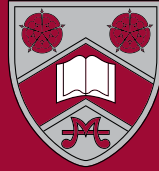


Penwortham Post



Penwortham Girls' High School



Spring 2024



Artsmark
Platinum Award
Awarded by Arts
Council England

Welcome to the Spring edition of the Penwortham Post.

This term has passed by so quickly, bringing about a number of changes in our school to ensure that all students feel supported. In January, we launched Student Services, a dedicated space where students can source on the spot advice and support. The response from our students has been incredibly positive.

We recently held our annual STEM Festival at PGHS, showcasing a wide array of engaging activities. These activities were supported by a number of local employers and businesses. For more information on these events, please refer to this newsletter for detailed articles. Additionally, this Easter, a group of students are taking on an unforgettable journey to Texas with the science department, where they will visit NASA. Another group of Year 10 students will be embarking upon a journey to Krakow as part of the History curriculum. I am particularly proud of our extensive extra-curricular and enrichment offer at PGHS. These experiences provide further opportunities for students to develop our core values of curiosity, dignity and compassion.

I am also proud of the inclusive community that we have at PGHS. This term, I accompanied Year 10 students to the Masjid E Saliheen Preston Muslim Cultural Centre and more recently, I was invited to the International Women's Day celebrations at the BAPS Shri Swaminarayan Mandir. It is our mission to promote a deeper understanding and appreciation of the diverse cultures that enrich our school community. This commitment to inclusivity lies at the core of our ethos and values.

Thank you, as always for your continued support of everything we do here at PGHS. On behalf of all the staff and the Governing Body, I would like to wish you all a peaceful and restful break. For those celebrating a religious festival during this time, I wish you a joyous Easter or Eid-al-Fitr.



Sharon Hall, Headteacher
Penwortham Girls' High School

STEM Careers Carousel Inspires PGHS Students to Explore Boundless Opportunities

On the 29th of February 2024, Penwortham Girls' High School annual Careers Carousel unfolded as a pivotal event during our STEM Festival, illuminating pathways to future success for our Year 10 and Year 11 students.

Over 20 dedicated professionals from diverse STEM fields graciously volunteered their time to share insights and expertise, igniting a spark of curiosity and ambition in our students.



continued overleaf...

continued... STEM Careers Carousel Inspires PGHS Students to Explore Boundless Opportunities

The carousel offered a dynamic rotation through various STEM sectors, allowing students to gain first-hand knowledge from industry experts. From engineering marvels to the intricate world of organometallic chemistry, from the innovative realm of radiotherapy to the strategic domain of logistics, our students were exposed to a broad spectrum of STEM-related careers. Moreover, they delved into the profound impact of mathematics within the insurance industry, as well as the boundless opportunities within the higher education sector.

The feedback from our students was resoundingly positive, with many expressing gratitude for the eye-opening experience. The insights gained during the carousel have prompted profound reflections on their future career paths. Indeed, many students are now re-evaluating their options, buoyed by a new found awareness of the diverse opportunities awaiting them in the world of STEM.

None of this would have been possible without the unwavering dedication of our STEM Ambassadors, who generously shared their time, expertise and passion for their respective fields. Their commitment to nurturing the next generation of STEM leaders has left an indelible mark on our students, empowering them to envision a future brimming with possibilities.

We extend our heartfelt appreciation to all our STEM Ambassadors for their invaluable contributions to the success of the Careers Carousel. Your selflessness and dedication have not only enlightened our students but have also inspired them to pursue their dreams with unwavering determination. We are deeply grateful for your efforts and the impact that you have made on our school community.

As we look to the future, we are filled with optimism and excitement, knowing that our students are equipped with the knowledge, inspiration and resilience to chart their own paths towards success in the vibrant world of STEM.

Mr D Knee, Teacher of Science



MANY THANKS TO OUR STEM AMBASSADORS WHO SUPPORTED THE EVENT:

Demi Jordan	Mace Group. International Consultancy and Construction Firm.
David Nuttall	Engineering Manager at Leyland Trucks
Peter Fisher	Retired BOE Engineer and Retired naval Engineer
Jenna Hartnett	Pricing Analyst for Covea/Vitality Insurance
Simon Bourne	Key Account Manager at TGW Logistics
Sarah Seaton	Project Director at School Rebuilding, Department of Education
Justin Rawcliffe	Project Director at School Rebuilding, Department of Education
Sergey Zlatogorsky	Chemistry Lecturer at University of Central Lancashire
Laura Littlefair	Northumbria University
Dr Peter Tipping	Engineer, LC Auxetec
Chandni Asher-Vardey	Network Rail
Iain Scott Ferguson	Network Rail
Simon Close	ForexClear
Shelley Shuttleworth	Radiotherapy Practice Educator at Lancashire Teaching Hospitals
Steven Rawlinson	SISK Building Contractors
Sharon Leary	Serconnect Ltd
Amanda Winter	Microbiologist and Technical Team Manager for BSI
Susan Jones	Social Value Manager at Mac Roofing
Nicola Parkinson	Head of People at Eric Wright Group
Michelle Faulkner	Facilities Manager at Eric Wright FM
Katheryn Wood	BAE Systems Head Office

National Attendance Award

This term, we received a national award for being in the top 25% of similar schools for our overall attendance.

We know that great attendance is the result of school, students and their parents/carers working in close partnership, so we wanted to share this achievement with you. Ensuring all our students are in school as often as possible is our number 1 priority, as high attendance rates are not just linked to better academic outcomes but also correlate with positive wellbeing and stronger social relationships. Internal school data shows that high attending students are more likely to participate in clubs, go on trips and residentials, hold positions of responsibility, be awarded higher ATLs and achieve more positive academic outcomes.

