



Supporting Your Child's Learning
Summer Term - Year 10

At Yardleys, we understand that it can sometimes be difficult to know how best to support your children through their studies. But we also know that the more our students talk about their work, both inside and outside of school, the deeper and more flexible their learning. We need you to help us promote the school values of **curiosity** and **reflection** beyond our classrooms and, in doing so, help your child on their journey to academic success!

Below is a condensed plan of what your child will be studying in their core subjects this term, along with some suggestions of additional home learning activities - things you might watch, listen to or discuss together - in order to support their learning in school.

	Watch (Access ClickView via the 'Homework Hub' section of the VLE)	Listen (Use BBC Sounds and Spotify to access suggested podcasts)	Discuss (Start up a conversation with your child around these topics)
Summer 1			
English Students will be revisiting the anthology of conflict poetry they studied in Y9 and look to compare core poems detailing physical, familial and social conflict.	BBC Teach: Ciaran Carson on 'Belfast Confetti' Southbank Centre: Johan Agard, Guyana BBCiPlayer: Tan France: Beauty and the Bleach	Witness History: World War I Poetry'. 'In Our Time: The Charge of the Light Brigade' 'Straight Talking English' Podcast, S4 E11: 'Tennyson's <i>The Charge of the Light Brigade</i> '	Is conflict ever necessary? How might people affected by conflict feel? To what extent do you think those actively involved in conflict understand its purpose? To what extent might poems be viewed as sources to explain historical conflicts?
Maths Foundation: distance-time graphs; compound measurements; inequalities; ratio; expanding double brackets & factorising; standard form; rearranging & simultaneous equations	https://corbettmaths.com/2013/05/25/travel-graphs/ https://corbettmaths.com/2013/05/18/inequalities/ https://corbettmaths.com/2013/12/23/expanding-two-brackets-video-14/ http://corbettmaths.com/2013/02/06/factorising-quadratics-1/ https://corbettmaths.com/2013/04/28/standard-form/ http://corbettmaths.com/2013/12/23/changing-the-subject-video-7/ http://corbettmaths.com/2013/03/05/simultaneous-equations-elimination-method/	Who is faster, Usain Bolts' world record of 100 m in 9.8 seconds, or a car travelling at 25 mph? What is wrong with this inequality: $-3 < x > 5$? The distance between the Sun & planet Earth is 93 million miles. How can we write this in standard form? $v = u + at$ How can we rearrange this formula to make "t" the subject How would you solve this dilemma: - David buys 2 scones and 2 coffees in a shop and the cost is £18. - Ellie buys 3 scones and 2 coffees in the same shop and they cost £22. - Work out the cost of a scone & a coffee.	

<p>Higher: histograms; cumulative frequency; mean from tables; percentage calculations; compound interest; volume of prisms and non-prisms & expanding triple brackets</p>	<p>https://corbettmaths.com/2012/08/20/drawing-histograms/</p> <p>https://corbettmaths.com/2012/08/09/drawing-cumulative-frequency-graphs/</p> <p>https://corbettmaths.com/2013/02/15/reverse-percentages/</p> <p>https://corbettmaths.com/2013/04/20/volume-of-a-prism/</p> <p>http://corbettmaths.com/2013/12/27/expanding-three-brackets-video-15/</p>		<p>What does the word 'cumulative' mean?</p> <p>How can cumulative frequency graphs be used to estimate the median and interquartile range?</p> <p>Why is the mean from a grouped frequency table always an estimate?</p> <p>How do repeated percentage changes affect the final value of a quantity?</p> <p>How does compound interest compare to simple interest over time?</p> <p>Can you define a prism? How do you work out the volume of a prism?</p> <p>How do you work out the volume of a frustum?</p>
<p>Science Biology: Topic B5: Health, Disease and the Development of Medicines</p>	<p>Horizon: Sugar vs Fat, A Balanced Diet</p> <p>Ten Bad Things You Didn't Know about Smoking and Tabaco</p>	<p>Health Check: Floods Spreading Disease in Pakistan (BBC Sounds)</p> <p>More of Less: The Truth about Obesity and Covid-19 (BBC Sounds)</p>	<p>Are natural disasters increasing the spread of disease?</p> <p>Is obesity causing people to become more ill from other diseases?</p>
<p>Physics:</p>	<p>Bill Nye the Science Guy - Electricity: https://www.youtube.com/watch?v=SYacUaukaxg</p> <p>Mains Electricity - Freesciencelessons https://www.youtube.com/watch?v=fbu3o9wavHk</p>	<p>Read the following:</p> <p>Circuits fundamentals: http://www.dynamicscience.com.au/tester/solutions1/electric/circuits1.htm</p> <p>The War of The Currents - AC vs DC Power https://www.energy.gov/articles/war-currents-ac-vs-dc-power</p>	<p>How are plugs and circuit breakers designed to keep you safe in the home?</p> <p>Consider the 'trucks with energy' analogy from the 'Circuits Fundamentals' link (under Read). Can you think of a similar analogy?</p>
<p>Chemistry: Metals and Extraction</p>	<p>GCSE Pod: Extracting Metals</p> <p>GCSE Pod: New Ways of Extracting Copper</p>		<p>How is the reactivity series linked to different methods of metal extraction?</p> <p>Are there any metals which don't need to be extracted and found in their native state?</p>
Summer 2			
<p>English Students will continue to develop their understanding of poetry and their analysis of it by comparing unseen poems.</p>	<p>'Perfecting Poetry: Poetic Form and Structure'</p> <p>'Perfecting Poetry: Sensory Imagery and Sound Devices'</p>	<p>'Straight Taking English' Podcast, 'Tacking an unseen Poem'</p> <p>Remember to also check out GCSEPod for more relevant pods.</p>	<p>Why do people write poetry?</p> <p>Is a poem more or less impactful than a narrative?</p> <p>What do you think makes an effective poem? What is it about these feature/devices that you find impactful?</p>

