SUMMER STUDY LIST

ART, CRAFT & DESIGN

Potential reads….

Henry Moore at Kew: Monumental Nature | The Arbuturian – in preparation for a visit to Kew Gardens in September/October.

***Ways of Seeing* by John Berger: An essential foundation text that explores how social, political, and historical contexts shape our perception of art and images. [1, 2]**

· The *Story of Art Without Men* by Katy Hessel: A validating, contemporary look at art history that brings overlooked women artists from the past 500 years to the forefront.

· Art*: The Definitive Visual Guide* by Andrew Graham Dixon: A comprehensive reference book covering major art movements, techniques, and masterpieces spanning centuries and cultures. [1, 2, 3]

· The *Shock of the New* by Robert Hughes: A stimulating guide exploring the origins and evolution of modern art through the lens of a century defined by massive change. [1, 2, 3]

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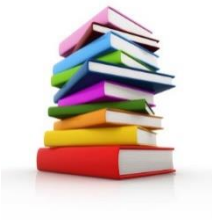
BIOLOGY

Suggestions for further reading

Please note that this list is of course not exhaustive. I'm sure you could find (and in fact, would encourage you to find) some interesting reading of your own. The great thing about Biology is there is a huge range of books out there on whatever topic or level you are interested in.



Neuroscience:

The Man Who Mistook His Wife for a Hat and Other Clinical Tales ***Oliver Sacks***

Case histories of patients lost in the bizarre, apparently inescapable world of neurological disorders. Sacks tells the stories of individuals afflicted with fantastic perceptual and intellectual aberrations: patients who have lost their memories and with them the greater part of their pasts; who are no longer able to recognize people and common objects; who are stricken with violent tics and grimaces or who shout involuntary obscenities; whose limbs have become alien; who have been dismissed as retarded yet are gifted with uncanny artistic or mathematical talents.

Conversations with Neil's Brain ***Calvin & Ojemann***

Neurophysiologist Calvin and neurosurgeon Ojemann succeed admirably in describing the anatomy and physiology of the brain-undoubtedly the most complex organ in the human body-in very understandable terms. Using the ploy of a dialog with a brain surgery candidate named Neil, the authors answer many puzzling questions concerning the brain's functions. Neil, who suffers from epileptic seizures because of brain damage sustained in an auto accident, is eager to have the damaged cells removed. During extensive conversations, Neil learns about memory, moods, motor functions, language, thought patterns, and visual comprehension. Line drawings enhance the explanations. (Available free of charge from http://williamcalvin.com/bk7/bk7.html

The Human Brain: A guided tour ***Susan Greenfield***

What would you see if you removed the skull from the human brain and then slowly worked your way deeper and deeper into the brain, to the level of an individual neuron? With renowned brain researcher Susan Greenfield as your guide, here is your chance to gain a bird's eye view of the human brain—and to learn more about what the brain is, how it works, what happens when one part of the brain is made dysfunctional through stroke or accident, how brain mood-modifying drugs find their targets. In a particularly fascinating chapter, Greenfield surveys for us how a brain is built and then takes us on a tour of the developing brain from the moment of conception.

The Brain: The Story of You ***David Eagleman***

Join renowned neuroscientist David Eagleman on a whistle-stop tour of the inner cosmos. It's a journey that will take you into the world of extreme sports, criminal justice, genocide, brain surgery, robotics, and the search for immortality. On the way, amidst the infinitely dense tangle of brain cells and their trillions of connections, something emerges that you might not have expected to see you.

Other Minds: The Octopus and the Evolution of Intelligent Life ***P Godfrey-Smith***

What if intelligent life on Earth evolved not once, but twice? The octopus is the closest we will come to meeting an intelligent alien. What can we learn from the encounter? In Other Minds, Peter Godfrey-Smith, a distinguished philosopher of science and a skilled scuba diver, tells a bold new story of how nature became aware of itself – a story that largely occurs in the ocean, where animals first appeared. How did the octopus, a solitary creature with little social life, become so smart? What is it like to have eight tentacles that are so packed with neurons that they virtually ‘think for themselves’? By tracing the question of inner life back to its roots and comparing human beings with our most remarkable animal relatives, Godfrey-Smith casts crucial new light on the octopus mind – and on our own.

Health, disease and physiology:

The Hot Zone: A terrifying true story ***Richard Preston***

A highly infectious, deadly virus from the central African rain forest suddenly appears in the suburbs of Washington, D.C. There is no cure. In a few days 90 percent of its victims are dead. A secret military SWAT team of soldiers and scientists is mobilized to stop the outbreak of this exotic "hot" virus. *The Hot Zone* tells this dramatic story, giving a hair-raising account of the appearance of rare and lethal viruses and their "crashes" into the human race.

Why We Get Sick: The new science of Darwinian medicine ***Nesse & Williams***

Written by two founders of the emerging science of Darwinian medicine, who deftly synthesize the latest research on disorders ranging from allergies to Alzheimer's and from cancer to Huntington's chorea. Why We Get Sick compels readers to reexamine the age-old attitudes toward sickness.

The Immortal Life of Henrietta Lacks ***Rebecca Skloot***

Her name was Henrietta Lacks, but scientists know her as HeLa. She was a poor Southern tobacco farmer who worked the same land as her slave ancestors, yet her cells—taken without her knowledge—became one of the most important tools in medicine. The first “immortal” human cells grown in culture, they are still alive today, though she has been dead for more than sixty years. This book captures the beauty and drama of scientific discovery, as well as its human consequences with interviews with Lack’s family.

The Body, A Guide for Occupants Bill Bryson

We spend our whole lives in one body and yet most of us have practically no idea how it works and what goes on inside it. The idea of the book is simply to try to understand the extraordinary contraption that is us.'

In the best-selling, prize-winning A Short History of Nearly Everything Bill Bryson achieved the seemingly impossible by making the science of our world both understandable and entertaining to millions of people around the globe.

Now he turns his attention inwards to explore the human body, how it functions and its remarkable ability to heal itself. Full of extraordinary facts and astonishing stories, The Body: A Guide for Occupants is a brilliant, often very funny attempt to understand the miracle of our physical and neurological makeup.

Life at the Extremes *Frances Ashcroft*

The challenge of scaling the highest mountain, exploring the deepest ocean, crossing the hottest desert, or swimming in near-freezing water is irresistible to many people. *Life at the Extremes* is an engrossing exploration of what happens to our bodies in these seemingly uninhabitable environments. Frances Ashcroft weaves stories of extraordinary feats of endurance with historical material and the latest scientific findings as she investigates the limits of human survival and the remarkable adaptations that enable us to withstand extreme conditions

It's All in Your Head *Suzanne O'Sullivan*

Pauline first became ill when she was fifteen. What seemed to be a urinary infection became joint pain, then life-threatening appendicitis. After a routine operation Pauline lost all the strength in her legs. Shortly afterwards, convulsions started. But Pauline's tests are normal: her symptoms seem to have no physical cause whatsoever. This may be an extreme case, but Pauline is not alone. As many as a third of people visiting their GP have symptoms that are medically unexplained. In most, an emotional root is suspected which is often the last thing a patient wants to hear and a doctor to say. This book looks at the confusing and misunderstood world of psychosomatic illness.
Winner of the Wellcome Book Prize 2016

Zoology, ecology and conservation:

Last Chance to See *Douglas Adams*

> Douglas Adams and zoologist Mark Carwardine travel around the world in search of exotic, endangered creatures. Amusingly written with some very poignant moments

Silent Spring ***Rachel Carson***

Rachel Carson's Silent Spring was first published in three serialized excerpts in the New Yorker in June of 1962. The book appeared in September of that year and the outcry that followed its publication forced the banning of DDT and spurred revolutionary changes in the laws affecting our air, land, and water. Carson's passionate concern for the future of our planet reverberated powerfully throughout the world, and her eloquent book was instrumental in launching the environmental movement. It is without question one of the landmark books of the twentieth century.

What has Nature Ever Done for Us? How Money Grows On Trees ***T Juniper***

From Indian vultures to Chinese bees, Nature provides the 'natural services' that keep the economy going. From the recycling miracles in the soil; an army of predators ridding us of unwanted pests; an abundance of life creating a genetic codebook that underpins our food, pharmaceutical industries and much more, it has been estimated that these and other services are each year worth about double global GDP. This is a book full of immediate, impactful stories, containing both warnings (such as in the tale of India's vultures, killed off by drugs given to cattle, leading to an epidemic of rabies) but also the positive (how birds protect fruit harvests and how the rainforests absorb billions of tonnes of carbon).