Mr Ward
Senior Assistant Headteacher



**FFT National
Attendance Award
2023/24**

Governors Update Spring 2024

This term has been extremely short due to how the Easter dates have fallen this year but somehow, we seemed to have got a lot done!

The governors have been extremely pleased and reassured by the smooth transition to Mrs Hall as Headteacher. We knew from the start that we had appointed the right person for the task; Mrs Hall has the ethos of Penwortham Girls' High School running through her veins and wants nothing more than to build on Mrs Pomeroy's successes. There have been some additional appointments made to serve the school well into this next chapter. A key decision has been to appoint Mrs Woodhouse to join Mr Ward and Mr Ramsdale in the team of Senior Assistant Headteachers. Governors welcome the development and expansion of Mrs Woodhouse's role and wish her much success. Appointments have also been made to the Safeguarding team and to the Life Skills team. These have been key to the fulfilment of our school values and integral to the rounded development of our students. Our vision is quite clearly identified in what students and staff have delivered this term so far. There have been a number of events that include the Soroptimist society raising £300 for St Catherine's Hospice, a focus on kindness for International Women's day, all students taking part in Safer Internet Day and a focus on World Religion Day where the Year 9 assembly included student-created presentations on aspects of Islam, Christianity and Hinduism. Added to these, is the STEM Festival which is the focus of this end of term newsletter. The governing board wishes to thank students, staff and parents for their continuing support and efforts this term. We send warm wishes to those of you who celebrate Easter and those of you celebrating Eid Al-Fitr during the break also. We hope all our community enjoys two weeks break and we hope the students return ready for more hard work!

Lorimer Russell-Hayes, Chair of Governors



International Women's Day

The theme of this year's International Women's Day was 'Inclusion', calling for individuals to envisage a gender-equal world that is free of bias, stereotypes and discrimination and is instead diverse, equitable and inclusive.

This objective aligns closely with our school's core values of compassion, dignity and social responsibility.

In preparation for the assemblies held throughout the

week, we posed key questions to our students regarding the significance of including others and how we can ensure that everyone, both within and outside of our school community, feels a sense of belonging. The overwhelming response was that demonstrating kindness is essential for fostering growth within any community.

Subsequently, we asked each student to nominate ways in which we can show kindness to others. As a result, we have created a kindness calendar and will be encouraging students to participate in various acts of kindness. This will be led by the new students' Respect Council who will be the first to trial the 28 days of kindness challenge.

Mrs Hall, Headteacher



Be Kind.

YOU GOT THIS!

28 DAYS OF KINDNESS



SUN	MON	TUE	WED	THU	FRI	SAT
1 Smile at someone in the corridor	2 Hold the door open for someone	3 Write a thank-you note to someone who has helped you recently	4 Give someone a genuine compliment	5 Give your time and help at home by doing one chore today	6 Recycle and give something you no longer need to charity	7 Listen to someone without interrupting
8 Thank someone who helped you when you needed it	9 Tidy up an area of your home without being asked	10 Give someone your place in the canteen queue	11 Talk to someone new in school who you don't know	12 Send a kind message to a friend you have not seen in a while	13 Listen and support someone who needs to talk	14 Give someone new a space in your friendship group
15 Cook a meal or make a snack for someone at home	16 Share your favourite book with someone	17 Help to unpack groceries at home	18 Show kindness to the planet by switching devices off when you are not using them	19 Encourage someone to do well in class	20 Check in with your friends and ask them if they are OK	21 Practice patience and kindness in busy areas in your community
22 Include someone who may feel left out	23 Do something to show kindness to yourself	24 Offer to carry groceries when you are at the shops with your family	25 Do one random act of kindness for a family member	26 Write a positive message on a sticky note and leave it for someone to find	27 Share your skills or talent with others, for example baking a cake!	28 Reflect on your month of kindness and think of ways to continue spreading kindness in your daily life
<p>"Kindness is the most important tool to spread love among humanity."</p>						

I am kind



Kindness Matters

Charity Fundraising

This term, the Soroptimist Society donated £300 to St Catherine's Hospice.

The money was raised by selling sweets and different refreshments on sports day, running a bake sale and organising a Halloween hunt. This money has been raised thanks to the students at PGHS who have been very supportive by participating in these events. St Catherine's told us they are going to put the money towards buying Alexa's for the patients in the hospice allowing them to listen to music whilst they are ill in bed. Many of us will be grateful to St Catherine's hospice at some point in our lives when they look after our family members, and I hope this donation shows our gratitude.

Mr Herbert, Associate Assistant Headteacher



Art & Photography

UCLAN's Saturday Art Club exhibition

I was extremely proud to attend UCLAN's Saturday Art Club exhibition on Thursday evening.

Two of our talented students, Izzy and Olivia in Year 9, had work on display as part of the exhibition. The club offers creative workshops exploring various art, design, fashion and textiles processes. The Club is exclusively for teenagers aged 13 to 16. You can find out more about this here. <https://www.uclan.ac.uk/events/saturday-club>

Mrs Mitchell, Lead Teacher for Art, Design and Photography



Art & Photography

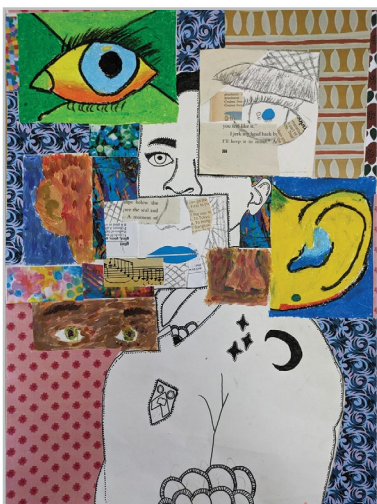
Year 8 self-portraits

Year 8 have been working ever so hard on their self-portraits.

