















# Bosworth Academy Super Curriculum



## Science

 Collaboration	 Citizenship
 Communication	 Critical Thinking
 Creativity	 Character













**KS3 SCIENCE SUPER CURRICULUM**  
**YEAR 7: B1 Cells, C1 Particles, P1 Forces**

 <p>Make a youtube video showing your own particle models of solids, liquids and gases. Make sure you describe the differences between them.</p>	 <p>Read this <a href="#">information</a> about Sir Isaac Newton. What lasting impact do his discoveries have in today's world?</p>	 <p>Read this <a href="#">webpage</a> about cells. Which fact was the most interesting to you?</p>
 <p>Watch this <a href="#">video</a> about organic food and decide whether eating organic food is better for you.</p>	 <p>Take an adult you know to a park with a seesaw. Explain to the adult why their end of the seesaw goes down when they sit on it and try to explain how they can make it balance.</p>	 <p>'Animals are better than plants' Create an argument that plants are better than animals with at least 3 detailed points.</p>
 <p>'Science would not exist without humans'. What do you think about this statement? Can you think of some logical argument to support your point of view?</p>	 <p>William Scoresby has his birthday in October. Find out about his life and how it links to your chemistry topic. Can you write a eulogy for him?</p>	 <p><a href="#">These</a> are some of the greatest solid structures in the world. Which one would you most like to visit and why?</p>
 <p>Design an experiment at home to determine the 'squashest' fruit. Share your findings with your family.</p>	 <p>With a friend, design a mime/model/poster to explain how water is transported through a plant.</p>	 <p>Write a story about the titanic sinking from the point of view of the iceberg. Try to include some information about why icebergs float.</p>

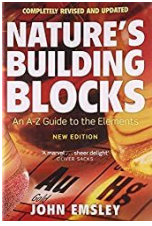
Reading and watching suggestions to develop your learning of this topic

<p>Disney - Flubber U</p> 	<p>Titanic - James Cameron</p> 	<p>Disney Pixar - The Incredibles</p> 
<p>What if you had animal teeth - Sandra Markle</p> 	<p>Little Shop of Horrors PG</p> 	<p>The reason for plants - Stephen Buchman</p> 
<p>The Water Babies by Charles Kingsley</p> 	<p>Aquaman 12A</p> 	<p>Frozen PG</p> 
<p>Enders Game - Orson Scott Card</p> 	<p>Newton and His Falling Apple - Kjartan Poskitt</p> 	<p>A Silly Science Experiment - Timothy Roland</p> 

**KS3 SCIENCE SUPER CURRICULUM**  
**YEAR 7: B2 Bodily Functions, C2 Elements & P2 Sound**













 <p>Wear ear plugs for a day to see what your experiences are. Share your experiences on a vlog.</p>	 <p>Watch this <a href="#">video</a> about the history of atomic theory. What made scientists change their ideas over time?</p>	 <p>Devise a method to transform the symbol equations of chemicals into chemical formula.</p>
 <p>The tagline of the Alien movie released in 1979 is 'In space no one can hear you scream'. Try to explain to someone why this is.</p>	 <p>Take a <a href="#">look</a> at these healthy and smoke damaged lungs. Try to link the difference you see between them to the drugs contained in cigarettes.</p>	 <p>Work with a friend/group of friends to remember all the bones of the human body. Make a video showing you reciting them from memory.</p>
 <p>Are ultrasound scans safe for pregnant mothers and their foetus?          What evidence can you find to support your conclusion?          Is the evidence reliable?          How do you know it is reliable?</p>	 <p>Watch this <a href="#">video</a> about a man with severe skeletal deformities and his road to standing upright. What feelings do you think the patient, his mother and the surgeon have through his long road to standing upright?</p>	 <p>Can you make a model digestive system using a pair of tights and a broken up biscuit?</p>
 <p>It is National Stem week from 5th-14th March. Make a poster showing all the events happening in the local area and post it up in the Science department.</p>	 <p>Can you design a gentle keep fit program for a local residential care home? Ideally you should concentrate on increasing their muscle strength and range of movement.</p>	 <p>Watch this <a href="#">video</a> about dolphin communication. Summarise it in 6 sentences and use those to describe the video to a family member using your sentences.</p>

Reading and watching suggestions to develop your learning of this topic


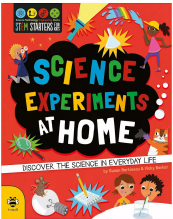
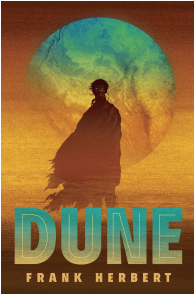