Juniper's book will change whole way you think about life, the planet and the economy.

Meadowland: The Private Life of an English Field ***John Lewis-Stempel***

Meadowland gives an unique and intimate account of an English meadow's life from January to December, together with its biography. In exquisite prose, John Lewis-Stempel records the passage of the seasons from cowslips in spring to the hay-cutting of summer and grazing in autumn, and includes the biographies of the animals that inhabit the grass and the soil beneath: the badger clan, the fox family, the rabbit warren,the skylark brood and the curlew pair, among others. Their births, lives, and deaths are stories that thread through the book from first page to last.

Winner of the Thwaites Wainright Prize 2015

Evolution:

The Red Queen ***Matt Ridley***

Referring to Lewis Carroll's "Red Queen" from "Through the Looking-Glass," a character who has to keep running to stay in the same place, Matt Ridley demonstrates why sexual reproduction is humanity's best strategy for outwitting its constantly mutating internal predators. "The Red Queen" answers dozens of other riddles of human nature and culture -- including why men propose marriage, the method behind our maddening notions of beauty, and the disquieting fact that a woman is more likely to conceive a child by an adulterous lover than by her husband. Brilliantly

written, "The Red Queen" offers an extraordinary new way of interpreting the human condition and how it has evolved

The Selfish Gene ***Richard Dawkins***

Dawkins explains natural selection from the view of a gene – what we would now call “Neo Darwinism”. The aim of a gene, Dawkins claims, is to replicate and be passed on to the next generation. This book illustrates the ways in which genes influence living organisms to achieve this aim.

The Rise and Fall of the Third Chimpanzee ***Jared Diamond***

A wide-ranging book which applies insights from biology, anthropology, and linguistics to questions such as why one species of big mammal (humans) came to dominate its closest relatives, such as chimpanzees, and why one group of humans (Eurasians) came to dominate others (Indigenous peoples of the Americas). It also examines how asymmetry in male and female mating behaviour is resolved through differing social structures across cultures, and how first contact between unequal civilizations almost always results in genocide. The book ends by noting that technological progress may cause environmental degradation on a scale leading to extinction.

A Brief History of Everyone Who Lived **Adam Rutherford**

Since scientists first read the human genome in 2001 it has been subject to all sorts of claims, counterclaims and myths. In fact, as Adam Rutherford explains, our genomes should be read not as instruction manuals, but as epic poems. DNA determines far less than we have been led to believe about us as individuals, but vastly more about us as a species. In this captivating journey through the expanding landscape of genetics,

Adam Rutherford reveals what our genes now tell us about history, and what history tells us about our genes. From Neanderthals to murder, from redheads to race, dead kings to plague, evolution to epigenetics, this is a demystifying and illuminating new portrait of who we are and how we came to be.

Sapiens: A brief history of humankind ***Yuval Noah Harari***

One hundred thousand years ago, at least six human species inhabited the earth. Today there is just one. Us. Homo sapiens. How did our species succeed in the battle for dominance? Why did our foraging ancestors come together to create cities and kingdoms? How did we come to believe in gods, nations, and human rights; to trust money, books, and laws; and to be enslaved by bureaucracy, timetables, and consumerism? And what will our world be like in the millennia to come?

The Incredible Unlikeliness of Being ***Alice Roberts***

Alice Roberts tells us about the most amazing story on the planet - the creation of the human animal. Nothing is more extra-ordinary, and her guided tour of the human body takes us on a fascinating journey of self-discovery.

Tamed: Ten species that changed our world ***Alice Roberts***

In Tamed, Alice Roberts uncovers the deep history of 10 familiar species with incredible wild pasts: dogs, apples and wheat; cattle, potatoes and chickens; rice, maize and horses - and, finally, humans. She reveals how becoming part of our world changed these animals and plants and shows how they became our allies, essential to the survival and success of our own species.

Cell Biology:

Power, Sex and Suicide - Mitochondria and the Meaning of Life ***Nick Lane***

Mitochondria are tiny structures within all our cells, believed to have once evolved from bacteria living independent lives. Drawing on cutting edge research, this book explores the fundamental role they play in some of the biggest themes in biology: evolution, the origin of the sexes, in growth, ageing, disease, and in death.

Life Unfolding: How the human body creates itself ***Jamie A Davies***

Where did I come from? How is my left leg the same size as my right one? Why are the fingerprints of identical twins not identical? How did my brain learn to learn? Why must I die? Questions like these remain biology's deepest and most ancient challenges. They force us to confront a fundamental biological problem: how can something as large and complex as a human body organize itself from the simplicity of a fertilized egg? A convergence of ideas from embryology, genetics, physics, networks, and control theory has begun to provide real answers. Life Unfolding tells the story of human development from egg to adult, from this perspective, showing how our whole understanding of how we come to be has been transformed in recent years.

Microbe Hunters ***Paul de Kruif***

Paul de Kruif's *Microbe Hunters* is a timeless dramatization of the scientists, bacteriologists, doctors, and medical technicians who discovered microbes and invented the vaccines to counter them. De Kruif reveals the now seemingly simple but really fundamental discoveries of science—for instance, how a microbe was first viewed in a clear drop of rain water, and when, for the first time ever, Louis Pasteur discovered that a simple vaccine could save a man from the ravages of rabies by attacking the microbes that cause it.

The Emperor of All Maladies: A Biography of Cancer ***Siddhartha Mukherjee***

In The Emperor of All Maladies, Siddhartha Mukherjee, doctor, researcher and award-winning science writer, examines cancer with a cellular biologist's precision, a historian's perspective, and a biographer's passion. The result is an astonishingly lucid and eloquent chronicle of a disease humans have lived with - and perished from - for more than five thousand years. Riveting and magisterial, The Emperor of All Maladies provides a fascinating glimpse into the future of cancer treatments and a brilliant new perspective on the way doctors, scientists, philosophers and lay people have observed and understood the human body for millennia.

Molecular biology and biochemistry:

Life on the Edge: The Coming of Age of Quantum Biology ***Jim Al-Khalili***

Each chapter in *Life on the Edge* opens with an engaging example that illustrates one of life's puzzles – How do migrating birds know where to go? How do we really smell the scent of a rose? How do our genes manage to copy themselves with such precision? – and then reveals how quantum mechanics delivers its answer. Guiding the reader through the maze of rapidly unfolding discovery, Al-Khalili and McFadden communicate vividly the excitement of this explosive new field of quantum biology, with its potentially revolutionary applications, and offer insights into the biggest puzzle of all: what is life?

The Epigenetics Revolution ***Nessa Carey***

How is it that, despite each cell in your body carrying the same DNA, you don't have teeth growing out of your eyeballs or toenails on your liver? How is it that identical twins share the same DNA and yet can exhibit dramatic differences in the way that they live and grow? It turns out that cells read the genetic code in DNA more like a script to be interpreted than a mould that replicates the same result each time. This is epigenetics and it's the fastest-moving field in biology today. The Epigenetics Revolution traces the thrilling path this discipline has taken over the last twenty years.

Genome ***Matt Ridley***

This book offers extraordinary insight into the ramifications of humans mapping their own genome. By picking one newly discovered gene from each pair of chromosomes and telling its story, Matt Ridley recounts the history of our species and its ancestors from the dawn of life to the brink of future medicine. From Huntington's disease to cancer, from the applications of gene therapy to the horrors of eugenics, Matt Ridley probes the scientific, philosophical, and moral issues arising as a result of the mapping of the genome.

The Double Helix ***James Watson***

By identifying the structure of DNA, the molecule of life, Francis Crick and James Watson revolutionized biochemistry and won themselves a Nobel Prize. At the time, Watson was only twenty-four, a young scientist hungry to make his mark. His uncompromisingly honest account of

the heady days of their thrilling sprint against other world-class researchers to solve one of science's greatest mysteries gives a dazzlingly clear picture of a world of brilliant scientists with great gifts, very human ambitions, and bitter rivalries.

