



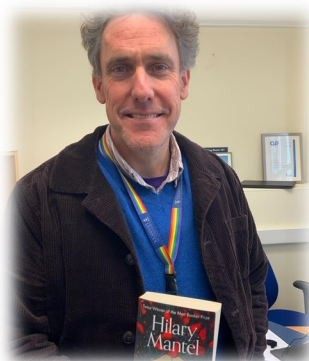
Headteachers Message

Dear Students, Parents and Friends,

Students' return to the school building coincides with many signs of spring arriving: birds are nesting, the daffodils are out and the cold, isolated winter we have all lived through seems to be drawing to a close. As a staff we are now getting excited about plans for the summer term, when we hope to be able to do many of the things that have been difficult or impossible so far this year: visiting lecturers, sport, and maybe even a school trip if we can pull things together in time. We have also been refining plans for the summer examinations and I have written about this below to ensure that everyone knows the details and understands the rationale for the plan. As well as the relief of having everyone back in school, there's much else to celebrate this month, as we look back on the achievements in the "CERN and back" challenge, excellent results from the Physics Olympiad, and our students gaining places on prestigious outreach courses at Oxford and Cambridge Universities. We are also looking forward to students taking advantage of opportunities closer to home at the University of Liverpool, with Prof. Carsten Welsch booked to deliver his Physics of Hollywood lecture next term, and some of our students conducting quantum physics experiments in the UoL Physics labs.

We believe that students are very happy with the education and the care they are receiving but if you ever have cause to be concerned about your child's welfare, or feedback that could help us, please call us on 0151 6400397 or [email me](#) or [David Hemsley](#).

Damian Haigh



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Holiday Dates

- Easter Break March 29th - April 9th
- May Day - May 3rd
- Half Term Break May 31st - June 4th

Return to School

As you can probably see from our faces in our [Return to School Video](#), there was a huge sense of relief and joy for everyone in school in getting students and staff back together again. Because of the need to conduct LFD tests on Monday morning we gave students a couple of hours of unstructured time to socialise, catch up on work and settle back into school: the sound of music and laughter in the corridors was quite special and a wonderful contrast to the quiet of the school buildings over the last few weeks. Our busy school curriculum means that, other than during lunchtimes, students don't get that much unstructured time to talk and work together. This is something we are reflecting on as we develop the curriculum and the timetable for next year.

One important thing we have learned from the lockdown lessons is that students really appreciate and benefit from the small group "supervision" sessions we introduced in January. We have therefore integrated these into our normal timetable in school and every week our students now get a 30 minute session with each teacher, in a small group. Timetabling this becomes more difficult as the school population grows, but we have some ideas about how we can make this sustainable in the long term (such as Year 13 students helping to deliver Year 12 supervisions) so that future students of ULMaS can benefit from the same small group learning opportunities.

We were particularly delighted to overhear students talking about the books that they had been reading during January and February. We plan to keep up the encouragement around reading for pleasure: it's not just enjoyable and good for our mental health, it's a really powerful form of lifelong learning which, if it becomes a habit, changes people's lives.



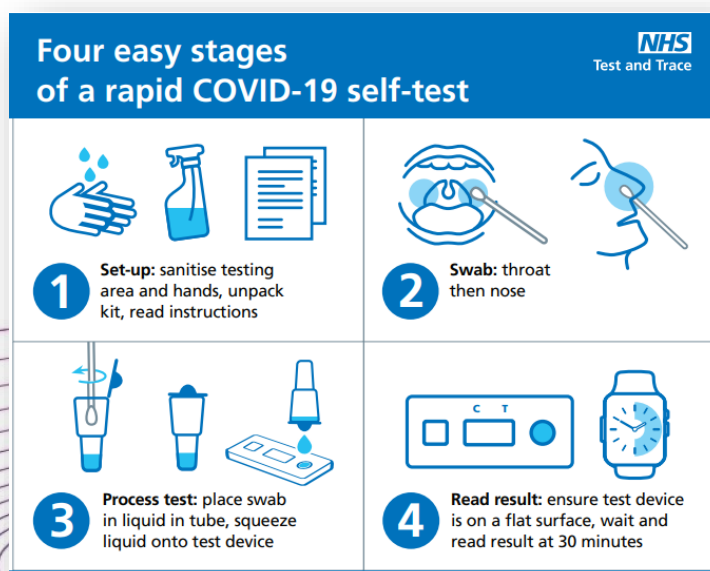
Home Testing

We were so pleased about how well students completed the tests in school. 100% of students and staff in school had completed them as asked. We now move to using home testing kits.