They have taken inspiration from Bruno Del Zou, Vincent Van Gogh, Pablo Picasso, Gustav Klimt, George Braque, Brianna McCarthy, Aubrey Beardsley and many more. Some students found their own artist to inspire their final outcomes. I am blown away with their hard work and resilience towards this project.

Mrs Mitchell

Lead Teacher for Art, Design and Photography





All students have taken part in Safer Internet Day. Each year there is a theme for the day and this year's theme was, **'Imagine a world without the internet. How would your life change?'**

The students have had assemblies to make them think about how the internet has changed over the last 10 years and what new technology has emerged within the life time of the students. They have also thought about what they do in their social time now that life has changed due to the internet and what technology is available. Some examples are, what they spend their money on now and what decisions they might make in life regarding their own future. We've talked about their online presence and them being mini social influencers. We have challenged the students to look at how they use the internet and their devices and shown them how they can be used in a positive way.

We feel it is important that the students actively have conversations and be open about what they are doing and seeing online.



BTEC Creative Media Production

Year 11 are currently completing their final 10-hour practical exam.

They have completed the first 5 hours and produced some detailed plans ready for the final creation of their media product. They will need to arrange the assets that they wish to include in the final product. Well done with the preparation stage and good luck for the final 5 hours of exam!

Computing

Key Stage 3 Computing

KS3 Computing lessons have had a focus around online safety and looking at persuasive design used in app creation.

We discussed a range of persuasive design features that companies use and how these impact on their lives. The students then selected a few of these features and designed an app. They then presented these to their peers. There have been some incredible ideas.

Year 7 are starting to explore a different way of programming using BBC Micro:Bits. This unit has seen them complete a range of challenges and games using the Micro:Bit website. They can experiment with this at home using the BBC Microbit website.

Year 8 are exploring a different way of programming using BBC Micro:Bits. This unit builds from what they have learnt in year 7 about Micro:Bits by incorporating Python programming language to add challenge.

Year 9 are learning about computational thinking and understanding how programs and computers think and work. They will be exploring flowcharts, pseudocode and then looking and creating mini-programs based on the flowcharts and pseudocode into python. This will give the students an insight into GCSE Computer Science.

GCSE Computer Science

Year 11 have completed their final mock exams and there are some pleasing results.

The students have been spending the time learning about the practical paper and how to answer some of the challenging questions. All students are working hard and hope they continue this hard work over the next few weeks in preparation for the final GCSEs.

Mrs Bennett, Curriculum Leader for the C.A.T. Faculty

Technology

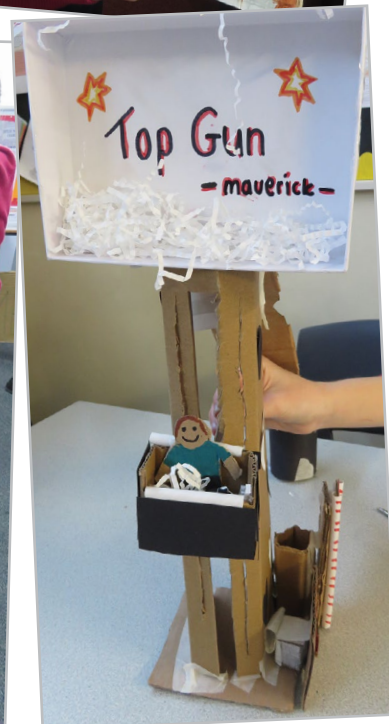
IET Faraday Engineering Challenge

This term, all Year 8 students were involved in a fantastic STEM day, taking part in the IET Faraday Engineering Challenge.

The challenge gave the students the opportunity to create a solution for a real-world challenge. This year, the challenge was to design an attraction for a UK theme park. The students worked in teams of 5 or 6 and each person in the group had a specific role, such as a project manager, accountant, visual designer or a manufacturing engineer. They had to include electronics in their designs and even had to do an engineering apprenticeship in order to complete the day.

All students participated really well, and the outcomes were very impressive. Year 8 can be credited on their positive attitudes and great behaviour on the day; there are definitely some potential engineers within the year group and it will be exciting to see where it takes them in the future.

Mrs M Moss, Curriculum Coordinator of Design & Technology



Technology

Food Preparation and Nutrition

Year 11s have completed their practical non-exam assessment, making 3 dishes in 3 hours.

This was a very intense and hectic 3 hours but the final results were amazing and the students did themselves proud! Unfortunately, I cannot show photographs of their final dishes yet, so please take a look at last year's.



Miss Scott, Lead Teacher of Food Preparation and Nutrition

STEM Festival Jam Tarts Competition

At this year's STEM Festival, Year 7 and Year 8 students entered Miss Scott's Jam Tarts Competition.

After learning about the science behind making the perfect shortcrust pastry, students were challenged to make 6 perfect jam tarts. The competition saw many students entering and the competition was very high. The judges were Mrs Hall, Miss Scott, Mrs Moss and Mrs Bennet. The quality of the jam tarts blew them away!

Miss Scott, Lead Teacher of Food Preparation and Nutrition



1st prize went to Evelyn B Y7

2nd prize went to Alice T Y7

3rd prize went to Evie S and Ella B Y7



The Press Gang!

This term the English Department have launched our very own Press Gang.

The team of journalists is made up of students across Year 7, Year 8 and Year 9. Their task has been to write about a range of events across school and to interview members of the Penwortham Girls' community. In our first edition, our Year 7 students share their interviews with Miss Garlick about the upcoming school show "The Little Mermaid", and also a mini interview with Maisie W from Year 11, who is currently serving on the Student Leadership Team.

In next term's edition, expect to see more articles, including an in-depth interview with our new head-teacher, Mrs Hall.

The Press Gang meet every Friday lunchtime in Room 6 and we are always looking for new budding journalists!

Mrs Snowdon, Curriculum Leader for English



Interview with Maisie W.

Student leadership team

What is your aspiration when you leave high school?
"I want to become a Formula 1 engineer."

