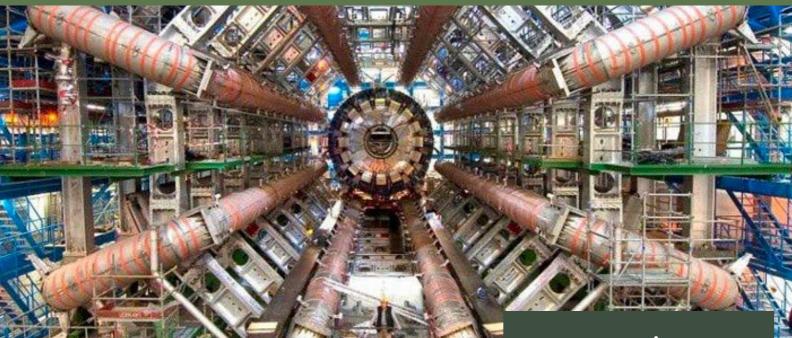
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#### **CERN VISIT 2023**

The European Organization for Nuclear Research (French: Organisation européenne pour la recherche nucléaire), known as CERN

Visiting the largest particle physics laboratory in the World. Exploring the issues CERN's scientists are trying to solve:

BIG QUESTIONS: What is the universe made out of? How does it exist?



Educational excellence for our City

A collaboration between KEVI HWGA and KEVI Aston provided a rare opportunity for our students to experience the most expensive and prestigious nuclear research centre (CERN) in the world. They learned about the world's largest particle collider that has given rise to explanations regarding anti-matter...

HWGA Science Faculty delivers a World Class Trip to CERN, Geneva with Year 13 STEM students.



The ability to seek out opportunities to receive responses to your work; to present your own views and ideas clearly and concisely; to listen to the views of others; be willing and able to work in teams; to assume a variety of roles and be able to evaluate your own ideas and contributions.

COLLABORATIVE

and new particles that existed immediately after the Big Bang. Students were attentive to the lectures on medical physics application which inflamed curiosity and triggered an array of questions A day of experiments included: cloud chamber experiments and superconducting magnets making levitating magnets were one of the many highlights of this trip. Students worked together and formed new friendships with students from the other King Edward Foundation School. Vast amounts of information were digested including fun facts such as Tim-Berner-Lee, a British scientist at CERN, who invented the World Wide Web. We explored Geneva where they did very well to use their language skills and meet the locals, rode the transport independently, indulged in ice- cream and took pleasure in exploring the city and sight-seeing on a glorious sunny day. The following day was a tour of the United Nations building - listening in and watching a live conference taking place! Students were in awe of the grandeur of the interiors of the conference rooms and the donation exhibits from the countries that contribute towards it.

A trip to the capital city of Switzerland, Bern Einstein Museum was the start of the next itinerary, where students found out about Albert Einstein's life, relationships, and theories as well as a history of inventions by others; displayed in a timeline snaked route. On the same day they travelled to Lauterbrunnen to view the glacial waterfalls and Interlaken where they explored a holiday resort around the tranquil turquoise lakes between the mountains. Here they admired the breath-taking scenery which they recognised in some famous Bollywood movies and visited the honorary statue of the director – Yash Chopra.

The final day was sub-zero temperatures and snow at Mont Blanc - the highest mountain in the Western Alps. Here the students travelled up the peak, via cable car, experienced amazing views and took their memories of a life-time photographs. After their descent they explored Chamonix - a world-class ski resort and warmed up with some delicious hot halal Turkish kebabs before returning to the hotel for a pit-stop to freshen up for an evening of bowling and pizza. The final day: we left early to start the long journey back to the UK which was broken up with half a day in Paris where the sun shone brightly while they cruised the river Seine and took in the sites of the city such as the Notre Dame.

After some selfies with the Eiffel Tower, we had our final meal in France and continued our journey back. The student reviews were overwhelmingly positive, many saying it was a once in a lifetime trip. The social skills, cultural experience and independence has opened their eyes up to a wider perspective of the world around them and the opportunities beyond. It was also pleasing to see that they had embraced their embedded HPL skills: collaboration, big picture thinking, originality, seeing alternative perspectives and intellectual confidence in their behaviours and communication during their trip experiences.



14 Oct

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#### **Student Reviews**

There was a wide range of activities on the trip – there was something for everyone, so if the activity the day was based around wasn't for us then chances were that another day's activities would be more enjoyable. All the days had an educational side to them, so as well as being fun, there was also some knowledge being gained.

