

## General notes about personal statements

- Every UCAS application requires a personal statement. However, they are usually not as relevant as your school qualifications. Think of the process of writing a personal statement as an opportunity to reflect on our plans for the subject(s) you want to study at university and why.
- Revise your statement a few times. At the later revisions, think of what kind of information you would like to give Admissions teams who are trying to evaluate whether you would do well on the course you are applying for.
- Applicants often ask how to write a statement if they are also applying for Maths, Economics or Data Science courses as part of a mixed UCAS choices portfolio. We understand the issue and we are happy with personal statements tailored to other courses as long as they include enough evidence that you are likely to enjoy mathematical subjects and problem solving at university level.

## What could be covered in the statement?

- Why do you like mathematics, statistics, and/or data science? How do you engage with these subjects?
- Do you like mathematics for its own sake? Or are you more excited about applications of mathematics to the “real world”?
- What other subjects in school do you like and why? Are they connected with mathematics? Or are they complementary to it?
- Where does your motivation and inspiration for learning come from? Do you read books? What other resources do you use?
- In case you have any achievements in competitions, please mentioned these. That can be specific to mathematics, but it can be anything else, too.
- Equally, if you have other experiences, which are relevant for demonstrating can take responsibility or you are enthusiastic about something, do mention that here.
- In case you were ill or there are any other reasons for underperformance in certain phases or subjects, the statement provides room to explain this, but do so briefly.
- Have you lived abroad? How did you experience life in a different country, what is similar and what is different from the UK?

## Material to engage with mathematical sciences

We would like to know what it is that you like about mathematics and what kind of mathematical problems and areas you have explored. It is informative for you to hear your thoughts on a piece of mathematics. Resources are only a mouse click away. Through the contributions of both amateur and professional mathematicians from all around the world on Wikipedia, YouTube and other websites you can easily find inspiring food for thought.

Pick a more specific mathematical topic and explain why you like it. Below are some starting points.

Buffon's needle problem

<https://www.youtube.com/watch?v=szUH1rzwbAw>

<https://www.youtube.com/watch?v=Vws1jvMbs64>

<http://datagenetics.com/blog/may42015/index.html>

[https://en.wikipedia.org/wiki/Buffon%27s\\_needle\\_problem](https://en.wikipedia.org/wiki/Buffon%27s_needle_problem)

Seven bridges of Königsberg

<https://wild.maths.org/bridges-königsberg-0>

<https://youtu.be/elb1cz06Uwl>

<https://www.maa.org/press/periodicals/convergence/leonard-eulers-solution-to-the-königsberg-bridge-problem>

Simpson's paradox

<https://youtu.be/ebEkn-BiW5k>

<https://youtu.be/t-Ci3FosqZs>

[https://en.wikipedia.org/wiki/Simpson%27s\\_paradox](https://en.wikipedia.org/wiki/Simpson%27s_paradox)

Gödel's incompleteness theorem

<https://youtu.be/YrKLy4VN-7k>

[https://en.wikipedia.org/wiki/Gödel%27s\\_incompleteness\\_theorems](https://en.wikipedia.org/wiki/Gödel%27s_incompleteness_theorems)

There are some excellent YouTube channels about mathematics and statistics. Below are some random samples of what you can find there.

3blue1brown: What is calculus?

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

3blue1brown: Who care about topology?

<https://www.youtube.com/watch?v=AmgkSdhK4K8>

Numberphile:

Hannah Frey sharing a cake <https://www.youtube.com/watch?v=kaMKInkV7Vs>

Holly Krieger about the Mandelbrot set <https://www.youtube.com/watch?v=NGMRB4O922I>

Ben Sparks about a beautiful trigonometry animation <https://youtu.be/snHKEpCv0Hk>

Tadashi Tokieda about strange spinning tubes <https://youtu.be/JuuYFt8bahE>

James Grime about data visualisation and the beauty of pi <https://youtu.be/NPoj8lk9Fo4>

Also, check out our webpages for links to Open Day Puzzles and other resources:

<https://warwick.ac.uk/fac/sci/statistics/courses/>