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Snappy first sentences can be quite impactful A universe without Mathematics and Physics would not exist. The fundamental interactions... My enthusiasm for Mathematics and Physics comes from the fact that they are both used to further our understanding of the universe and have applications in all other areas of science. My main area of interest in Physics is particle physics as this tells us how fundamental parts of our universe interact with each other. I aim The newer fields such as X, Y, Z also excite me as they to improve my knowledge of science in fields such as particle physics, plasma physics, and nuclear fusion as these are new areas of physics and, with research, could lead to great improvements in our knowledge of how the world works. I would like to learn more about plasma and fusion as further research in these fields could have practical applications capable of revolutionising the ways in which we produce electricity, making production far more efficient, safe and less damaging to the world. Behind all revolutionary Physics is mathematical basis. I thoroughly enjoy this process of maximising the In Mathematics, I enjoy learning new, more efficient methods of answering questions and then applying them to efficiency of mathematical methods and then applying this theory to physical concepts.
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underlying Mathematics, and that applying new mathematical knowledge to solve real world issues is one of the a variety of branches of most important reasons for me to study both subjects. In school, I am learning modules from all branches of Mathematics and have started independently teaching myself an additional Further Mathematics module to expand my knowledge of mathematics beyond my school's selection of modules. As well as this, I am attending repetition of 'enjoy' lessons in preparation for a STEP Mathematics exam. I enjoy both the challenges associated with teaching myself more maths for the additional module, and the ways in which STEP questions require me to apply my AS beyond syllabus demands. level mathematics in ways not tested by the syllabus.

I am interested in the extent to which Physics can apply Mathematics to problems in the real world, and use quite a long sentence observations to make discoveries based on the Mathematics behind experiments that were performed, such as

observations to make discoveries based on the Mathematics behind experiments that were performed, such as the size of the nucleus of an atom, as discovered in Rutherford's scattering experiment. Outside of lessons, I have travelled to CERN to visit the Large Hadron Collider in order to learn about the experiments performed there, and have attended a presentation at Newcastle University about the applications of Mathematics in areas very cool! such as game shows. I have also received a Bronze award in the UKMT Senior challenge. I completed the questions in the Cambridge Chemistry challenge and completed a written test as part of the challenge, achieving a copper award.

Furthermore, I have helped my school in Year 7 and Sixth form open days, answering parents' questions and dedication talking to prospective pupils about Mathematics, Physics and Chemistry. Outside of school, I am a black belt in communication, confidence

Taekwondo and have previously coached people who were new to the sport. I have also been a member of the Put skills acquired sentence ('Being part of the ATC...') here Air Training Corps, where I completed the Bronze Duke of Edinburgh award. Whilst planning for the Duke of Mention soft skills acquired here Edinburgh award, I was responsible for organising the route that would be taken, making sure that we would finish on time and that we would walk the correct distance, and planning the routes that would be taken should

something go wrong on the expedition. I also helped organise fundraising events such as Remembrance Day coffee mornings. Being a part of the ATC taught me leadership skills, punctuality and the ability to organise myself and a group. I have also taught myself guitar and bass, and currently play as part of a band with friends.

After university, I would like to continue learning Physics, studying either fusion or particle physics, and look forward to being a part of future research.

Concluding sentence could convey more passion and doesn't have to be about future prospects

Thread soft skills into the extracurricular paragraph frequently rather than adding them all at the end. I've added some skill ideas for you as suggestions.