Y, the Descent of Man ***Steve Jones***

Men, towards the end of the last millennium, felt a sudden tightening of the bowels with the news that the services of their sex had at last been dispensed with. Dolly the Sheep - conceived without male assistance - had arrived. Her birth reminded at least half the population of how precarious man's position may be. What is the point of being a man? For a brief and essential instant, he is a donor of DNA; but outside that glorious moment his role is hard to understand. This book is about science not society; about maleness not manhood. The condition is, in the end, a matter of biology, whatever limits that science may have in explaining the human condition. Today's advances in medicine and in genetics mean at last we understand why men exist and why they are so frequent.

The Eight Day of Creation ***Horace Freeland Judson***

Judson tells the story of the birth and early development of molecular biology, in the US, the UK and France. In particular, the fascinating account of the remarkable golden period from the revelation of the double helix structure of DNA through to cracking the genetic code and solving the basic problems of how genes are regulated, is told largely in the words of the main players in the unfolding drama, all of whom were interviewed extensively by Judson in preparing this acclaimed volume.

Life on the Edge ***Jim Al-Khalil and Johnjoe McFadden***

Life is the most extraordinary phenomenon in the known universe; but how does it work? Even in this age of cloning and synthetic biology, the remarkable truth remains nobody has ever made anything living entirely out of dead material. Life remains the only way to make life. Are we missing a vital ingredient in its creation?

Each chapter in Life on the Edge opens with an engaging example that illustrates one of life's puzzles – How do migrating birds know where to go? How do we really smell the scent of a rose? How do our genes manage to copy themselves with such precision? – and then reveals how quantum mechanics delivers its answer. Guiding the reader through the maze of rapidly unfolding discovery, Al-Khalili and McFadden communicate vividly the excitement of this explosive new field of quantum biology, with its potentially revolutionary applications, and offer insights into the biggest puzzle of all: what is life?

Oxygen ***Nick Lane***

Oxygen has had extraordinary effects on life. Three hundred million years ago, in Carboniferous times, dragonflies grew as big as seagulls, with wingspans of nearly a metre. Researchers claim they could have flown only if the air had contained more oxygen than today - probably as much as

35 per cent. Giant spiders, tree-ferns, marine rock formations and fossil charcoals all tell the same story. The strange and profound effects that oxygen has had on the evolution of life pose a riddle, which this book sets out to answer. Oxygen is a toxic gas. Fruit flies raised at twice normal atmospheric levels of oxygen live half as long as their siblings. Reactive forms of oxygen, known as free radicals, are thought to cause ageing in people. Yet if atmospheric oxygen reached 35 per cent in the Carboniferous, why did it promote exuberant growth, instead of rapid ageing and death? “Oxygen” takes the reader on an enthralling journey, as gripping as a thriller, as it unravels the unexpected ways in which oxygen spurred the evolution of life and death. The book explains far more than the size of ancient insects: it shows how oxygen underpins the origin of biological complexity, the need for two sexes, the accelerated ageing of cloned animals like Dolly the sheep, and the surprisingly long lives of bats and birds.

General Science:

Advice to a Young Scientist ***Peter Medawar***

To those interested in a life in science, Sir Peter Medawar, Nobel laureate, deflates the myths of invincibility, superiority, and genius; instead, he demonstrates it is common sense and an inquiring mind that are essential to the scientist’s calling. This book will tell you what it is really like to be a “scientist”.

Human ***Robert Winston***

This encyclopaedia all about humans is truly fascinating. It covers **everything** from our biology, psychology, cultures, beliefs and evolution. Highly recommended book to have on your shelf.

Bad Science ***Ben Goldacre***

Dr Ben Goldacre is the author of the Bad Science column in the Guardian. His amusing book is about all the 'bad science' we are constantly bombarded with in the media and in advertising.

Quirkology ***Richard Wiseman***

Psychologist Professor Richard Wiseman has examined the quirky science of everyday life. In *Quirkology*, he navigates the backwaters of human behaviour, discovering the tell-tale signs that give away a liar, the secret science behind speed-dating and personal ads, and what a person’s sense of humour reveals about the innermost workings of their mind- all along paying tribute to others who have carried out similarly weird and wonderful work.

Brave New World ***Aldous Huxley***

Considered to be Aldous Huxley's most enduring masterpiece, this fantasy of the future highlights’ dangers of genetic engineering and man’s control over nature.

CHEMISTRY

The Periodic Table – Primo Levi

A story of a Jewish Chemist in Italy during the 1930-40s. He was interned in a concentration camp and tells his story through chemical elements. Profound and uplifting at the same time.

The Disappearing Spoon - Sam Keen

It tells the history of the world and human rivalry through the bizarre, brilliant, and sometimes deadly stories behind every element on the periodic table.

Materials Science: "Stuff Matters" by Mark Miodownik

uncovers the fascinating chemistry and engineering behind the everyday objects around us, from the steel in our buildings to the ink in our pens

Forensics and History: "The Poisoner's Handbook" by Deborah Blum

dives into the sinister side of chemistry, chronicling Jazz-Age New York City and the rise of forensic science as it fought against brilliant, murderous poisoners. [1]

History of Science: "A Short History of Nearly Everything" by Bill Bryson

It is a wildly entertaining overview of the universe's creation, weaving together chemistry, physics, and biology for the ultimate layperson's guide. [1, 2]

Food & Drink: "The Chemistry of Tea" by Michelle Francl

Breaks down the organic compounds, water temperatures, and teapot materials that affect your daily brew.

CLASSICS – Latin, Greek, Classical Civilisation

Students embarking on A Level Latin and/or Classical Greek in September will begin with the following texts in the original. You may wish to read a Penguin translation to give you a feel of the content of each.

Latin
Cicero, *Pro Roscio Amerino*

Greek
Sophocles, *Electra*
Herodotus, *Histories* Book 7

Below is a general Classics reading list, appropriate for anyone studying Latin, Greek or Classical Civilisation.

Retellings of Classical stories and myths:

Margaret Atwood, *The Penelopiad*

Pat Barker, *The Silence of the Girls, Women of Troy, The Voyage home* (trilogy)

Stephen Fry, *Mythos*

Stephen Fry, *Heroes*

Ted Hughes, *Tales from Ovid*

Madeline Miller, *The Song of Achilles*

Madeline Miller, *Circe*

Donna Tartt, *The Secret History*

Historical fiction:

Robert Harris, *Pompeii*

Robert Harris, *Imperium, Lustrum, Dictator* (trilogy)

General:

Mary Beard, *SPQR: A history of ancient Rome*

Mary Beard, *Confronting the Classics: Traditions, inventions, and innovations*

Simon Goldhill, *Love, Sex and Tragedy: How the ancient world shapes our lives*

Robert Lane Fox, *The Classical World: an epic history of Greece and Rome*

COMPUTER SCIENCE

1. **Book Recommendations to Fuel Your Passion for the Subject:**
    - Hello World: How to be Human in the Age of the Machine - Hannah Fry (highly recommended)
    - The Art of Statistics (learning from data) - David Spiegelhalter (highly recommended)
    - Artificial Intelligence: A Ladybird Expert Book by Micheal Wooldridge
    - CODE: The hidden language of computer hardware and software by Charles Petzold

2. **Study Pseudocode (For Girl School A Level Computer Science Students):**

    The aim is to bridge the gap between GCSE and A Level by introducing the pseudocode used in the Cambridge International A-Level Computer Science (9618) syllabus before the course begins. The pseudocode required at A Level differs significantly from that used in AQA, and Paper 2 is heavily focused on pseudocode-based problem solving. Marking is very strict, so becoming familiar with the syntax and style early is highly beneficial.

    Moshikur.com **(**Moshikur.com**)** is an excellent resource for Cambridge Computer Science students. It provides comprehensive pseudocode tutorials, programming practice, and topic-based resources. The content is organised by unit through the navigation bar, and many sections include activities and tasks to reinforce learning.

    Students intending to study A Level Computer Science are HIGHLY encouraged to explore the pseudocode resources on Moshikur over the summer to gain a head start before Year 12.