What are you planning to study in college?
"I hope to study further maths, physics and geography."

In your role, what have you persuaded?
"I have launched the t-shirt logo design which will be sold in the STEM festival and I hope to improve the school environment."

Why did you join the environment team?
"I wanted to improve the environment in the school and outside of school."

Julia .K

Interview with Miss Garlick

Which show will our talented student perform this year?
The Little Mermaid

Who are the leading ladies?
We have Rosie Y as Ariel, Sophie S as Eric and Katie T as Ursula (all year 10s)

When will the production take place?
Umm, we aren't sure yet, but sometime in the Summer Term.

How many students are taking part?
Approximately 50

Which scene are you most excited to direct?
Under the Sea!

Which scene do you think will be the hardest to direct?
The transition between mermaid Ariel and human Ariel.

How long is the show?
At the moment – no clue.

Who is your favourite character?
Sebastian!

What is your favourite song?
Well, actually I really like Kiss the Girl!

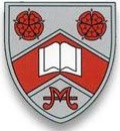
Who is designing and making the costumes?
So, we've actually asked parents to help this year.

Which teachers will be directing the show?
Me! With the help of Miss Starkie. Mrs Little and Mrs Catternach are doing the music and Miss Naylor is choreographing!

Will the money from the tickets be contributed to any charities in particular?
Honestly, I don't know but it is in discussion with the charities committee

By Amelia, Alyce and Amana





Geography News



GCSE Geography

A particular well done to our Year 11 GCSE Geographers. The Geography March Mock results were very pleasing, giving us and the students confidence for the summer. Year 11 have nearly finished the syllabus now – time grows short!

We recently had our GCSE fieldtrips to investigate the River Wyre in preparation for the Paper 3 exam in June. The staff were in agreement that the students were a credit to themselves; diligent in their data collection techniques and resilient in the face of some pretty cold conditions. Well done to all participants and thanks to the attending staff.



Hutton Grammar Sixth Form Centre

On Friday 23rd February, we had visitors from the Hutton Grammar Sixth Form Centre.

Miss Monaghan and three Geographers came to share their experience of studying the subject at A-level.

They gave a presentation on what sounded like exciting fieldwork opportunities, (at A-level, students decide their focus of study), lesson structure, topics covered and how they manage their time as A-level students. It was lovely to see Rebecca S, one of our Super Star Geographers from last year, (target - 6, achieved a grade 9), come back as part of the visit, and show current pupils, at PGHS the pathway ahead for their Geography studies.

If you want any further detail on studying A-level Geography, please drop in to see Mr Bowles who can show you a typical lesson, a textbook, some exam papers and the programme of study. Miss Monaghan at Hutton will also be happy to field any questions you might have; contact her at m.monaghan@huttongrammar.org



Geography Society



Come along and extend your knowledge of our wonderful planet! We used ICT based platforms, games, films, documentaries, model making and much more to extend your Geography knowledge & skills.

There is a programme of activities (see table below), but we are always open to suggestions on tasks too.

Time - lunchtimes on Monday

Venue - Rm 39 (or the ICT suites)



Mr Bowles

Enjoy any Easter celebrations you may have (easy on the chocolate!)



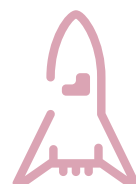
and Eid Mubarak to those celebrating the end of Ramadan on the 10th/11th April.

Year 7 Model History Competition

During the STEM festival, the History Department launched the year 7 Model History Competition for the second year running.

Students were invited to submit a history model of their choosing. Last year's models included a model of Queen Elizabeth I, Viking longboats, medieval swords, castles, a WW1 trench, a 1969 NASA rocket launch and even a replica French Revolution era guillotine! Winning entries received history themed prizes.

Mr Herbert, Associate Assistant Headteacher and Curriculum Leader for History





Mr McVey's Mysterious Maths – Easter 2024 Edition

To keep you occupied during the holiday, why not try the following puzzles? A full set of correct solutions either emailed to me (r.mcvey@penworthamgirls.lancs.sch.uk) or handed to me in person, will earn a Head's Breakfast along with a little Easter treat!

Enjoy and good luck!

PROBLEM 1

In one year, 78 862 314 Easter eggs were sold in the UK.

- Round this number to the nearest one million.
- Round this number to the nearest ten thousand.
- If an extra 2 million eggs had been sold, what would this number be if it was rounded to the nearest one million.

PROBLEM 2

A survey asked 56 253 people which type of chocolate egg they preferred. 32 132 people preferred milk chocolate and 16 482 people preferred dark chocolate. The rest preferred white chocolate. How many preferred white chocolate?

PROBLEM 3

Mrs Sweeney is making Easter biscuits. Here is her recipe:

80g flour

40g butter

15g lemon zest

25 ml water

She has 120g of butter. How much of the other ingredients will she need for her recipe?

PROBLEM 4

An Easter concert is due to start at twenty-past two in the afternoon. Unfortunately, the star of the show, Mr Cafferkey is running late and the start of the concert is delayed by 75 minutes. The concert lasts for 1 hour and 10 minutes. At what time did it finish?

Code Breaking



























Year 8 students enjoyed a spot of codebreaking in their Maths lessons during the STEM fortnight.

They learned that cracking codes and unravelling the true meaning of secret messages involves

lots of maths, from simple addition and subtraction, to data handling and logical thinking. Famous historical codebreakers, such as Alan Turing were looked at, along with his role in deciphering the German Enigma code during World War 2, proving to be a particularly interesting discussion point.

Students also tried their hand at breaking a range of different codes including the 'Dancing Men', 'Pig Pen' and 'Caesar' ciphers, as well as a bit of Morse Code. Why not have a go at breaking the code below which uses the aforementioned 'Dancing Men' cipher?

