowl League
		N/A	Years 7 & 8 House FIFA 20 Competition sign up - runs w/b 25 May (page 11)
		N/A	BBC Science & History Education offer (see issue 5)
		N/A	P.E. with Joe (featured in issue 1)
		N/A	Mr Jeffreys' History Crossword competition (page 21)
		N/A	Round Robin Challenge – ideas to Dr Machacek (page 17)
		8.45am	Hallway Gym Class with Mr Moore (all invited), Details in issues 6 & 7
TUESDAY	19 May	1.00pm	Healthcare and Medical Society
		4.00pm	Westcliff Drama Online
WEDNESDAY	20 May	1.00pm	Weekly Watch with Miss Williams (page 10)
		1.00pm	MOxbridge English (Sixth Form)
		4.00pm	Bibliophiles Book Club (Middle School, Sixth Form and staff)
THURSDAY	21 May	7.30pm	Mr Derrick's Film Club 'Watch-along' (page 12)
		N/A	Deadline for responses to this week's <i>Where in the World?</i> (see page 19)
FRIDAY	22 MAY	7.00pm	Philharmonia Orchestra's performance of Mahler Symphony 3 (page 10)



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