3. **Python Course (A Level Students & Those wishing to continue programming)**

Python Essentials Course 1 - We are offering students the opportunity to enrol on Python Essentials 1. This online course builds on the Python skills you have already developed, helping you become a more confident programmer. It provides the opportunity to gain a recognised Python qualification. If you complete all the online modules and pass the module tests by September, you will be invited to sit the final assessment in school. Passing this assessment will earn you the Python Essentials 1 Certificate, which is a great addition to your portfolio and future UCAS applications. Sign-up link: Free Python Course by Cisco: No Prior Experience Necessary! If you have any questions, please speak to or email Mr P. Wright

Project Based Work

Introduction

This project is designed for ***students who are transitioning from GCSE to A-Level Computer Science***. The goal is to bridge the gap by introducing key programming concepts and software development practices outlined in the A Level Cambridge International (CIE) Computer Science syllabus (9618). You will apply practical skills and theoretical knowledge, including algorithms, sorting and searching, file handling, storing and retrieving data, while following the Software Development Life Cycle (SDLC) model.

Project Overview: Student Revision Quiz System – or similar
Design and develop a quiz or revision application that allows users to take multiple-choice quizzes, track their scores. This project gives you an opportunity to be creative, problem-solve, and present a structured approach to software development.

Key A-Level Topics Covered

Concept	How It's Covered
Algorithms in general	Scoring, answer-checking, question shuffling
Sorting algorithms	Sort quiz results by score or time taken
Searching algorithms	Search questions by keyword
SDLC	Follow full cycle: analysis, design, implementation, testing, and evaluation

Software Development Life Cycle (SDLC)

- Identify the needs of both quiz players and quiz creators, including required inputs (such as names, topics and answers) and expected outputs (scores, feedback and progress tracking).
- Plan the program by creating structure charts, flowcharts and pseudocode to show how the system will operate and how users will navigate through it.
- Build the solution in Python, starting with a text-based interface. A GUI can be added later if desired (see possible extensions). More advanced students may choose to use object-oriented programming with classes. Consider adding searching and sorting functionality.
- Test the program thoroughly using a range of valid and invalid inputs to ensure that all features work correctly and scoring is accurate.
- Review the final product against the original requirements, highlighting successes, limitations and possible improvements. Gathering feedback from users can help guide future development.

Possible Extensions

- Create a graphical interface using Tkinter (tkinter)
- Store questions and scores in CSV files or a database.
- Add a countdown timer.
- Implement user accounts or a leaderboard.

Project Evidence

- Development documentation showing the design process.
- Well-commented source code.
- Screenshots or a demonstration of the program.
- Test results and evidence of debugging.
- A final evaluation reflecting on the project's success and future improvements.

Resources:

- Link to SharePoint resources page: Habs Boys Computer Science - Home
- Pythons help websites:
  - W3 Schools: Python Tutorial
  - Code Academy : Welcome - Learn Python 3 | Codecademy (Requires sign up)

Example Project:

Example write-up for a summer project can be found here: CS summer project.pptx

DESIGN & TECHNOLOGY

Summer work

Summer work for DT is important to ensure you keep thinking about design during the holiday but also to encourage you to get out and about and see design in the real world. The following tasks are a range of skills, techniques and activities that can be completed in a range of ways and will be useful for discussion in September

Task One: Explore

Go and visit any of the following places (there are many other museums that have amazing displays and exhibitions – I only name these to help you think about where to go):

New Designers from 9th to 12th July at Business Design Centre gathers more than 3,000 of the brightest and most radical new creative minds under one roof to launch the next generation of thinkers, makers and disruptors onto the UK design scene.
https://www.newdesigners.com/visiting/

The Design Museum https://designmuseum.org/

Victoria and Albert Museum https://www.vam.ac.uk/

Tate modern http://www.tate.org.uk/

Design and furniture and product shops.

The aim of getting out and about is to seek inspiration from a wide range of designed environments and created items, not just products. Look at products from the past and think about what it is about them such as materials designs and original thought that has led to them becoming design icons that have been put into a museum. Present you finds as an inspiration sheet, mood board or presentation. Take your inspiration from what you see and how it might have been presented. Also look in the museum shops and see if there are books to read and other items to help you continue to consider the wider impact the work of others may have on you as a designe when you get home. I buy postcards to pin up and remind me of my thoughts and responses to a trip.

Task Two: Create

Make a model.

This can be based on task one or three or something completely different.

Think about a problem you or a member of your family has and seek to solve it very quickly. Or take inspiration from an ide design or product you see through the summer.

Sketch, ask, model, test and improve. This is the iterative process (Explore, create and evaluate) of quickly designing and modelling that we will be using in A level.

Take photos and videos to show the making and testing of the model and include what you learnt and what you might do as the next step to develop the design further. Time lapse video of making is cool.

Produce a digital presentation of this work as you go. It is about rapid recording of what you did. Not a beautiful labour intensive portfolio. Maybe try a sketchbook, journal or scrapbook.

Task Three: Evaluation

Select a product at home that is **handheld**.

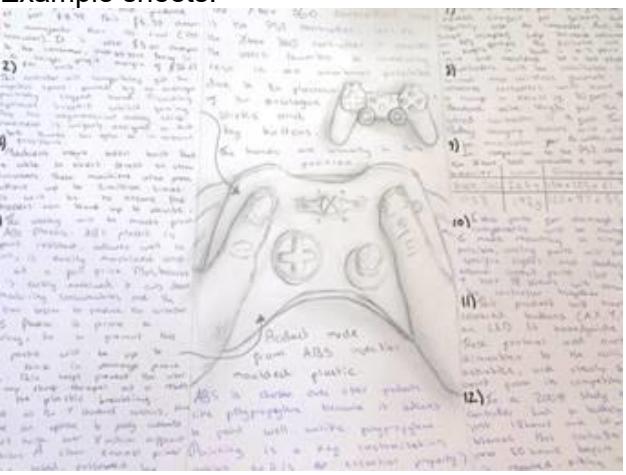
Use it, evaluate it (include asking other people what they think of the product here) and draw it.

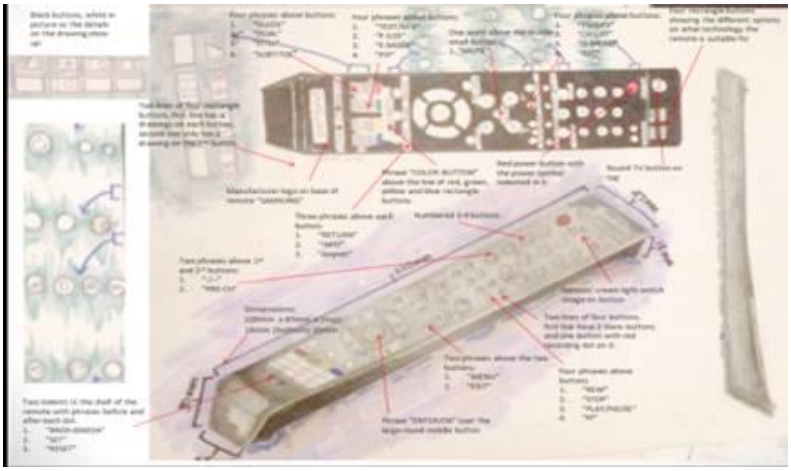
Then most important of all take it apart and draw how it fits together. Pay particular attention to mechanisms, battery acces and details of how it is held together or manufactured. (I have asked for drawings as this will challenge your presentation skills. Do use photographs as well but I really want to see how your drawing looks). Images of the item being held are key - so draw the hand as well.

Use annotation to explain what you find out and what the key design topics are that impact on the designer, user and stakeholder of the products. Also try to find out which process is used for its manufacture and the materials it is made from

(Please be aware of **safety** – **do not take apart a mains powered item** as there is a risk of electrocution even after it has been unplugged. Also select a product that will not matter if you can't get it back together again – just in case)

Example sheets:





Tips

Each of these tasks should be thought about and considered before you rush in. The aim is to complete them very quickly. The key to A level is working at pace. Although you do want to be pushing the quality of you thinking higher.

Some tasks may be a day's work – the explore task for example. You will record your findings as you go on a day trip to London.

Others may be a series of short sharp drawing and designing tasks that are more spread out.

The create task should be completed in no more than three to four hours. It is the modelling and learning from the challeng that is key – not the quality of the model.

DRAMA

Go to the theatre.