Key:

a	b	c	d	e	f	g	h	i	j	k	l	m
												
n	o	p	q	r	s	t	u	v	w	x	y	z
												

Coded message:



Escape Rooms

Students in Year 10 were also given the opportunity to take part in a virtual Escape Room in their Maths lessons.

They were placed into teams of five and given a different problem in seven different 'rooms' in a school that they had to solve in order to escape.

The rooms were scrambled for each team so that everyone completed the puzzles in a different order. As some rooms were harder than others, they didn't know how they were doing until the very end.

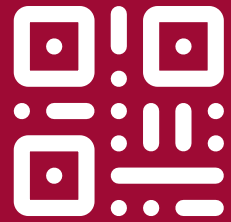
After completing all the rooms, there was one final challenge which was to decode the key cards and answer three questions in order to win. Each of the key cards they had received had different clues on them. The students had to work as a team to be able to solve the problem and 'escape'.



Bits & Pieces

Year 11 were given the opportunity look into how mathematics links to the real world.

This focused on how the code breaking that took place at Bletchley Park in breaking the Enigma code and another code the Lorenz cipher were thought to be unbreakable. Year 11 discovered how breaking the Lorenz cipher has impacted how we communicate today through the use of the internet. This helped to develop the ASCII code. ASCII is now used for computers to communicate between each other over the internet. Students had the opportunity to see how ASCII worked and how messages were encoded and decoded.



Mr Cafferkey, Maths Department

NatWest Money Sense

During the STEM Festival, Years 7, 8, 9 and 10 delved into how mathematics relates to the UK financial system during some of their Maths lessons.

In Year 7, students learned about the difference between debit and credits cards. Students were very aware that a debit card gives you access to the money you had earned, whilst a credit card is where you borrow money. However, students were not aware of the issues that misusing a credit card could cause.

Students also discussed when we should be using a debit card and when to use a credit card. Some scenarios which were talked about were paying the monthly mortgage bill and paying for a holiday. Students realised that the mortgage bill should not be paid by a credit card as we are paying back borrowed money by borrowing more money which is not financially wise. Paying for a holiday by credit card is more beneficial due to the protection that you get if a holiday company went into administration.

In Year 8, students were given an opportunity to learn about what to look out for on a pay slip. Although it may be quite a while before students may see one of these, the importance of seeing one now and how this links to the maths they are currently learning, was invaluable.

Students were very intrigued to know about the tax code and their national insurance number and when they will receive these. They were not aware of how a

few numbers in the tax code could impact the amount of tax each of us pay and the amount we end up taking home.

We then moved onto looking at the deductions, learning about when we pay income tax and the brackets of income tax that we can fall into. We also looked at what national insurance is and how much we have to pay; students couldn't believe that you start paying for national insurance at £9750 but income tax was £12500.

Overall, students were very keen to see where the money they earn goes and how tax and national insurance is calculated. They can now attempt to make an estimate on the wages they will receive into their banks in the future.

In year 9, students looked at insurance. They were made aware of the different types of insurance that are available. They were not fully aware that it is a legal requirement to have car insurance when driving a car but it was not a legal requirement to have other types of insurance, for example buildings insurance if you owned a home. It was amazing to see the knowledge that the year 9 students had and the awareness of the different types of insurance that was out there.

In Year 10, students were given an opportunity to learn about the different types of financial frauds and scams. The students discussed how fraud arises and what you and your bank can do to protect yourself. Some examples involve sharing few personal details online, checking your bank statements for unusual activity and always questioning any emails or posts that offer opportunities for easy money.

Enhancing Mathematical Problem-Solving Skills: Implementing RULER Tasks

As a Mathematics department, we are dedicated to equipping our students with the essential problem-solving and reasoning skills necessary for success in Mathematics, both in their academic journey and beyond.

In line with the requirements of GCSE examinations and the broader objectives of fostering critical thinking, we have implemented several strategies aimed at nurturing these vital skills in our Key Stage 3 (KS3) and Key Stage 4 (KS4) students.

When students reach Year 11 and sit their GCSE examinations, they are expected to not only demonstrate proficiency in mathematical facts, concepts and techniques but also to apply their knowledge to solve both familiar and unfamiliar problems across a range of contexts. To ensure our students are well-prepared for this challenge, we have integrated problem-solving and reasoning tasks into every unit of work throughout the curriculum.


One of the approaches we are actively embedding is the use of 'RULER' tasks. RULER is an acronym that stands for Read, Underline, Layout, Evaluate and Review. These tasks are specifically designed to guide students through a systematic process of problem-solving, encouraging them to approach mathematical problems in a structured and methodical manner.

Each week, all students are engaged in a RULER task focusing on 'Money Problems'. We have chosen this particular area of mathematics as it not only reinforces essential mathematical skills but also provides practical relevance to real-life situations. Through these tasks, students are challenged to apply their mathematical knowledge and reasoning abilities to solve problems related to budgeting, financial planning, and everyday transactions.


Here is an example of a **RULER** task:

RULER Task: Money Problems

Jenny is decorating her bedroom.



She buys three tins of paint.
One of the tins costs £13.68
The other two tins each cost £8.10
Jenny also buys a pack of paintbrushes.
The pack costs £6.99



Jenny gets $\frac{1}{3}$ off the total cost.
Jenny pays with two £20 notes.
How much change should Jenny get?

Read: Read the given scenario carefully

Underline: Identify key information and underline relevant details

Layout: Organise the information and plan your approach.

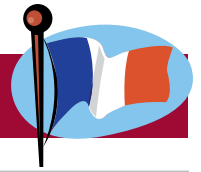
Evaluate: Apply mathematical concepts and reasoning to solve the problem.

Review: Double-check your calculations and assess whether your solution is logical and practical. Reflect on the problem-solving process and identify any areas for improvement.