<p>The Impossible - 12A</p>  <p>NAOMI WATTES EWAN MCGREGOR A FILM BY J.A. BAYONA <b>THE IMPOSSIBLE</b> ONE FAMILY'S INCREDIBLE TRUE STORY</p>	<p>Seven Pounds - 12</p>  <p>WILL SMITH <b>SEVEN POUNDS</b> LIVING MATH</p>	<p>My Sister's Keeper - Jodi Picoult</p>  <p>BY NEW YORK TIMES BESTSELLING AUTHOR <b>Jodi Picoult</b> my sister's keeper</p>
<p>The Karate Kid - 12</p>  <p>the <b>Karate Kid</b></p>	<p>Nature's Building Blocks - John Emsley</p>  <p>COMPLETELY REVISED AND UPDATED <b>NATURE'S BUILDING BLOCKS</b> An A-Z Guide to the Elements NEW EDITION Approved... your delight... of their books <b>JOHN EMSLEY</b></p>	<p>The Disappearing Spoon - Sam Kean</p>  <p>SAM KEAN A NATIONAL BESTSELLER the <b>DISAPPEARING SPOON</b> AND WHY THIS HELD UP MAYBE YOU ARE THE OWNER OF THE MOST RARE PERIODIC TABLE OF THE ELEMENTS</p>
<p>Stuff Matters - Mark MeADOWNIK</p>  <p>NEW YORK TIMES BESTSELLER MARK MIDOWNIK <b>STUFF MATTERS</b> EXPLORING the MARVELOUS MATERIALS that SHAPE OUR MAN-MADE WORLD</p>	<p>Kay's Anatomy - Adam Kay</p>  <p>TOTALLY BRILLIANT! - JACQUELINE WILSON <b>ADAM KAY</b> ILLUSTRATED BY HENRY PARKER <b>KAY'S ANATOMY</b> A COMPLETE (AND COMPLETELY DISGUSTING) GUIDE TO THE HUMAN BODY</p>	<p>It can't be true! Animals!</p>  <p>DK <b>It CAN'T Be TRUE!</b> <b>ANIMALS!</b> I'M BRILLIANT! I'M THE SMALLEST DOG IN THE WORLD! UNBELIEVABLE FACTS ABOUT AMAZING ANIMALS</p>
<p>Human Universe - Brian Cox &amp; Andrew Cohen</p>  <p>THE SUNDAY TIMES BESTSELLER <b>HUMAN UNIVERSE</b> PROFESSOR <b>BRIAN COX</b> &amp; ANDREW COHEN</p>	<p>Voyage to the heart of matter</p>  <p>THE LARGE HADRON COLLIDER <b>POP-UP BOOK</b> <b>VOYAGE TO THE HEART OF MATTER</b> FATON EMMA <b>ATLAS</b> PARADISE</p>	<p>Melody - V.C. Andrews</p>  <p>V.C. ANDREWS <b>Melody</b></p>

## KS3 SCIENCE SUPER CURRICULUM

### YEAR 7: B3 Reproduction, C3 Reactions, C4 Acids and Alkalis, P3 Light & P4 Space

 <p>What links the Clone Wars to Dolly the Sheep? <a href="#">Video</a></p>	 <p>Watch this <a href="#">video</a> and choose the Earth saving invention you think is best.</p>	 <p>A salt is made in a neutralisation reaction between a metal and a non-metal. What ingredients in your house can you find that contain a salt? What are the different metals and non-metals?</p>
 <p>Design a motif for a space mission to Mars.</p>	 <p>With a partner create a TED talk about a planet in the solar system. Here is an <a href="#">example</a> TED talk about the Solar System.</p>	 <p>After watching the <a href="#">video</a>, what advice would you give to someone suffering late or early onset of puberty?</p>
 <p>What do you think periods will be like for women in the future? This short <a href="#">video</a> shows how they have been viewed through history.</p>	 <p>Can you summarise 3 scientific findings about the neurology, physiology and psychology of transpeople? This <a href="#">video</a> uses some great graphics to try to explain this in a simple way.</p>	 <p>Design (and possibly create) a 'to scale' Solar System, to make it harder can you work out the distances involved using your scale?</p>
 <p>Read this article about the lack of black female scientists published in science textbooks. Why do you think this situation has arisen and what can be done about it?</p>	 <p>Teach someone at home about exothermic and endothermic reactions using a cartoon you have created.</p>	 <p>Find out when the summer solstice is this year. Plan an event to celebrate it for your friends!</p>

Reading and watching suggestions to develop your learning of this topic

<p>Cantor's Dilemma - Carl Djerassi</p> 	<p>Freaks, Geeks &amp; Aspergers Syndrome - Luke Jackson</p> 	<p>Bee Movie U</p> 
<p>Mortal Engines - Phillip Reeve</p> 	<p>The secret diary of Adrian Mole aged 13 ¾ - Sue Townsend</p> 	<p>Unbroken - Larua Hillenbrand</p> 
<p>Science experiments at home</p> 	<p>A short history of nearly everything - Bill Bryson</p> 	<p>Across the universe - Beth Revis</p> 
<p>Dune - Frank Herbert</p> 	<p>Total Recall - 12</p> 	<p>E.T. - U</p> 