	Simon Armitage: Writing Poems (2012)		
Maths Foundation: rearranging equations; simultaneous equations; drawing straight line graphs; transformation (reflection and rotation)	https://corbettmaths.com/2013/12/23/changing-the-subject-video-7/ https://corbettmaths.com/2013/03/05/simultaneous-equations-elimination-method/ https://corbettmaths.com/2013/05/29/ymxc/ https://corbettmaths.com/2012/08/19/reflections/ https://corbettmaths.com/2013/05/19/rotations/	<p>What does the word 'simultaneous' mean?</p> <p>What is the gradient & y-intercept for the straight-line $y = 2x - 5$?</p> <p>What is the angle turn from North to South?</p> <p>In transformations, what does TRRE stand for?</p>	
Higher: similarity; triple brackets; equating coefficients; quadratic sequences; speed	https://corbettmaths.com/2013/11/16/similarshapes/ https://corbettmaths.com/2013/12/27/expanding-three-brackets-video-15/ https://corbettmaths.com/2021/12/10/identities-video/ https://corbettmaths.com/2016/08/07/quadratic-sequences-version-2/	<p>When two or more shapes are similar, what property/feature of those shapes stays the same?</p> <p>What strategies make expanding triple brackets more efficient and less error-prone?</p> <p>How can equating coefficients be used to find unknown constants in algebraic expressions?</p> <p>How can you derive the nth term of a quadratic sequence from its terms?</p> <p>How are speed, distance, and time related in real-life situations, and how can graphs represent this?</p> <p>Who is faster, Usain Bolts' world record of 100 m in 9.8 seconds, or a car travelling at 25 mph?</p>	
Science Biology: Topic B2 (part 2) Cells and Control	<p>Stem Cells and Miracles</p> <p>Stem Cells: Wheelchair User</p> <p>Professor Dave Explains Biology: Mitosis, How Once Cell Becomes Two</p> <p>The Secrets of Our Cells: https://www.youtube.com/watch?v=0GX24jmsNIc </p>	<p>What are the issues surrounding stem cells?</p> <p>We know that we are made of cells. But we start out as just one tiny cell in the womb. How does that become enough cells to look like a baby? And how does that baby get enough cells to become an adult?</p>	
Physics:	<p>Scientific Eye: Static Electricity</p> <p>Dangerous Earth (E02) : Lightning</p>	<p>MET Office - about Lightning: https://www.metoffice.gov.uk/weather/learn-about/weather/types-of-weather/thunder-and-lightning/lightning </p> <p>Research how lightning occurs, and ways in which we can prevent it from being dangerous.</p> <p>Rub a balloon on a jacket and stick it to a wall. Can you explain why it sticks there?</p>	

	Shedding Light on Electricity (S01, E05): Electrical Safety	Bitesize: https://www.bbc.co.uk/bitesize/guides/zt7t4j6/revision/1	
Chemistry: Chemical Equilibria	Chemical Equilibrium S01, E01: Reversible Reactions	GCSE Pod: Reversible Reactions and Equilibria	What is meant by dynamic equilibrium? What factors affect dynamic equilibrium?
<p>In Summer 2, there is a whole school assessment week (mirroring that held in December) where students will be assessed on their knowledge this year. Sit with your child and make a revision timetable and encourage them to spend time revising each day rather than cramming the night before.</p>			