By engaging in RULER tasks, our students not only enhance their mathematical problem-solving skills but also develop valuable habits of mind, such as perseverance, attention to detail, and critical thinking. These skills are not only essential for academic success but also for navigating the complexities of the world beyond the classroom.

We are confident that by fostering a culture of mathematical curiosity and resilience, our students will be well-equipped to tackle the challenges they encounter in their academic studies and future endeavours.

Mrs Bennett, Mathematics Department



Visitor from France

From the end of February, we had a French student coming over to spend nearly 3 weeks here at Penwortham Girls' in order to complete work experience and to attend lessons as a student.

All French classes were able to meet Eva and ask her many questions using their French. It was great to see Eva could understand them and I felt very proud of our students who could not only ask questions clearly and confidently in a foreign language but also understand Eva when she replied in (fast!) French.



Eva also spent some time with Y7 German classes; Herr Briscoe's class had prepared questions for Eva to answer in English.

As part of the STEM festival, Y8 were invited to play Bingo in French at lunchtime with our French guest.

It was a lovely experience for both our guest and our students who displayed curiosity and social responsibility.

Madame Raine



This is what Eva wrote about her experience at PGHS:

3 weeks at Penwortham Girls' High School

Hello, my name is Eva, and I did a 3-week work experience at Penwortham Girls' High School. Upon arriving at this school, I was able to notice several differences for example the teachers wore suits whereas in France most French teachers simply wear jeans. I also noticed that the students wore a school uniform unlike in France where they wear what they want. I also noticed that there was only 45 minutes for lunch. Unlike France where we have 1 or 2 hours to eat as we have a starter and sometimes cheese! The shorter lunch allows students to finish lessons earlier, for example they finish at 3.20 pm whereas in France it is 5 pm and in some schools 6 pm. Also at lunch, students can either eat the meals from the canteen or they can bring their own sandwiches while we can't bring our own food in France, but we can go home for lunch. I also learned that when they have an absent teacher, they always have a supply teacher whereas in France we don't often have a supply teacher so we just finish earlier. I also found the students quite enthusiastic unlike in France where they often sulk, I think!

I really enjoyed these 3 weeks at this school. The teaching team and the students were very welcoming, I had a great time, thank you very much for allowing me to discover British school education during these 3 weeks.

Eva

Lily P ist nach Polen gefahren!

Lily P in Frau Gill's class in Year 7 went on a wonderful trip to Poland in the February half term and here, she tells us all about her trip:.

In February half term, I went on a ski trip to Poland and got to go and see some amazing landmarks such as the thermal spa, Krakow square and we went on a trip to Auschwitz. We learnt about this in our German lessons, as we had been learning about German History, the Berlin Wall and how Germany has changed over the years. I stayed in Poland for a week which meant I stayed in Krakow for 2 days and then in Zakopane for 4 days and travelled back to Krakow to go home the next day. In Krakow, I got to go ice skating, shopping and we visited Auschwitz. In Zakopane, I went skiing, to the thermal spa and a water park. Overall, it was such a good trip and Auschwitz was very interesting.

P.S. Do not forget to try Pierogi if you go to Poland - it is the best!



Auf Wiedersehen Herr Briscoe

At the end of this term, we say a fond farewell to our favourite male German teacher, Herr Briscoe who has expertly covered Mrs Ingram's maternity leave for the last 11 months.

Mrs Ingram will be returning to our MFL team after the Easter break and we say Auf Wiedersehen and Danke schön to Herr Briscoe for all his hard work and dedication to our team and students this last 3 terms and we wish him the very best of luck as he embarks on his new venture at his new school.

Keep in touch, Mr Briscoe and Viel Glück!



"As of the 15th of April, I shall be leaving this wonderful school and embarking on the next stage of my budding teaching career. During my tenure of 10 months here at Penwortham Girls', I've had

the privilege to collaborate with some remarkable individuals who have undoubtedly influenced my pedagogy and perspective on the profession. Working at this school has also afforded me the opportunity to engage with some exceptional young people, whose enthusiasm and character have dispelled any uncertainties I may have harboured about teaching. Most importantly, they have instilled in me a sense of optimism for the future, as they possess ambition, compassion, curiosity, dignity, resilience, and social responsibility in abundance.

God bless you and thank you, Penwortham Girls!'"

Herr Briscoe



Year 8 German – Reading Matilda

In Module 2, Year 8, we are learning about hobbies, in particular, reading and the types of books we like to read.

This is a brilliant topic for fine-tuning how to give detailed opinions. We have been reading about Matilda Wormwood's love of reading in a letter which she has written to Miss Trunchbull. We have imagined the type of reply that Miss Trunchbull would write to Matilda.

Here is a snapshot of some of our favourites.

Ich finde Lesen so langweilig, Matilda, aber ich lese ab und zu in der Badewanne, weil es warm ist. Am Liebsten lese ich Sportbücher, aber ich lese auch gern Zeitungen, weil sie interessant sind. Liebesromane und Kinderbücher lese ich nicht so gern, weil sie zu romantisch und blöd sind. Ich sehe nicht gern Kindersendungen, weil ich Kinder hasse. Meiner Meinung nach sind Kinder wie 'MAGGOTS'. Ich liebe Sportsendungen und mein Lieblingsbuch heist 'Shot putting for Dummies.

S Kampta.

Ich finde Lesen blöd, Matilda. Du liest zu viel. Wie schrecklich! Meiner Meinung nach sind Sportbücher wichtig. Fraulein Hönig liest auch zu viel und sie ist nicht sportlich. Ich hasse Fantasybücher, sie sind blöd, kindisch und superlangweilig. Am Liebsten lese ich Zeitungen, aber ich hasse alle andere Bücher.

M Siskina.