Dinner was also very diverse with different cuisines being offered every night.

Every day was something new and different and it didn't bore us even if you didn't do the subjects that associated w the trip it was still intriguing and enriching with knowledge. The journey there was long but rewarding as we used the coach every day on our journey to various places across Switzerland and France. All the restaurants were nice and accommodating and tried their best although they didn't understand English very well I felt like my allergies were very well catered too even if there was confusion at first. The hotel was comfortable, and it had sufficient space, it was nice having everyone in rooms close to each other so we could communicate from our balconies. The activities were academically interesting in ways which involved many subjects such as many types of engineering clearly from the lectures on physics and tour of the plant and the tokomak, humanities subjects because of the United Nations tour and talk on human rights we got to listen to and even the architecture in the Einstein museum and plasma membrane centre being designed a certain way being explained We had a good amount of free time I would say it wasn't all education we were able to buy souvenirs almost everywhere and take pictures where we could, it felt like a year group at the end as if we'd been together for a long time. I think a lot of new friendships were formed as well as a lot of knowledge learnt and it had the right amount of fun to work ratio. All the fre time activities and the views were incredible and even thought it was an educational trip it didn't feel dull for a second. I didn't want it to end, and it was one of the best experiences of my school years for sure and I definitely don't regret it one bit and I recommend everyone if they can go to it to definitely go. Kind Regards,

General activities were varied and had an educational influence. Food cuisine for dinner were good as we tried a range however lunch we had only options of kebabs that were provided and sold in this area. Timings for activity and sleep were good had enough sleep. Breaks throughout the journeys were also provided.

As someone who was full of doubts before the trip, I can say with complete

confidence I'm so glad I pursued and went outside of my comfort zone for this experience. It has honestly been one of the greatest experiences I've ever had as it helped build important life skills and independence within myself. It was also incredibly fun and eye opening to the world's issues. "Cern" is too narrow of a title in my opinion for this as we got to experience numerous different landmarks and it was the perfect experience to build key skills. I would strongly recommend this trip to all the coming years as nothing in my opinion has helped nurture that confidence and character growth in me than this. Of course, there were some minor critiques but honestly, I feel like they were catered for perfectly, so much that I don't even think it's worth mentioning. Genuinely I would like to thank Dr Shahid and Mr Kumar for organising such a wonderful trip for us all. I'm incredibly grateful to be able to have experienced it and it would be a big loss if next year groups missed out on this.



I have thoroughly enjoyed this trip and feel like I have been able to build up new skills whilst also developing the ones that I currently possess. I have been able to experience once in a lifetime opportunities that were genuinely of interest. Collaborating with the Aston school has also been very enjoyable. Visiting the United Nations has personally been the highlight of the trip, giving me an insight into something I'd potentially be interested in the future.

Amanda Octhere, student of Law, Psychology and Religious Studies

#### **Student Reviews**

Throughout the entirety of the Switzerland trip I found myself thoroughly entertained and occupied with the activities provided for me. The event I enjoyed the most was the tour of the UN, I found it intriguing to witness how the world comes together to discuss humanitarian matters over solely political ones. The boat ride in Paris presented for me an opportunity to appreciate the scenery and create more memories with my friends. The plasma factory definitely broadened my understanding of energy as it enticed me in the understanding of particle matter and the purpose behind conserving energy. Furthermore, I was able to create a myriad of memories with not only my friends, but also with students from KEA as we worked in collaboration. Spending my birthday here too will also be an experience I'll always remember, being at the top of Mont Blanc and taking in the beauty of the surroundings isnt something a person gets to do every day, so it will inevitably be something I look back on. I am very grateful for this opportunity and for the teachers who took great care of everything and ensured that we were safe and happy.

I am grateful for this opportunity to visit Switzerland. I have gained and developed various skills throughout this trip including communication and networking skills. This has been a once in a lifetime experience which I have thoroughly enjoyed and would recommend to everyone. A part of the experience which stood out to me was visiting the United Nations and learning about the history of the organisation and how world affairs are handled. Overall, it was a great experience.