Some suggestions:

Malory Towers at Alexandra Palace Theatre

A Midsummer Night's Dream at The Globe

The Seagull at The Sam Wannamaker

Electra at The National Theatre

The Boy Who Harnessed the Wind at Soho Place

Tao of Glass at Soho Place

Reading:

Go to the bookshop at The National Theatre and browse some plays there. You might enjoy:

Mudlarks by Vickie Donahue

DNA Dennis Kelly

Monster by Duncan MacMillan

Every Brilliant Thing by Duncan MacMillan

The Flick by Annie Baker

ECONOMICS

1. **Can't They Just Print More Money? Economics in Ten Simple Questions**
   - **Authors: Rupal Patel, Jack Meaning**
   - **ISBN: 978-1847943392**

2. **The Shortest History of Economics: The Powerful Story of Economic Ideas and Forces that Shape Our World**
   - **Author: Andrew Leigh**
   - **ISBN: 978-8119300907**

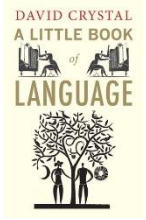
3. **Free Lunch Thinking: How Economics Ruins the Economy**
   - **Author: Tom Bergin**
   - **ISBN: 978-1847942739**

4. **Predictably Irrational: The Hidden Forces That Shape Our Decisions**
   - **Author: Dan Ariely**
   - **ISBN: 978-0061353246**

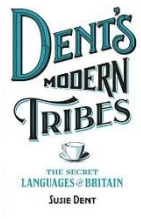
5. **Economics: The User's Guide**
   - **Author: Ha-Joon Chang**
   - **ISBN: 978-1620408148**

ENGLISH LANGUAGE

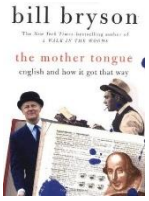
Suggested Reading for students interested in English Language



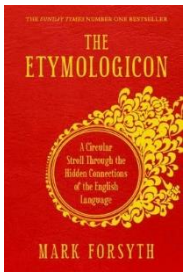
As a starting point, you can read pretty much anything by *David Crystal*. A good starting point would be *A Little Book of Language*, which explores where weird accents come from, what was the first written word, what causes a language to die out and how/whether a language can be revived. Then read anything else - *Texting* gives you the ammunition to analyse your friends' texts, which can be a good and a bad thing.
Once you've worked your way through the complete works of David Crystal, or if you fancy something different, then you might like to try …



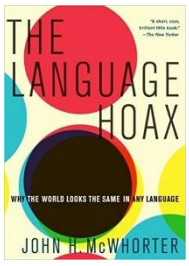
***Dent's Modern Tribes: The Secret Languages of Britain* - Susie Dent**
You'll find out why football managers all speak the same way, what a cabbie calls the Houses of Parliament, and how station managers can discreetly request back-up or notify staff of an incident.



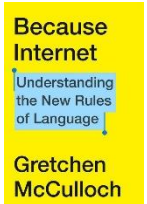
***Mother Tongue: The story of the English Language* - Bill Bryson**
Bryson explores the history, eccentricities, resilience and sheer fun of the English language - from why you can talk but your dog can't, to the fine lost art of swearing



***The Etymologicon* - Mark Forsyth**
What is the actual connection between disgruntled and gruntled? What links church organs to organised crime, California to the Caliphate, or brackets to codpieces? *The Etymologicon* explores the strange connections between words.



***The Language Hoax* - John McWhorter**
Japanese has a term that covers both green and blue. Russian has separate terms for dark and light blue. Does this mean that Russians perceive these colours differently from Japanese people? Does language control and limit the way we think? This book introduces you to an important language hypothesis that you'll debate throughout your A level course – does the language you use determine the way you think?



***Because Internet* – Gretchen McCulloch**
Why did emoji become so popular so quickly? Why do people of different ages punctuate their emails and text mess ages so differently? Does a full stop in a text really mean you're angry? How is ALL CAPS different to word lengthening and Ironic Capitals.

***Don't Believe A Word: From Myths to Misunderstandings – How Language Really Works* - David** *Shariatmadari* This article gives you a taste of the topics and his approach The Guardian

And a couple of fiction suggestions which are language related:
***Lexicon* – Max Barry:** At an exclusive school somewhere outside of Arlington, Virginia, students aren't taught history, geography, or mathematics - at least not in the usual ways. Instead, they are taught to persuade. Students harness the hidden power of language to manipulate the mind and to break individuals.
***Ella Minnow Pea* – Mark Dunn** (say it aloud and you'll get the joke)

Ella Minnow Pea is a girl living happily on the island of Nollop off the coast of South Carolina. Nollop was named after Nevin Nollop, author of the immortal pangram "The quick brown fox jumps over the lazy dog." Now Ella finds herself acting to save her friends, family, and fellow citizens from the totalitarianism of the island's Council, which has banned the use of certain letters of the alphabet as they fall from a memorial statue of Nevin Nollop. As the letters progressively drop from the statue, they also disappear from the novel.

ENGLISH LITERATURE

English Literature in the Lower Sixth

We will be preparing you for the Edexcel A level. On the course, you will study modern poetry, a drama text and two prose texts.

Over the summer we recommend that you:

- Go to the theatre.
- Dip into a poetry collection or two; collections like *Penguin's Poems for Life* or *The Poem and the Journey* (Ruth Padel) would be good starting points.
- Read some prose. Find a genre (suggestions below) and **read 3 novels** (or short story collection) from that genre, at least one of which should be
- pre 1900.

The prose texts you study are likely to be drawn from the themes below.

Women and Society	**Science and Society**	**The Supernatural**	**Crime**
Wuthering Heights (Bronte)	*Frankenstein* (Shelley)	*Dracula* (Stoker)	*Lady Audley's Secret* (Braddon)
*Tess of the D'Urbervilles (*Hardy)	*The Handmaid's Tale* (Atwood)	*The Picture of Dorian Gray (*Wilde)	*The Moonstone* (Collins)
Mrs Dalloway (Woolf)	*Never Let Me Go* (Ishiguro)	*Beloved (*Morrison)	*The Cutting Season* (Locke)
A Thousand Splendid Suns (Hosseini)	*The War of the Worlds* (Wells)	*The Little Stranger (*Waters)	*In Cold Blood* (Capote)

Below are some suggestions based on genres, but pick any genre or area that interests you

Women and Society
A Room with A View – E.M. Forster
An Angel at My Table – Janet Frame
Burial Rites – Hannah Kent
Cranford – Elizabeth Gaskell
Excellent Women – Barbara Pym
Fugitive Pieces – Anne Michaels
Middlemarch – George Eliot
Atonement – Ian McEwan
Oranges are not the Only Fruit – Jeanette Winterson
Persuasion – Jane Austen
The Bonesetter's Daughter – Amy Tan
The Painted Veil – Somerset Maugham
The Portrait of a Lady - Henry James
Villette – Charlotte Bronte
White Oleander – Janet Fitch
Wide Sargasso Sea – Jean Rhys

Crime and Detection

- *Brat Farrar* – Josephine Tey
- *Burial Rites* – Hannah Kent
- *Burnt Shadows* – Kamila Shamsie
- *Northanger Abbey* - Jane Austen
- *Strong Poison* – Dorothy L. Sayers
- *The Dry* – Jane Harper
- *The Turn of the Screw* – Henry James
- Any Agatha Christie novel
- *The Perfect Nanny* – Leila Slimani
- *The Good Son* – You-Jeong Jeon

Colonisation and its Aftermath
A Bend in the River – V S Naipaul
A Handful of Dust – Evelyn Waugh
Alias Grace – Margaret Atwood
Fasting, Feasting – Anita Desai
Half of A Yellow Sun - Chimamanda Ngozi Adichie
Staying On - Paul Scott
The Color Purple – Alice Walker
The Inheritance of Loss – Kiran Desai
The Lowland – Jhumpa Lahiri
The Poisonwood Bible – Barbara Kingsolver
The Secret River – Kate Grenville
Things Fall Apart – Chinua Achebe
White Teeth – Zadie Smith
White Tiger - Aravind Adiga

Science and Society
1984 – George Orwell
Brave New World – Aldous Huxley
Cloud Atlas – David Mitchell
Dominion – C. J. Sansom
Fahrenheit 451 – Ray Bradbury

Resistance – Owen Sheers
The Children of Men – P.D. James
The Road – Cormac McCarthy
The Time Machine - HG Wells