Ich finde Lesen okay, aber kindisch. Matilda, du findest Lesen unterhaltsam und sehr interessant. Ich lese manchmal im Bett, weil es so ruhig ist. Fraulein Hönig findet Lesen spannend aber ich finde Lesen blöd. Am Liebsten lese ich Horrorbücher, weil sie gruselig sind. Mein Lieblingsbuch ist 'Trunchbull The Greatest Shotputter on Earth'. Ich hasse Bücher über schwarze Katzen.

J Brunton

Ich finde Lesen sehr blöd, Matilda, aber ich lese in meiner Schule. Meiner Meinung nach sind Sportbücher gut aber Sachbücher sind sehr langweilig. Ich hasse Fantasybücher, weil sie doof sind. Ich finde Gameshows unterhaltsam aber ich sehe nicht gern die Nachrichten.

J Livingstone

Mrs Williams,
Teacher of MFL



Music Department

Music and Verse Evening

On Thursday 29th February and as part of the STEM Festival, we held our second 'Music and Verse' evening of the year.

The purpose of this concert was to provide our GCSE cohorts with the opportunity to perform to an audience in preparation for their future coursework submissions and to give our Year 8 students the opportunity to perform their LAMDA pieces to an audience. The evening was a tremendous success with all our students performing superbly. It was also fantastic to hear our Year 8 LAMDA students reciting their texts in preparation for their upcoming assessments. Good luck in your exam next week! It was the first time many of the students had performed in public alone and we are extremely proud of them all. The event raised £69.94 which will go to our nominated local charity: Preston Domestic Violence Services. Congratulations to everyone that took part.

Mrs Cattnach
Associate Assistant Headteacher and
Curriculum Leader for Music



Music Department



Open Mic

On Friday 23rd February, we organised an Open Mic for the STEM Festival

A number of students performed some classic hits with a link to STEM. There was a fantastic atmosphere on the quad with the girls all supporting each other and joining in with the singing. Congratulations to all the students that performed.

Mrs Cattanach
Associate Assistant Headteacher and Curriculum Leader for Music

Music Therapist

As part of the STEM festival, all year 8 students took part in a Music Therapy workshop.

Music Therapy is an area of growth as we are becoming increasingly aware of how music can benefit mental health, memory and general wellbeing. Current research which our visiting music therapist is part of, has suggested that music therapy can potentially assist in reducing medication costs in the NHS and have a positive impact on so many people.

We were delighted to welcome Rebecca, a professional Music Therapist, and Ryan, a professional musician who plays with numerous orchestras around Europe. They began the workshops in complete silence, allowing students to explore instruments with no guidance whatsoever. Rebecca used her experience as a music therapist to mirror whatever students played and the music slowly grew and all participants were able to grow in confidence and explore their 'sound-world', as would so often happen within a music therapy session.

Students demonstrated curiosity in the different elements of Music therapy through asking some thoughtful questions about how music can help people living with a range of different conditions such as dementia. Rebecca and Ryan were able to share their own stories and they showed some powerful video clips of music therapy in action.

We look forward to linking this into our work in class on Music therapy and how music can promote positive wellbeing.

Mrs Little, Music Department



PE Department

Preston North End Day Out

In celebration of International Women's Day, Preston North End invited our Y8 footballers to attend a match at Deepdale Stadium vs Stoke City.

The home team didn't quite manage to pull off the win but our students enjoyed cheering on Jess and Daisy as they stood in the Guard of Honour and then everyone took penalty kicks on the pitch at home time.



Jessica, Sophia, Daisy, Amelia, Jessica



Jessica, Amelia, Sophia, Jessica, Daisy

This was a proud moment for Mrs Finnigen and the PE department and we have no doubt that you will go on to take many a shot at goals (or save them) on Championship and Premier League pitches in the future! Well done, girls for your commitment to football at PGHS this year and a big thank you to your parents for their support. A brilliant day out had by all!



PE Department



Daisy and Jess eagerly waiting for the players to come out of the tunnel. Mrs Naylor, Curriculum Leader for Performance, Sport & Health



Y8 South Ribble Netball Tournament

On Monday the 11th March, our Y8 Netballers travelled to All Hallows Catholic High School to compete in the Y8 South Ribble Schools Tournament.



All South Ribble Schools competed, meaning the girls played 9 matches. They performed fantastically throughout, demonstrating impressive netball skills and excellent team spirit and endurance. We finished third overall out of 10 schools.

Well done to all the girls - Jasmine H, Lilah C, Isabelle M, Lily H, Georgia B, Phoebe Barnes, Eva P and Ruby M for a fantastic team performance.



Mrs Naylor, Curriculum Leader for Performance, Sport & Health

PE Department

Y7 South Ribble Netball Tournament

A huge well done to the Y7 'A' team who played 9 tough matches at the Y7 South Ribble Netball tournament on Tuesday 19th March!

They worked tirelessly for each other and played their socks off! They came away with a well earned 2nd place out of 10 schools, which is a fantastic achievement and a result of their hard work and determination on court. The PE department is so proud of how committed both teams have been to training this year and we can't wait to see how they progress through their time at PGHS! Well done girls!



Izzy, Erin, Phoebe, Gabby, Daisy, Tess, Ellie, Violet

Y7 South Ribble Netball Tournament

Our Y7 'B' team played amazingly well in the Y7 'B' tournament and were rewarded with a 2nd place overall!

The girls were fantastic both on and off court and their team work and school spirit made us extremely proud! All of the team have worked hard at training all year and they are excellent role models to their fellow students. Well done girls!! A big thank you to Eliza and Ruby from year 10 who were team coaches for the night.



Back row: Amy, Sophie, Beatrice, Aryana, Imogen, Darcey
Front row: Jayaani, Alyce

PE Department

Y9 South Ribble Netball Tournament

On Wednesday 6th March, the Y9 netball team played in the Y9 South Ribble Netball tournament at All Hallows.

