

Bosworth Academy Super Curriculum



Mathematics

Collaboration	Citizenship
Communication	Critical Thinking
Creativity	Character

KS3 MATHEMATICS SUPER CURRICULUM YEAR 8

 <p>Alex's Adventures in Numberland, by Alex Bellos an exhilarating cocktail of history, reportage and mathematical proofs that will leave you awestruck</p>	 <p>The Colossal Book of Short Puzzles and Problems, by Martin Gardner collection of short and inventive problems by popular mathematics and science writer.</p>	 <p>King's College London – visit KCL site and attempt one of the weekly challenge competitions – https://www.kcl.ac.uk/mathsschool/Weekly-Maths-Challenge/Weekly-maths-challenge.aspx</p>
 <p>Wild Maths – explore, imagine, experiment, create! – try and explore one of the games from the Dr Frost website: http://drfrostmaths.com</p>	 <p>Design a house or a school, producing full scale drawing, calculating area and showing all the relevant measurements. Complete the task by creating Paper or cardboard model.</p>	 <p>Beautiful Equations (2010) – BBC documentary featuring Stephen Hawkins and Matthew Collins (maths and art together) https://www.youtube.com/watch?v=059xlxwb3tM</p>
 <p>Bletchley Park – visit Blechley Park and explore the world of coding and maths https://www.bletchleypark.org.uk/visit-us</p>	 <p>Design models of prisms and pyramids scaled drawings, showing nets of all the relevant measurements. Complete the task by creating Paper or cardboard model</p>	 <p>Watch Movie based on mathematician Alan Turing's involvement in code breaking of Enigma – 'The Imagination Games' directed by Morten Tyldum</p>
 <p>Listen to maths documentary podcast – Relatively Prime, by Samuel Hansen – http://relprime.com/</p>	 <p>Watch biography based drama on Srinivasa Ramanujan Indian Mathematician in Trinity College, England – 'The Man Who Knew Infinity' directed by Matthew Brown- and present the key facts to the class.</p>  <p>Formulae Rap – use it and share with class , a tool to memorise area and volumes formulae of different shapes – https://www.youtube.com/watch?v=-z4SUypJZxo</p>	 <p>Science Museum – Maths Gallery - visit newly open section of Science Museum involving various aspects of Maths http://www.sciencemuseum.org.uk/visitmuseum/plan_your_visit/exhibitions/mathematics?keywords=mathematics</p>

 <p>Beautiful Equations (2010) – BBC documentary featuring Stephen Hawkins and Matthew Collins (maths and art together) https://www.youtube.com/watch?v=059xlxb3tM1¹</p>	 <p>Listen to Travels in a Mathematical World podcast, by Peter Rowlett - featuring mathematicians talking about their work as well as features on maths history and maths news; http://www.travelsinamathematical</p>	 <p>Watch Movie based on mathematician Alan Turing's involvement in code breaking of Enigma – 'The Imagination Games' directed by Morten Tyldum</p>
<p>Unit 1 - Percentages</p>	<p>Unit 2 - ²</p>	<p>Unit 3 - Conversions and</p>
<p>Unit 4 - Scale Drawings and Maps</p>	<p>Unit 5 - Area and Perimeter</p> <ol style="list-style-type: none"> 1) Watch the TED talk and have a go at the challenge: https://www.ted.com/talks/gordon_hamilton_can_you_solve_the_mondrian_squares_riddle 2) Have a go at this TED talk activity: https://www.ted.com/talks/dan_finkel_can_you_solve_the_secret_werewolf_riddle 3) Have a go at this TED talk activity: https://www.ted.com/talks/alex_gendler_can_you_solve_the_alice_in_wonderland_riddle 4) 	<p>Unit 6 - Circumference and Area of Circle</p> <ol style="list-style-type: none"> 1) Watch the TED talk about the life of pi: https://www.ted.com/talks/reynaldo_lopes_the_infinite_life_of_pi#t-189966
<p>Unit 7 - Pythagoras Theorem</p> <ol style="list-style-type: none"> 1) Area of tilted squares: https://nrich.maths.org/polygonrings 2) 	<p>Unit 8 - Surface Area and Volume</p> <ol style="list-style-type: none"> 1) Watch the TED talk and have a go at the challenge: https://www.ted.com/talks/daniel_finkel_can_you_solve_the_alien_probe_riddle#t-98288 2) 	<p>Unit 9 -</p>
<p>Unit 10 -</p>	<p>Unit 11 - Probability</p>	

¹ U – Unity C – Curiosity G – Growth S – Service