The Supernatural

Jonathan Strange & Mr Norrell – Susanna Clarke
Mexican Gothic - Silvia Moreno-Garcia
Northanger Abbey – Austen
Rebecca – Daphne du Maurier
The Bloody Chamber and other stories – Angela Carter
The Fall of the House of Usher - Edgar Allan Poe
The Historian – Elizabeth Kostova
The Thirteenth Tale – Diane Setterfield
The Turn of the Screw – Henry James
The Woman in White - Wilkie Collins

War
In Memoriam – Alice Winn
Strange Meeting – Susan Hill
Regeneration/ The Eye in the Door/ The Ghost Road – Pat Barker
War and Peace – Tolstoy
Birdsong – Sebastian Faulks
For Whom the Bell Tolls - Hemingway
The Yellow Birds – Kevin Powers
A Pale View of the Hills – Ishiguro
The Things They Carried – Tim O'Brien

Short Stories *(some identified above)*
Alice Munro - *For The Love Of A Good Woman*
Jhumpa Lahiri - *Interpreter of Maladies*
Adichie - *The Thing Around Your Neck*
Katherine Mansfield **-** *The Garden Party and Other Stories*
Julian Barnes - ***Pulse***
James Joyce – *Dubliner*

FRENCH

1. La famille en voie de changement	**Conseils pour réussir son couple :** https://www.journaldunet.com/management/expert/59110/10-conseils- pour-reu **Comment la première vie en couple a évolué de la génération des années 50 a** **Le cyberterrorisme :** https://www.vie-publique.fr/eclairage/18469-la-cybersecurite-quelles-reponses-a
2. Le rôle du bénévolat	**Les origines de la devise française : Liberté Egalité Fraternité :** La petite histoire de la devise « Liberté, Égalité, Fraternité »	info.gouv.fr **Un Français sur quatre fait du bénévolat :** http://www.lefigaro.fr/actualite-france/2017/12/05/01016-20171205ARTFIG00004-un-francais-s
3. La musique francophone contemporaine	**Playlist d'une ancienne élève :** https://open.spotify.com/playlist/6aJWHxkrfPhGtvgTGNUMXn?si=Gvz0TJ8cSXG6Azx_yvrFc
4. La cyber-société	**Les nouveaux métiers :** https://photo.capital.fr/20-nouveaux-metiers-du-numerique-qui-recrutent-et-comment-s-y-fo **Le cyberterrorisme :** https://www.vie-publique.fr/eclairage/18469-la-cybersecurite-quelles-reponses-aux-menaces
5. Le patrimoine	Documentaire sur la restitution de Notre Dame (disponible jusqu'au 15 mai): https://www.bbc.co.uk/iplayer/episode/m000hbdq/rebuilding-notredame-inside-the-great-cathedral- Chef's Table France : https://www.netflix.com/search?q=chef%27s%20ta&jbv=80128096&jbp=1&jb
6. Le septième art	**L'histoire du festival de Cannes : https://www.youtube.com/watch?v=jHkj1I7QWXQ** **Une liste de films/séries se trouve sur ce Padlet: https://padlet.com/alavelle3/igcse-french-m fbou9y7c3gu5/wish/j40PQDOEMOxYavXB**

Instructions for using these resources

This list is designed to be a little taster of what you can expect to be comfortable reading throughout your A Level French course, in order to maximise your knowledge and understanding of the topics covered in lessons. It will not be adequate to rely on the text book, although you should use it as your starting point and exploit it for practice exercises and statistics as much as you can.

How to go about tackling an authentic article:

Open up the page and be ready with a pen and paper to write down new vocabulary.
Work out first and foremost what the title means in order to give yourself a strong sense of context before you begin. Read the first paragraph and try to translate it in your head.
Pinpoint the words you are getting stuck on, based on whether you feel your translation makes sense given the title of the article. Write down these words and then go to WordReference to look them up INDIVIDUALLY. If you feel that the meaning that you have found doesn't fit the context of the article, try considering the possibility that the word might be part of a compound structure e.g. a little idiomatic expression or perhaps an expression which relies on two verbs together.
You can then scroll down on the listing for your word on WordReference and see if the compound use exists in their list.
You should aim to tackle one paragraph at a time, and to be able to summarise in English the content of each paragraph before moving on. Keep a record of the vocabulary that you look up so that you can see the progress that you make as you read more articles of this nature.
Remember that if you get stuck, it is probably because the meaning of the language is something that you have not come across before and just needs some unpicking!
When we have our live sessions, be ready to ask questions about the language you are confronted with so that you can fully understand the texts. Sometimes there is a cultural context that you cannot possibly expect to be aware of yet, so don't be disheartened if you feel you understand the words but not the meaning of the text.

Making full use of the video resources:

Remember that it is fine to watch with English subtitles. You can use them to your advantage and try spotting where the subtitles give a shortened or slightly less accurate version of what is being said. This is quite fun!
Once you get a bit more confident, you can try watching with French subtitles if they are available. This is really great for helping you to work on your spelling/phonetic awareness as well as your listening skills.
Listen out for differences in pronunciation – there is a huge range of different accents within France and it is fun to get to know them!
Try to build up a knowledge of significant public figures in France – actors, singers, directors, politicians, anyone who contributes to a feeling of what makes France French.
Use the video resources as a starting point for you to do your own research and start building up a picture of French culture. For example, with the Cannes video, you could look up which films have won prizes at Cannes and use that as a starting point for watching more French films

GEOGRAPHY

A Level Geography Summer Learning

This will be your **first assessed piece** of work (hand to your Geography teacher in your first lesson).

Hydrology, river processes and hazards

Term	Definition
Drainage basin	The area of land drained by a river and its tributaries. It functions as a natural system with inputs, stores, transfers, and outputs.
Infiltration	The process by which water enters the soil from the ground surface. The rate depends on soil type, vegetation cover, and saturation levels.
Throughflow	The horizontal movement of water through the soil layer, usually towards a river channel. It occurs more quickly through permeable soils.
Percolation	The downward movement of water from the soil into the underlying rock layers. It is slower than infiltration and affected by rock permeability.
Lag time	The time difference between the peak rainfall and the peak discharge. Short lag times can increase flood risk.
Overland flow	Also called surface runoff; it occurs when rainfall exceeds infiltration capacity and flows directly over the land surface into rivers.
Channel flow	The movement of water within the river channel itself, often measured as discharge (volume per unit of time).
Evapotranspiration	The combined process of water loss from the land surface by evaporation and from plants by transpiration.
Precipitation	Any form of moisture that falls from the atmosphere to the Earth's surface, including rain, snow, sleet, and hail.
Groundwater	Water that is stored in permeable rock below the water table. It can move slowly through the rock and feed rivers via baseflow.

Task

Use at least five of these terms to write no more than 500 words about a **UK drainage basin** and the **processes that operate within it**. You may use **maps and diagrams** to support your writing. You must have at least **three references** to support your work.

Extension: Earth processes and mass movements

Choose a recent mass movement event (e.g. landslide or debris flow) and research:

- What caused the event?
- What were the impacts on people and the environment?
- How successful were the responses and strategies used to manage it?

Link your example to other areas of the specification, such as: Human factors increasing risk (e.g. deforestation, urban growth), climate change and extreme weather or hazard management strategies (prediction, preparedness, response).

Urban areas and management

Term	Definition
Urbanisation	The increasing proportion of a population living in urban areas, usually linked to rural–urban migration and natural population growth.
Urban growth	The absolute increase in the physical size or population of an urban area, often through expansion of built-up areas and rising densities.
Counter-urbanisation	The movement of people and businesses away from urban areas to smaller towns, villages, or rural areas, often for lifestyle or cost reasons.
Re-urbanisation	The movement of people back into inner-city areas that have been redeveloped or regenerated, often involving young professionals and investment.

Urban morphology	The layout and physical form of urban areas, including street patterns, land use zones, and building structures.
Megacity	A city with a population of over 10 million people. Examples include Tokyo, Delhi, and São Paulo.
Urban sprawl	The uncontrolled outward expansion of urban areas into surrounding rural land, often characterised by low-density housing and car dependence.
Informal settlements	Residential areas where housing has been built without official planning permission, often lacking basic services like water and sanitation.
Urban sustainability	The ability of a city to operate in a way that meets the needs of the present without compromising the ability of future generations to do so.
World cities	A city that has a big influence on the world's economy, culture, and politics. It acts as a global hub for business, finance, and communication, and is home to important businesses, banks, and international organisations.