Parents will have received information about the home testing kits which students received last week. Please do encourage them to do these tests twice weekly, and record their results as explained in the email. How to do these tests is [here](#).

All students also received the PCR test needed to check any positive test done at home. I am really pleased with how well these systems have worked so far. We thank everyone for following the guidance. We still have not had a case whilst the school has been fully open and we hope this continues.

Several times this year people have self isolated due to themselves or family having symptoms and this has helped keep us all safe too.



Summer Exams

This week we reviewed our plans for summer examinations, which were due to take place the week immediately following the Spring Bank Half Term Holiday. Having reflected on the impact of the winter lockdown, and the disadvantages of having exams immediately after a holiday, we have decided to move the exams from the week commencing 7th June to the week commencing 14th June and the Monday of the following week. A full calendar of exam dates will be shared with students next week, and we will be working with them next term to ensure their revision plan is well structured.

These examinations serve a number of important purposes:

- They are a rehearsal for the final A-Level examinations in Year 13. Students are already familiar with our realistic rehearsals that enable us to face the challenge of exam stress honestly and together, rather than trying to hide from the reality and just hope it goes away.
- They provide the primary source of evidence for the UCAS estimated grades we will provide to universities in the autumn of Year 13. We will be following the approach of our colleagues in other Maths Schools: carefully moderating the marking of the examinations so that we are as confident as possible of the grades awarded.
- They give us a thorough and accurate measure of the learning that students have achieved so that we can make good plans to accommodate students' needs in Year 13.
- They enable students to achieve a strong sense of satisfaction in their learning at the end of a challenging year in which the majority have worked very hard in response to a demanding set of courses.

Our intention is that, with a well planned programme of preparation over the next half term, students should be able to take most of the Spring Bank Holiday Half Term holiday as a break from revision. We're conscious that many families have not been able to take holidays over the last year and will want to make the best of the Half Term break, and we are going to encourage students to do exactly that. In order to make that realistic we are shifting the exam dates further into June so that students will have a final revision week in school before taking their papers. We have also explored the possibility of moving the exams to before half term but decided this was not the best option for the following reasons:

- It doesn't allow enough time to finish the Year 12 content and revise it properly before students take the exams.
- It doesn't give students a experience of revising and sitting examinations that is sufficiently similar to that which they will have in Year 13.

British Physics Olympiad: Senior Physics Challenge



We had a high number of courageous year 12 physicists who thrived at stretching their problem solving skills by applying fundamental physical principles to novel situations. They raced against physics as well as time and these are some of our happy winners! Well done to all of you!!



Progression beyond Year 13

May is when the UCAS applications for University opens for September 2022 entry. We now have a Progression google classroom where we share opportunities for students to build up experiences, CVs and skills. Parents can ask the students to show you what is on there. We also want to make sure students do not over commit to these extra opportunities, so are keeping a careful eye on them so they do not forget to keep achievement high in their studies.

Recent opportunities taken by students include;

- Cambridge Uni Women in Maths- Kim and Hannah applied and were successful
- Oxford Uni Particle Physics- Joe and Thomas applied for a project and were successful
- ESA Raspberry Pi competition- James, Thomas, Leo, Hannah and Emma took part
- Nuffield Bursaries- We have students applying for work experience in industry or a uni
- Sutton Trust Summer School- Students have been applying for summer residentials

Lockdown CERN and back challenge

WELL DONE EVERYONE AND THANK YOU TO ANY DONORS

We are so impressed with how well our community got involved with the challenge. To CERN and back would have been great, and we did it twice with a trip there and then back to Paris as a bonus. Here are some stats from the activity:

745 different exercise activities, 41 participants, overall 37 days worth of exercise (in 36 days!).

