

Super Curriculum

MATHEMATICS

Super curricular activities are those that extend your knowledge of the curriculum outside of the traditional learning environment. They take the subjects you study in the classroom beyond those which your teacher has taught you or what you've done for home learning. For example, you may go into more depth on something you picked up in the classroom or learn about a new topic altogether. The super curriculum encourages a love of learning and develops a thirst for knowledge. It allows you to make complex connections between aspects of your studied subjects and utilise your cultural capital to understand new areas. For example, your understanding of Tsarist Russia may provide further context to the development of the Imperial Russian Ballet in Dance history. Without this extra exposure to learning, we simply cannot fully understand our chosen course.

These activities are normally in the form of extra reading, but they can take many other forms, like watching videos online, downloading podcasts, attending lectures, visiting museums or entering academic competitions. Engaging in super curricular activities will help you develop a love for your favourite subject or subjects. In this booklet, there are a range of activities, suggested by your teachers for each subject on offer at Key Stage 5.

They are by no means exhaustive lists but should give an idea where to begin. I would encourage you to share ideas and opportunities you come across with your teachers so that, over time, the recommended activities in this booklet can grow. As educators, we are consistently developing our knowledge too, so please feel free to engage your teachers in a discussion of what you find! Don't forget that you can also complete MOOC's in many fascinating topics.

In the future, employers or universities will be interested to hear about what super curricular activities you have engaged in; they will be interested in what you have learnt and impressed by your efforts. Students often comment on how difficult personal statements are to write and the super curriculum allows for a candidate to elaborate on their suitability for courses/ roles.

I wish you well in your pursuit of super curricular activities and would love to hear all about them!

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Read	<ul style="list-style-type: none">• The Pleasures of counting by T.W. Korner• The Book of numbers by John H. Conway and Ricard K. Guy• Calculus Gems by G. F. Simmons• The Mathematical Experience by P. J. Davis and R. Hersch• The Shape of space by Jeffrey R. Weeks• Mathematics: A very short introduction by Timothy Gowers• Concepts of Modern Mathematics by Ian Stewart• What is Mathematics? By Richard Courant and Herbert Robbins• The Music of the Primes: Why an Unsolved Problem in Mathematical Matters by Marcus du Sautoy• Indra's Pearls: The vision of Felix Klein by David Mumford
Click	<ul style="list-style-type: none">• www.maths.cam.ac.uk/undergrad/admissions/• www.stepmathematics.org.uk• www.nrich.maths.org.uk• www.priorexams.com
Visit	<ul style="list-style-type: none">• University of Birmingham Popular Maths lectures
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Complete	<ul style="list-style-type: none">• United Kingdom Mathematics Trust - https://www.ukmt.org.uk/• FMSP/UKMT Senior Team Mathematics Challenge - http://furthermaths.org.uk/stmchallenge• Problem Solving Matters - https://www.maths.ox.ac.uk/study-here/undergraduate-study/outreach/problem-solving-matters-1