It was an evening of competitive netball played by all. The girls represented PGHS brilliantly and were rewarded with 3rd place in the borough. Well done, girls!



Marnie, Evie, Lucie, Faye, Mia-Grace, Holly, Katie, Scarlett, Jade

Y7 South Ribble Football Cup

On Thursday 29th February, 11 Y7 students went to Lostock Hall to take on the challenge of the first round of the South Ribble Football Cup.

The girls played brilliantly and took the competition right up to the final whistle. This meant penalties! We then went 5 for 5 and Lostock Hall JUST took the win on the 6th. We are so proud of the ambition and resilience that the team displayed but most importantly, their team work and sportsmanship towards each other and their opponents. Well done, girls!



Back row: Seren, Darcey, Aryana, Lani, Hannah, Darcey, Martha
Front row: Karma, Ella, Ellouise, Bella

Year 10 Mosque Trip

On 23rd February, Year 10 visited the Masjid E Saliheen Preston Muslim Cultural Centre as part of their drop-down day.

Students walked to the Mosque where they were greeted by the Imam. Year 10 were shown round the Mosque and given a demonstration on how to perform ablution (ritual washing before prayer). Students then listened to multiple talks by men and women from the Mosque on topics including prayer and Ramadan.

Once students returned to school, they spent the rest of the morning making a mini Mosque model and annotated the Mosque with information they had learnt whilst at the Mosque.

Miss Buckle, RE Department



"I really enjoyed learning about the features of the Mosque, such as the Minaret. This helped me complete my mini Mosque model. I also enjoyed looking at the architecture and repeated patterns in the Mosque, such as on the carpet."

"The Mosque trip was really interesting and cool. It felt really calm and like you could feel God with you. I liked the glass, marble stairs, rugs and white walls with Arabic quotes written on them. We all wore headscarves and were shown how Muslims wash before prayer. We watched the Imam pray and we learnt about Ramadan. A fun fact I learnt is that the Quran is read from right to left rather than left to right."

Science Department News

Year 7 students enjoy stargazing as they visit a mobile planetarium during the STEM Festival.

During the 2nd week of the STEM Festival, Year 7 students were able to experience the wonders of the universe in a full immersive experience.

The girls learned about the composition of stars and how all of the elements that make up everything, including themselves, had originally formed in the centre of stars scattered across the universe. They were also treated to a detailed insight into the Artemis programme that will soon be taking astronauts back to the moon. Throughout the experience, students became involved asking probing questions to the knowledgeable presenter, Dave.

Mr Knee, Science Department

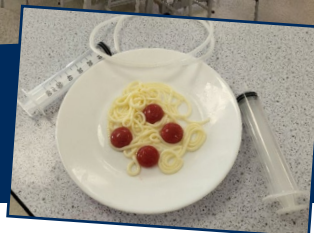
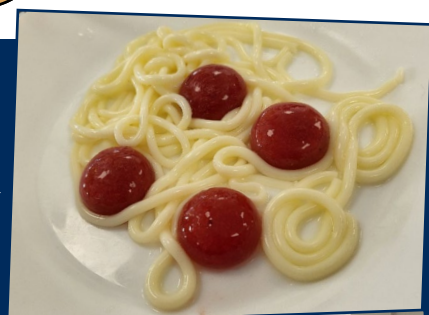


Chemical Cookery

Throughout the STEM Festival, each Year 9 class had the opportunity to have a cooking lesson with Mr Dean.

Mr Dean talked about his time as a chef and how he used molecular gastronomy to make his dishes more interesting. We had to recreate spaghetti and meatballs using white chocolate for the spaghetti and raspberry domes for the meatballs! We were teamed in groups of four or five and after a demonstration, we got straight to it. Overall, we all found the lesson really fun (even if some of the dishes didn't work too well) and it was a great break from our usual lessons! The spaghetti and meatballs tasted great, although the texture was slightly weird! We had to use different chemicals like sodium alginate, calcium lactate and agar agar. The sodium alginate and calcium lactate react together and form a gel. This allows a membrane to form around the raspberry juice and give a pop when bitten into! The agar agar is a setting agent and when heated enough, allows for heat stable jellies to be made. This allows the spaghetti to be made using tubes and syringes!

Mr Dean, Science Department



Science Department News

Leaders Award Competition

Year 9 are taking part in the 'If you were an Engineer, what would you do?' Leaders Award competition.

IF YOU WERE an ENGINEER WHAT WOULD YOU DO?™

The competition challenges students from primary and secondary schools to identify a problem, design a creative solution to their problem and write a letter explaining why an engineer should choose to build their solution.

During the STEM Festival, Year 9 had a number of lessons to prepare them for the competition. In the first lesson, the students watched videos showing the different engineering jobs that are available, which also showed no matter who you are or what your background, you can do engineering.

The students also had to interview an engineer, a key requirement of the competition. Year 9 interviewed Vish Kalsapura from Network Rail. Mr Kalsapura gave an overview about engineering within the rail industry and gave a little insight into his role within cyber security.

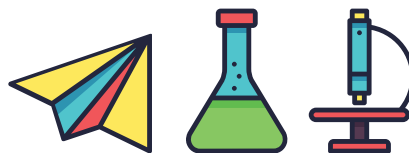
In the final couple of lessons, the students had to identify a problem and then design their solution, taking inspiration from previous winners in the competition. All the teachers were impressed with the engagement of the students and the fantastic ideas being created.

All the students that enter the competition will have their design graded by an engineer and will receive a certificate. Shortlisted entries will then be put forward to a panel where the best ideas will be celebrated at an awards event and exhibited in a public exhibition in the summer term.

One extraordinary part of the competition is that every year, university teams choose an idea from the shortlisted entries to build!

Fingers crossed and good luck, Year 9!

Mrs Goodwill, Science Department



Penwortham Girls'
High School

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