Target- 4108km (original target was 2054km which we extended as we were ahead of the target)

Actual- 5678.38km

Amazing efforts by everyone. Here are those who went that extra mile (!) with their totals in 36 days

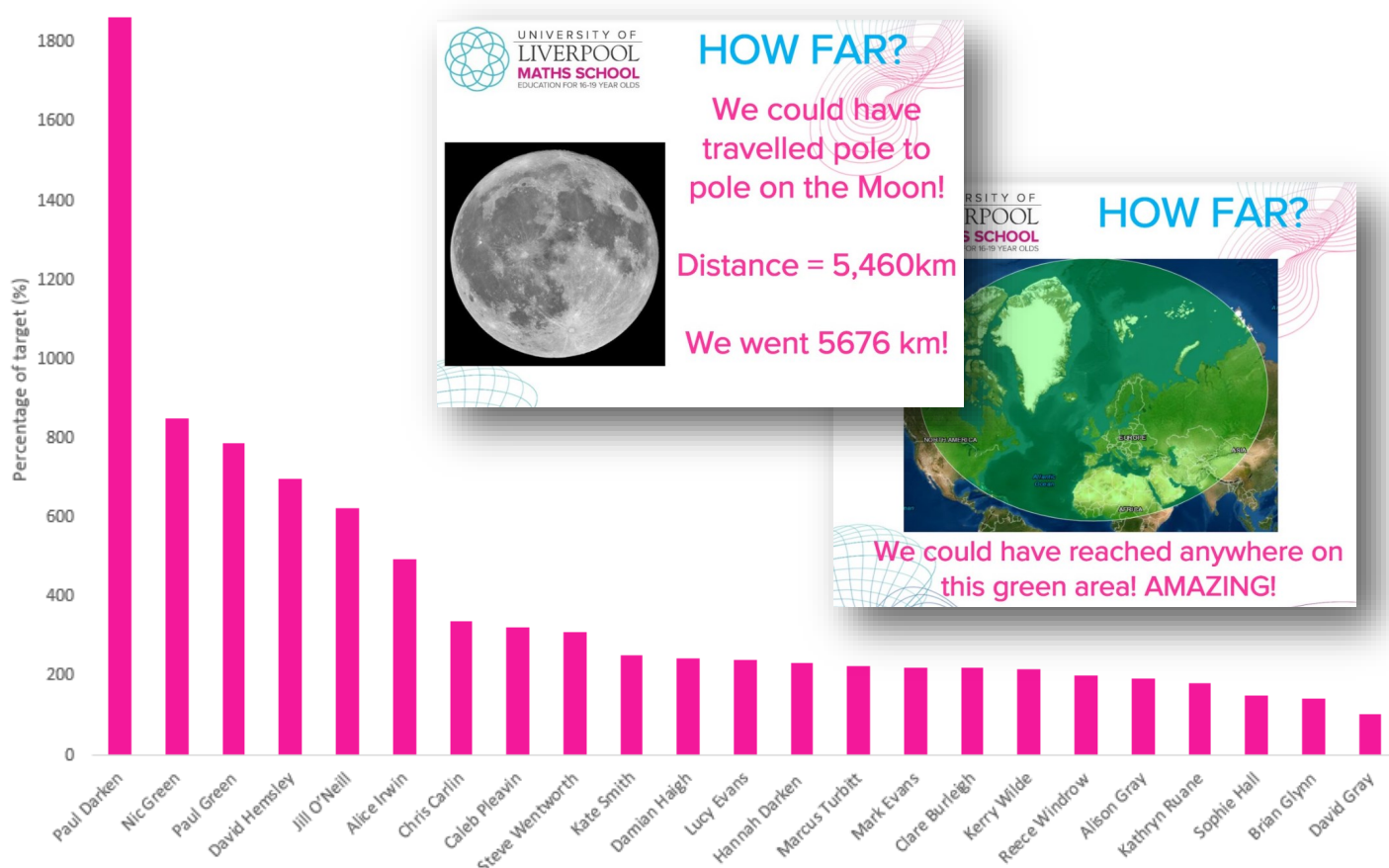
Furthest walked- 361km- Jill O'Neill (10km a day!)

Furthest cycled- 1053km- Paul Darken (all the way to CERN by himself!)

Furthest ran- 176km- Nic Green (including a 5am half marathon!)

Longest time- 57 hours- Jill O'Neill (over 2 days!)