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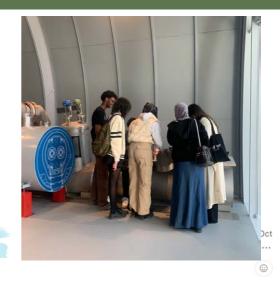
Day 1- interesting tour and educationally beneficial. Chinese buffet was nice. Maybe more free time

Day 2- UN tour was really interesting and exploring the town was fun, lots of shops. Indian restaurant was okay

Day 3- Einstein museum was very good but probably too much time there. Interlaken was beautiful and more free time would've been nice

Day 4- mount blanc was amazing- lots of stuff to do when u get there. Expensive but worth it. Chamonix village was nice to walk around and the bowling was really fun

Day 5- Paris boat cruise was so nice with the views. More time in Paris would've been nice to have more free time too. The Indian restaurant was good and overall the trip was a really fun experience and I'd definitely recommend it



The 2023 october trip was a wonderful experience, in which I was able to visit many places such as The United Nations. It was a well planned trip. As a geography student I enjoyed our visit to Mt Blanc and Interlaken. The staff members did a great job supervising the whole trip. Sent from <u>Outlook for iOS</u>

14 Oct ...

Providing travelling opportunities combined with educational backgrounds, we were able to see real life applications of content theory learned in our textbooks. A key place was CERN, where learning about applications of physics was immersive and a surreal experience. Where walls and rooms would be designed and enriched with information and sensory methods of learning, making it enjoyable and memorable. Another area was also the United Nations. We even got to spectate a human rights discussion. With technology adapted to suit different languages and countries. While these places are highly educational, their mixture of the arts makes it extraordinary. Within the United nations was art pieces with deep meanings. This trip was an experience I could never replicate, especially with the opportunity provided to be immersed alongside my classmates.



the initial experience of the Switzerland trip was a once in a lifetime experience for me. Just receiving the opportunity alone was unbelievable; it's another thing to be living in the experience. The way everything had been organised and scheduled in place left no concerns or doubts making the journey smooth throughout. The interactive activities and gaining knowledge of things I hadn't a clue about gave me a much wider perspective on the world and how technology has evolved. Even bonding with the other King Edward branch has allowed me to form new friendships as well as transfer skills such as teamwork. Considering I do humanities subjects only, this trip was a wonderful opportunity to explore different fields as well as make links. If I could do it all over again, I 100% would.

#### **Student Reviews**

Visiting CERN (the European Organisation for Nuclear Research) in Switzerland was an opportunity of a lifetime. The facility's cutting edge research into particle is fascinating. The guided tour provided great insight into the world of Science and the experiments conducted there. It made me appreciate the collaborative efforts of scientists from around the world to unlock the mysteries of the universe.

My trip to the United Nations office in Geneva was an eye-opening experience. The city itself is beautiful, nestled by Lake Geneva and surrounded by mountains. The UN office is situated in a picturesque location. The guided tour offered a glimpse into the crucial work being done in areas like human rights, humanitarian aid, and disarmament. Observing the Assembly Hall and Conference Halls where diplomatic negotiations take place was astonishing, understanding how discussions and agreements take place. The visit emphasized the global impact of the UN's efforts and the importance of diplomacy in resolving international conflicts.

I headed to Interlaken, which was a complete contrast with its breathtaking alpine scenery. The town nestled between different lakes and various adventures, such as hiking and paragliding. The views of the surrounding mountains, including the Jungfrau, were simply spectacular. Interlaken also served as a gateway to explore the Swiss Alps.

Travelling to Mont Blanc was an unforgettable adventure. This iconic mountain, situated in the French Alps, is the highest peak. The journey started in Chamonix, a charming alpine town, where I took a cable car to ascend the mountain, it was quite a thrilling and electrifying ride in my opinion. The panoramic views showed vast glaciers and towering peaks as far as the eye could see.

Visiting the Eiffel Tower in Paris was a dream come true. The iconic structure is even more impressive in person than in photos. As I approached, the sheer size and intricate ironwork left me shocked. Taking the boat towards it going round made me marvel in awe at the beauty. The River, Cathedral, and the Louvre were all visible from above.

This trip has been a pleasant and memorable adventure, an eyeopening experience, that'll I'll never forget, if I was given this opportunity, I would pay a visit again. Thanks to my school and the teachers' efforts who were involved making this trip, I was able to explore, learn and enjoy the wonders of the world.





This educational trip was an amazing experience. It taught me new things and allowed me to experience things I'd never thought off. Such as visiting the UN and Mount Blanc.

This trip was organised, and I would recommend going.

