Supporting Your Child's Learning
Autumn Term – Year 11

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)
Autumn 1			
English Students will be reading the novel 'Animal Farm' by George Orwell. In this first half term, they will be focused primarily on plot and knowledge associated before exploring whole text essay questions about themes, characters and events.	1954 animated film adaptation 'Animal Farm' Lucy Worsley's Royal History's Biggest Fibs: The Russian Revolution People of World War II: Joseph Stalin (2022)	'1984', George Orwell (audiobook) GCSE Pod: 'Edexcel Tips for Exam Success and Example Responses.' Radio 4: In Our Time Podcast: 'Animal Farm' Dan Snow's History Hit: George Orwell and 1984	What happens when power is abused? How do dictators gain power? What examples of propaganda exist today? Why does lack of learning make manipulation easier? Are we living in an AI dictatorship?
Maths **Foundation:** straight line graphs, sequences, Pythagoras, SOH CAH TOA, volume and surface area of prisms, volume and surface area of 3D shapes.	https://corbettmaths.com/2013/11/13/describingrules/ https://corbettmaths.com/2012/08/19/pythagoras-video/ https://corbettmaths.com/2013/03/30/trigonometry-introduction/ https://corbettmaths.com/2013/04/20/volume-of-a-prism/ https://corbettmaths.com/2013/03/29/surface-area-of-a-cuboid/		In the equation y = mx + c…. What does each letter stand for & how can you work them out? How many different types of number sequences can you describe? Can you find all 4? What does SOH CAH TOA stand for? Can you come up with a formula to work out the number of faces, edges and vertices for ANY prism?
Higher: number sequences, iteration, functions, inverse functions, factorising, equating coefficients, factorising quadratic formula and graph sketching.	https://corbettmaths.com/2017/06/13/iteration-video/ https://corbettmaths.com/2016/08/07/composite-functions-2/ https://corbettmaths.com/2013/12/29/completing-the-square-video-10/ https://corbettmaths.com/2013/04/24/quadratic-formula/ https://corbettmaths.com/2019/02/04/invariant-points-video/		Can all equations be solved using iteration? Do all functions have an inverse? Can all quadratics be factorised? What is the minimum information needed to sketch a quadratic graph? What do a, b & c stand for in a quadratic formula?
Science **Biology:** cells and control and genetics	Watch the film 'Gattaca' (PG 13) on ClickView and then discuss the questions opposite.		Is having your genome sequenced a good idea? How would life be different if we lived in a society where all embryos are screened for birth defects?
Physics: static electricity, magnetism, electromagnetism	Scientific Eye: Static Electricity (1996) Dangerous Earth: Lightning (2016) Real World Science: Magnetism (2014) DC Motors (2007)		Research how lightning occurs, and ways in which we can prevent it from being dangerous.

	https://weather.metoffice.gov.uk/learn-about/weather/types-of-weather/thunder-and-lightning/lightning		Rub a balloon on a jacket and stick it to a wall. Can you explain why it sticks there?
Chemistry: Quantitative analysis, fuels and earth science	Carbon and its Compounds: Combustion Reactions of Carbon Compounds (2017)	GCSE Pod: Pollution	What is the difference between complete and incomplete combustion? How does pollution negatively impact the environment?
Autumn 2			
English Whilst continuing to revise 'Animal Farm' and 'Romeo and Juliet', students will begin studying for their English Language GCSE (non-fiction and creative writing, Edexcel 2.0)	Shakespeare Today: Romeo and Juliet S01: E01 'Context' Shakespeare Today: Romeo and Juliet S01 E07and E08 'Key Analysis Quotes.	Revise- GCSE English Language Revision (Spotify), Literary Devices: Oxymorons and Hyperbole First Rate Tutors (Podcast): Animal Farm: Context, Plot, Characters and Themes.	Who or what is to blame for the death of Romeo and Juliet? Could things have ended differently, how? Is Animalism an achievable dream on 'Animal Farm'?
Maths **Foundation:** surface area and volume of £D shapes, percentage of an amount, ratio, proportionality/ best buys, percentage change and reverse percentages, probability (space diagrams).	https://corbettmaths.com/2013/02/15/percentages-of-an-amount-calculator/ https://corbettmaths.com/2013/03/03/ratio-sharing-the-total/ https://corbettmaths.com/2018/11/28/unitary-method-video/ https://corbettmaths.com/2013/03/26/best-buys/ https://corbettmaths.com/2013/03/31/percentage-change/		Which is bigger: 30% of £80 or 80% of £30, why? Share £63 in the ratio 2:3:4 If 5 pencils cost£2.25, work out the cost of 8 pencils. Offer 1: 3 pens for £1.95 Offer 2: 5 pens for £3.50 Which is the better offer and why?
Higher: enlargement and variance SOH CAH TOA, exact value trig, sine rule, area, sine rule and cosine rule	https://corbettmaths.com/2013/03/30/trigonometry-missing-angles/ http://corbettmaths.com/2013/04/20/exact-trigonometric-values/ https://corbettmaths.com/2013/04/04/circle-theorems-theorems/ https://corbettmaths.com/2013/03/01/equation-of-a-circle/		What is the general equations of a circle? How do you remember key trig values such as cos(30) and tan(45) etc? What is the link between a radius and a tangent? How many solutions do non-linear simultaneous equations have?
Science **Biology:** cells and control and genetics	BBC Sounds: Genetics Made Simple https://www.bbc.co.uk/sounds/brand/p0356vfb		Visit the Science Museum and see the 3D model Watson and Crick made of DNA. See the results of the human genome project published in the Welcome Trust building by London Euston.
Physics: particle model	Flow of Heat (2015) BBC Bitesize Daily: Scotland: Physics: Specific Heat Capacity (2020)		Research the story of Archimedes and Hiero's crown. Can you explain how Archimedes was able to tell if the crown was pure? Research how a submarine is able to control how it sinks and floats.
Chemistry: Qualitative Tests	Ion Tests (2010) BBC Bitesize Daily: Scotland, Alkenes	Qualitative analysis: test for ions (GCSE Pod) Hydrocarbons (GCSE Pod)	Debate whether you think it's better to promote recycling or raw materials, or to extract them by electrolysis from new ore? What drawbacks are there?
In the final weeks of the Autumn Term (w/c 07.12.26 and 14.12.26), students will be examined on their knowledge in all subjects during a whole school assessment week.			