The challenge to all was do 1 mile a day. These are the participants who achieved the target, so they are 100% or above target! :



Well done everyone, we raised £830 for Young Minds. Well above the £300 target! And if reading this makes anyone want to donate please do:

<https://www.justgiving.com/fundraising/University-of-Liverpool-Maths-School3>

YOUNGMiNDS

Aspiring Mathematicians Programme Update

Throughout the lockdown, additional activities for the AMP have been on an optional basis given that students were spending so much time on behind a computer, so we are especially proud of the effort put in by many of our students to turn up to the lunchtime sessions to keep enriching their learning through a challenging time. Many students are gearing up to make applications to elite university courses in the Autumn.

All students are now well underway with their group physics projects, with ideas being finalised since returning to school ready for the experiments themselves to take place after Easter. The students have shown real enthusiasm about their projects, and we encourage you to ask them about it so you can see for yourselves. Although originally we planned to begin the independent research projects back in January, we decided that launching them when back on the school site would be a better option that enables us to give individual guidance to students who were beginning to explore possible avenues of research that are of interest specifically to them. Since returning, students have begun thinking about the topics that interest them, and how they can be applied to other things they enjoy and are passionate about, like sports, clubs and hobbies. We want students to create worthwhile and meaningful projects which they will be motivated to carry out independently over the remainder of this academic year and throughout Year 13.

STEMMASTER

A number of students and staff are big fans of the TV show Taskmaster and with the sports hall currently unavailable to us because of covid restrictions, Head of Maths Colin has devised STEMMaster with help from Kerry. Each Friday afternoon, students work in groups to complete tasks such as creating social media puzzles, hitting a wall with a paper airplane from the greatest distance away and creating a school flag! There have already been countless examples of some really ingenious lateral thinking and it has been great to see students working together in groups within their school houses.



Easter Maths Festival - on Instagram!

We are working with Dr Katie Steckles to put together an Easter Mathematics Festival entirely on [Instagram](#). A mixture of live video interviews and presentations, interactive posts and stories this will be an online feast of mathematical treats for school students weary of Zoom lessons. By using XTX funding we're able to get brilliant mathematicians and scientists such as Katie Steckles (see her on Only Connect [here](#)), [Hana Ayoob](#) and [James Grime](#) to devote their time to producing exciting maths content for school students all over the UK. This is part of our Outreach programme but we very much hope that our students will take part in it as well: to take part, just follow us on Instagram: [@livmathsschool](#)





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EDUCATION FOR 16-19 YEAR OLDS

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Our Mission

We exist to enable children with a strong interest and high potential in the mathematical sciences to achieve global impact through careers in the mathematical sciences. By preparing them thoroughly and comprehensively for STEM degrees and significant roles both within local communities and the global community of science, technology, engineering and mathematics, our students will be equipped to become tomorrow's industrial and academic researchers, innovators who will address the world's greatest challenges, teachers who will inspire the next generation, wealth creators, entrepreneurs and problem solvers.

Outreach Update

Our online outreach courses continued to run throughout the recent lockdown, and we are very pleased that attendance remained strong despite many of our participants taking part in addition to demanding programmes of home learning put in place by their schools. What's more, two new mathematics courses aimed at Year 10 and 11 students have both enjoyed particularly strong starts, with upwards of 100 new students across the region joining in this age group to further their study beyond GCSE and enhance their algebra

skills in readiness for beginning A Levels in the autumn. Full details on all courses can be found on our website [here](#). Any student across the North West is welcome to join in, so please do feel free to pass this information on to anybody you think might be interested.



Free Online Lessons

A-Level Physics Problem Solving

Dr Aurora Gutierrez-Sosa
Head of Physics

For more information visit this link

liverpoolmathsschool.org/outreach-reaching-your-potential



Social Media

We have been posting a lot of information on Instagram, Facebook and Twitter to help get the message out that we are here to help students across the region in our Outreach, and some of these may join us in September. Please do share and pass on information to those who may be interested so we can be sure to help as many students we can in the North West. We have even started a Tik Tok page, but we are rather lost in that one so will have to see how promoting Maths goes on that.

We are also posting weekly vlogs so you can get a feel for the lessons we deliver here. These are in a playlist on youtube you can access on this link:

https://www.youtube.com/playlist?list=PLuCaH0-PTwC7_2EeBBYGK3qvHh_UcXCdM



WEEKLY VLOG

Our staff and students

Why we are glad everyone
is back in our Sixth Form

14th March 2021

liverpoolmathsschool.org