Task

Use at least five of these terms to write no more than 500 words about **an urban area** (anywhere in the world, except the UK) and the **processes that have shaped that place over time**. You may use **maps and diagrams** to support your writing. You must have at least **three references** to support your work.

Extension: Population and Migration

Choose a country that has introduced a policy to **manage high natural population growth** (e.g. through family planning, education, or incentives). Research and summarise:

- What was the policy and why was it introduced?
- What challenges or pressures was the country facing (e.g. housing, healthcare, employment)?
- How successful has the policy been?

Try to link your example to broader specification themes, such as: Population structure and dependency ratios, development level and government capacity and/or cultural and ethical considerations in policymaking.

GERMAN

Willkommen zum Deutsch-A-Level!

🎉 Willkommen zum Deutsch-A-Level – und herzlichen Glückwunsch zu dieser tollen Wahl! Ihr werdet eine ganz neue Seite der deutschen Sprache entdecken: spannende Kultur, aktuelle Themen, Filme, Literatur und viele Möglichkeiten, eure eigenen Meinungen auszudrücken. Manchmal wird es herausfordernd sein, aber auch abwechslungsreich, lohnend und richtig interessant. Wir freuen uns darauf, euch im September zu sehen – ihr werdet Deutsch lieben!

Themen

Year 12 topic content:

- Familie im Wandel
- Die Digitale Welt
- Jugendkultur
- Feste und Traditionen
- Kunst und Architektur
- Das Berliner Kulturleben

Year 13 topic content:

- Einwanderung
- Integration
- Rassismus
- Deutschland und die Europäische Union
- Die Politik und die Jugend
- Die Wiedervereinigung und ihre Folgen

- **Paper 1** - Listening, Reading and Writing + Translation (E-G and G-E)
  - Based on all topics studied in Years 12 and 13
  - 2hrs 30 mins, 100 marks, worth 50% of A-Level
- **Paper 2** - Essay paper – written in German
  - 2 x essays: 1 book and 1 film or 2 books (essays approx. 300 words each)
  - 2 hours, 80 marks, 20% of A-Level
  - Film (start Autumn Yr 12)
  - Novel/play (start at end of Yr 12)
- **Paper 3** – Speaking
  - Detailed discussion of one topic card from all topics studied in Yrs 12 and 13
  - Presentation and discussion of Individual Research Project (IRP)
  - Max 16-18 mins, 60 marks, 30% of A-Level

Preparing to start:

Grammar!

Revise and be confident with the following grammar points:

- Verbs and tenses! Nothing is more important than your verbs!
- Word order, in particular:
    - Verb second and inversion
    - Time Manner Place
    - Conjunctions! 3 sorts, 'resetting', inverting and subordinating
- Cases & adjective endings

You can review your GCSE notes and exercises, but the following are also very helpful:

- https://www.nthuleen.com/teach/grammar.html (comprehensive list of grammar explanations and activities. Recommended!)
- www.german.net (lots of grammar revision activities to choose from here)
- www.languagesonline.org.uk
- BBC Bitesize German

Vocab!

There are **a lot** of ready-made resources out there on the key language learning sites/apps, and of course you can compile your own lists too. Look specifically for Y12 German or search for one of the A level topics as listed above. Acquiring vocabulary is a **huge** part of the A level course. Much (though not all) of the grammar we do will be revision and consolidation of things you have already learned. Acquiring vocabulary is what will really enable you to move your language on. Try using some of the well-known vocab learning sites below – you can search up and find lots of sets for AQA A level German!

- Quizlet
- Memrise
- Remnote

Knowledge of all things German/Austrian/Swiss

At A level, you will study the topics in a specifically German/Austrian/Swiss context. For example, in the topic Familie im Wandel, we will learn about issues pertaining to family in Germany/Austria/Switzerland specifically, not in a general sense. Learning about these topics in German will both improve your language and broaden your knowledge.

Here are some ideas for things you might look at…

News and current affairs

Of course, all of the newspapers, magazines etc have their own websites which you can look at. However, they can often be a bit overwhelming… The ones below are designed more specifically for learners of German, ie you!

- Top-Thema *DW* is a great news site for learners of German. Look at *Video-Thema* and *Top-Thema* under the *Deutsch Lernen* tab. There are lots of topical videos and articles, and they often come with gap fill/comprehension exercises, lists of vocab, transcripts etc to help you maximise your learning. Don't worry about not understanding everything, that is to be expected. And don't look up every unknown word you come across. Just read/watch and absorb what you can: over time you will really a see a difference in how much you understand.
- News in Slow German: https://open.spotify.com/show/4CAPKEyQ9KHtm9XEkjWHp3 Remember, Listening is often the skill which students find the most challenging: the more you listen to authentic German, the more you will improve. Plus, your own accent and *Sprachgefühl* will improve too. Don't worry if you don't understand everything, or even only understand some bits. That will get better over time too.

TV and Films

We have a selection of films on HabsTube – look on the German page to see. But there are always lots of things on Netflix, Amazon Prime and All4 (Walter Presents) too. Again, great for improving your listening skills, your accent and general Sprachgefühl, even with subtitles. You can often opt for subtitles in German if you want that extra challenge!

There is also www.arte.tv/de which is a European culture tv channel. Plenty of diverse topics to choose from and they update what's on offer regularly. If you choose to *Deutsch (Hörgeschädigte)* as the language, you will get German subtitles to help you.

Music and Podcasts

- Discover some German music on Spotify! The Goethe Institute have a few playlists for example. https://open.spotify.com/user/goethe-institut
- See if you can understand the lyrics. Go to the Lyrics Training website and find a German song/band/artist you like. Complete the gap fills until you can complete 'advanced' (or even 'expert'?!) https://lyricstraining.com/de/
- Explore 600 years of Germany's complex history with Neil MacGregor's podcast 'Germany: Memories of a Nation'. Very interesting and covers all sorts of diverse topics using objects, art, landmarks and literature as a focus. You will both enjoy and learn! https://www.bbc.co.uk/programmes/b04dwbwz/episodes/downloads

Books

Getting to a level where you are proficient enough to read an authentic text is one of the great landmarks and joys of learning a language. Remember, you do NOT need to understand every single word, and you should NOT look up every single word you come across. It will spoil the process if you do and turn it into a laborious chore. At the start of Sixth Form in particular, you can consider purchasing the same text in both English and German. Read a chapter in English, then read the same chapter in German. You will realise then what a lot of the vocab must mean without having to look it up. You can also buy books with the English on one page and the German on the other of a double page side. If you are reading purely to improve your language, you can even consider reading a straightforward, favourite English book like Harry Potter in its German translation.

A good place to get ideas for modern literature to read is to look at recent nominees and winners of the *Deutscher Buchpreis.* If fiction is not what you are after, then look for biographies etc, or read news articles. As long as you are reading!

HISTORY

Early Modern - Tudor

The Tudors: A Very Short Introduction **by John Guy**

The Tudor Chronicles: 1485–1603 **by Susan Doran**

Thomas Cromwell: A Revolutionary Life **by Diarmaid MacCulloch**

Henry VIII: The King and His Court **by Alison Weir**

Heretics and Believers: A History of the English Reformation **by Peter Marshall**

Winter King: Henry VII and the Dawn of Tudor England **by Thomas Penn**

The Six Wives of Henry VIII **by Alison Weir**

Early Modern - USA

Friends Divided - Gordon S Wood

The Glorious Cause - Robert Middlekauff

American Revolution - Edward Countryman

Washington - Ron Chernow

Empire of Liberty

Late Modern - Britain

Hard Times by Charles Dickens

Heyday by Ben Wilson

Victorius Century by David Cannadine

Age of Improvement by Asa Briggs

Late Modern - USA

The Unfinished Journey by William H Chafe

Rise to Globalism by Stephen Ambrose

Uncivil Wars by Mark Hamilton Lytle

MATHEMATICS

Maths Extension Activities for Year 12 Further

YouTube channels

- Numberphile https://www.youtube.com/user/numberphile
- Mathologer https://www.youtube.com/channel/UC1_uAIS3r8Vu6JjXWvastJg
- MindYourDecisions https://www.youtube.com/user/MindYourDecisions
- Stand-up Maths https://www.youtube.com/channel/UCSju5G2aFaWMqn-_0YBtq5A
- 3blue1brown https://www.youtube.com/c/3blue1brown
- Blackpenredpen https://www.youtube.com/user/blackpenredpen
- Socratica https://www.youtube.com/playlist?list=PLi01XoE8jYoi3SgnnGorR_XOW3IcK-TP6
- Veritasium https://www.youtube.com/c/veritasium/videos

- The first five of these channels are appropriate for anyone with a general interest in Maths. The sixth channel looks at integration, using techniques taught (mostly) in Single Maths A2. The seventh channel introduces a first year university maths topic in a very approachable way. The eighth channel covers a variety of scientific topics, including some maths topics.