Having more free time would have made things even better. And food wise it was good



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The accomodation was good. I really enjoyed going to mont blanc, taking the cable car. Having free time of our own to explore was nice. Overall, despite the trip being tiring it was a new and satisfying experience.

#### **Student Reviews**





It was a great opportunity and an experience that I'll never get again so it was

entertainment. We learnt about the physics behind the hydrogen collider based in Switzerland, went to the highest point on Mont Blanc, got to listen in on a conference at the United Nations, explored Interlaken's lakes and rivers, learnt about the life of Einstein and even got to go bowling. Given the chance I'd

definitely worth being able to go. It was a mix of both education and

This trip has been one of the best experience that i have endured let me elaborate. From day 1 journey was so exciting as it is such a new environment knowing you will be exploring. Onwards throughout the days there was plentiful activities to do waking up early in the morning getting ready to go on an adventure is a dream come true for me. Climbing mountains, visiting the UN and CERN is something i would never have thought of doing but it added so much to my knowledge of science and the greater thinking that is really required.

I feel more confident and way more passionate about my a-level subjects i feel as if this was the push that I required. The UN motivated me to always speak your mind and how deeper the unity of countries of the world separate into. I have achieved independency and a strong determination that was enhanced by the mont blanc mountain as i saw the world in a much more different view then i did when i was on ground level. A sense of realisation has been gained by this heartfelt journey and immersing in different cultures and understanding its intricacy opened both my eyes.

I have gained this strive to push harder for my education knowing that there is so much more to know about this world and how it all relates to science but in such a beautiful way that you must experience it for yourself. I deeply appreciate this rewarding, once in a lifetime trip that will live on in my memories, as a picture cannot simply describe the true happiness i felt.

First of all, I would like to say thank you so much for allowing me to go on the trip, because if I didn't go then I would have many regrets seeing and learning so much about. For example, how fusion is made with plasma and how it happened. Also, one of my favourite moments of the trip is that sightseeing amazing creations such as Mount Blanc, Lauterbrunnen and Interlaken. Finally, without travelling with my family members has taught me a lot, like the experience and it was good to get away from a lot of stress. I rate the trip 10/10. Many thanks again for letting me go on the trip.

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definitely go again. This is my review miss, thank you 😊.

This trip was very educational as we visited many places such as the United Nations where we were able to listen to a live conference. We also had been to the Einstein museum where we were able to view his whole life and many other points in history from the Egyptians to the Persian empire. As well as this we had fun exploring the Cities of Geneva and Interlaken, climbing up a mountain as well as enjoying the views on the cable car.

14 Oct ... 0

#### **Student Wellbeing**

Food ranging from familiar pizza, icecream and halal Turkish kebabs were frequent for lunches and 'family' sit down meals in the evening explored evening cuisine ranging from French to Chinese.

This business class apartment hotel in France was spacious, clean and provided our continental breakfast.







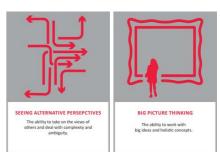




#### CERN, Geneva, Switzerland

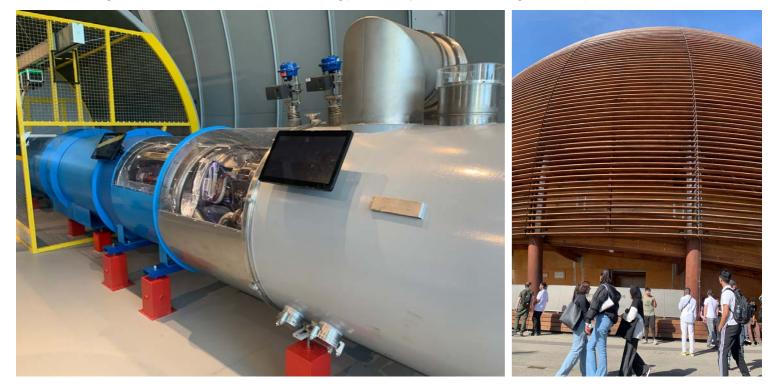
Underground, the Large Hadron Collider (LHC) is the world's largest and most powerful particle accelerator.

It first started up on 10 September 2008, and remains the latest addition to CERN's accelerator complex.



#### CERN, Geneva, Switzerland

The LHC consists of a 27-kilometre ring of superconducting magnets with a number of accelerating structures to boost the energy of the particles along the way.



#### THE GLOBE OF SCIENCE AND INNOVATION





#### NUCLEAR RESEARCH Exhibition





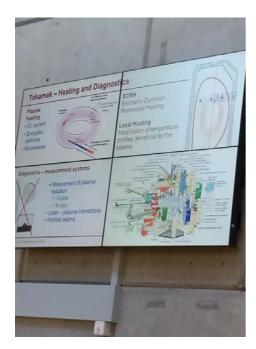














Particle Physics

Discussing, evaluating and concluding the results





# QUANTUM TENNIS



Medical Physics Lecture

Getting ready for university

How latest technology on x-rays work

Radiotherapy



Visit to the United Nations

The broken chair

Symbolises opposition to landmines and cluster bombs and acts as a reminder to politicians and diplomats.







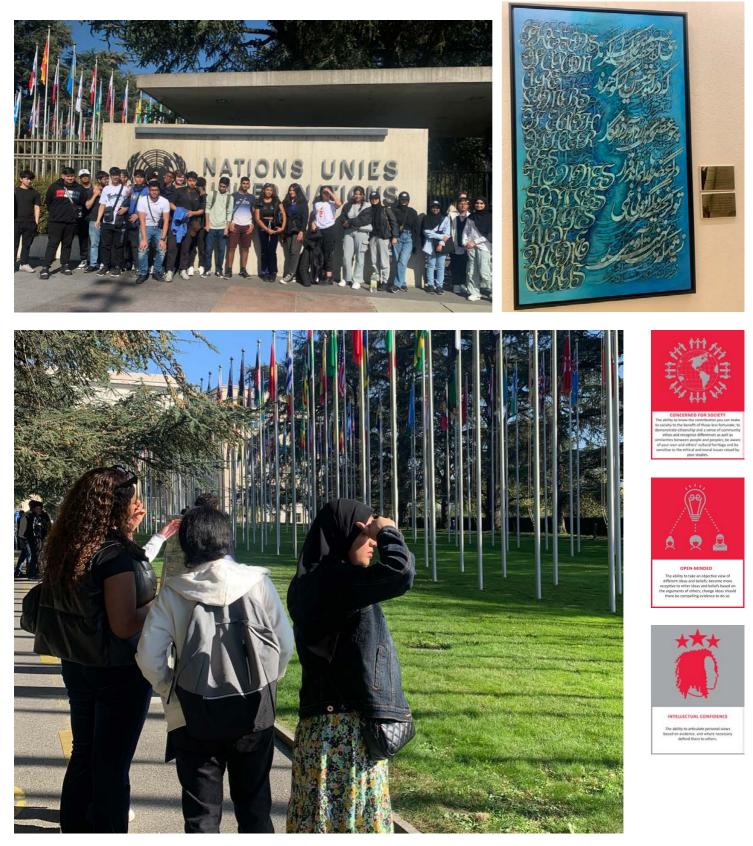
CONCERNED FOR SOCIETY The ability to know the contribution year care male to society to the benefit of those less fortunate; to demonstrate ditembly and a sense of community artiss and receipsian differences as well as jumilarises between people and peoplex; be awart of your own and others' chuttan thertage and be sensitive to the ethical and moral issues raised by your studies.







Visit to the United Nations



#### www.hwga.org.uk

# HWGA SCIENCE









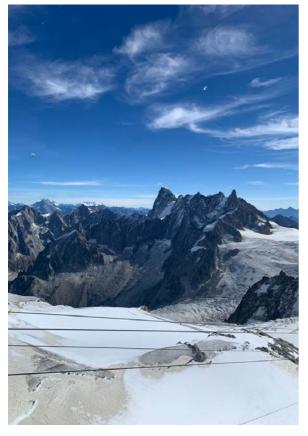






#### Interlaken, Switzerland











COLLABORATIVE The ability to seek out opportunities to receive responses to your work; to present your own wews and ideas clearly and concisely; to listen to the views of charge and abit to work in team; to assume a variety of roles and be abile to evaluate your own ideas and contributions.









CONFIDENT The ability to develop a belief in your knowledge understanding and action: recognise when you need to change your beliefs based upon addition information or the arguments of others; deal wit new challenges and situations, including when th



The ability to take an objective view of different ideas and beliefs; become more receptive to other ideas and beliefs based on the arguments of others; change ideas should there be compelling evidence to do so. Paris, France

On the way home back to the UK