Maths websites

- Art of Problem Solving – Alcumus https://artofproblemsolving.com/alcumus

This is a useful website for answering extension maths questions and getting instant feedback.

- Project Euler https://projecteuler.net/

These are maths questions that you need to use a computer to solve.

- Isaac Physics https://isaacphysics.org/

This website includes a lot of Physics, but also sections covering Maths.

Competition websites

- BMO1 https://bmos.ukmt.org.uk/home/bmo.shtml#bmo1 This website has a supply of BMO1 papers, together with some solutions.

University Admission Tests websites

- TMUA Prepare – UAT UK (esat-tmua.ac.uk)
- MAT https://www.maths.ox.ac.uk/study-here/undergraduate-study/maths-admissions-test
- STEP Preparing for STEP – OCR
- STEP https://maths.org/step/

These websites have a variety of exam papers. TMUA and MAT are based (mostly) on single Maths AS, so should be (mostly) accessible by November of Y12. STEP I is based

(mostly) on the single Maths A2 syllabus, so some questions will be accessible by November of Y12, with the remaining questions accessible by early in Y13. STEP II is based (mostly) on single Maths A2 and Further Maths AS, so will begin to be accessible in the second half of Y12. STEP III is based on the Further Maths A2, so will begin to be accessible in the middle of Y12.

Books

DOING MATHEMATICS

How to Solve It George Polya (Penguin, 1990)
How to study for a maths degree Lara Alcock (OUP, 2013) How to Think like a Mathematician Kevin Houston (CUP, 2009)

HISTORICAL AND GENERAL

Mathematics: Queen and Servant of Science E.T. Bell (Spectrum, 1996) Makers of Mathematics S. Hollingdale (Penguin, 1989)
Mathematicians: An Outer View of the Inner World Mariana Cook (Princeton University Press, 2009) A Russian Childhood S. Kovalevskaya (trans. B. Stillman) (Springer, 1978)
Alan Turing, the Enigma A. Hodges (Vintage, 2014) The Man Who Knew Infinity R. Kanigel (Abacus, 1992) A Mathematician's Apology G.H. Hardy (CUP, 1992)
The man who loved only numbers Paul Hoffman (Fourth Estate, 1999) Surely You're Joking, Mr Feynman R.P. Feynman (Arrow Books, 1992) Fermat's Last Theorem Simon Singh (Fourth Estate, 2002)
The Simpsons and Their Mathematical Secrets Simon Singh (Bloomsbury, 2013) The Music of the Primes Marcus du Sautoy (Harper-Collins, 2003) Sautoy (Fourth Estate, 2008)
Symmetry and the Beautiful Universe Leon M. Lederman and Christopher T. Hill (Prometheus, 2004) Closing the Gap: The Quest to Understand Prime Numbers Vicky Neale (OUP, 2017)
Euler's Pioneering Equation Robin Wilson (OUP, 2018)

MATHEMATICAL ADVENTURES AND RECREATIONAL

http://www.cut-the-knot.org Alexander Bogomolny (since 1996) http://www.dimensions-math.org Etienne Ghys (since 2006)
www.josleys.com/articles/ams_article/Lorenz3.htm
The Colossal Book of Mathematics M. Gardner (Norton 2004)
Problem Solving Through Recreational Mathematics Bonnie Averbach & Orin Chein (Dover 2000) Game, Set and Math. I. Stewart (Penguin, 1997)
Does God Play Dice? I. Stewart (Penguin, 1990). To Infinity and Beyond Eli Maor (Princeton, 1991)
Cakes, Custard and Category Theory: Easy recipes for understanding complex maths Eugenia Cheng (Profile Books Ltd, 2015)
The Norm Chronicles: Stories and numbers about danger David Spiegelhalter and Michael Blastland (Profile, 2014)
A Mathematical Mosaic Ravi Vakil (Brendan Kelly, 2008)
Professor Povey's Perplexing Problems (Thomas Povey, 2015)

READABLE MATHEMATICS

The MαTH βOOK Clifford A Pickover (Sterling, 2009)
Mathematics: a very short introduction Timothy Gowers (OUP, 2002)
Solving Mathematical Problems Terence Tao (OUP, 2006)
Archimedes' Revenge P. Hoffman (Penguin, 1991)
The Pleasures of Counting T.W. K¨orner (CUP, 19

Calculus for the Ambitious T.W. K¨orner (CUP, 2014)
Logical Labyrinths Raymond S. Smullyan (CRC Press, 2008)
Luck, Logic, and White Lies: The Mathematics of Games J¨org Bewersdorff (A K Peters Ltd, 2004) Insights into Game Theory: An Alternative Mathematical Experience Ein-Ya Gura & Michael M. Maschler (CUP, 2008)
What is Mathematics? R. Courant & H. Robbins (OUP, 1996) From Here to Infinity Ian Stewart (OUP, 1996)
What's Happening in the Mathematical Sciences D. MacKenzie and B. Cipra (AMS, biennial publication, since 1993)
Beyond Numeracy J. A. Paulos (Penguin, 1991)
The Penguin Dictionary of Curious and Interesting Numbers D. Wells (Penguin, 1997) 50 Visions of Mathematics Sam Parc (ed.) (OUP, 2014)
Reaching for Infinity S. Gibilisco (Tab/McGraw-Hill, 1990) 1963 that this cannot be proved or disproved.
The Mathematical Experience P.J. Davis & R. Hersh (Penguin, 1990)
The Computational Beauty of Nature: Computer Explorations of Fractals, Chaos, Complex Systems, and Adaptation Gary W Flake (MIT Press, 2000)
Chaos J. Gleick (Minerva/Random House, 1997)
Chaos and Fractals: An Elementary Introduction David P. Feldman (OUP, 2012) Algorithms Unlocked Thomas H. Cormen (MIT, 2013)

READABLE THEORETICAL PHYSICS

A Short History of Nearly Everything Bill Bryson (Black Swan 2004)
The Strangest Man: The Hidden Life of Paul Dirac Graham Farmelo (Faber and Faber 2009) Black Hole Blues Janna Levin (Vintage 2016)
The Particle at the End of the Universe Sean Carroll (Oneworld Publications 2013) The New Quantum Universe T. Hey & P. Walters (CUP, 2003)
A Brief History of Time Stephen Hawking (Bantam Publishing 1988)

READABLE TEXTBOOKS

Advanced Problems in Mathematics: Preparing for University S.T.C. Siklos (OpenBook Publishers, 2016) http://www.openbookpublishers.com
Towards Higher Mathematics: A Companion Richard Earl (Cambridge University Press, 2017) Mathematical Methods for Science Students G. Stephenson (Longman, 1973)
Mathematical Methods for Physics and Engineering K F Riley, M P Hobson & S J Bence (Cambridge University Press 1998)
A Concise Introduction to Pure Mathematics Martin Liebeck (Chapman& Hall/CRC Mathematic, 2010)
What is Mathematical Analysis? John Baylis (MacMillan, 1991) Groups: A Path to Geometry R.P. Burn (CUP, 1987)
Yet Another Introduction to Analysis V. Bryant (CUP, 1990) A First Course in Mechanics Mary Lunn (OUP, 1991) Understanding Probability Henk Tijm (CUP, 2012)

OTHER

NRICH Mathematics - Free online mathematics resources designed to help students develop mathematical reasoning and problem-solving skills https://nrich.maths.org/post-16

Plus Magazine - An online magazine opening a door to the world of maths. https://plus.maths.org/content/

Advanced Problem-Solving resources from NRICH. This is an accessible and structured introduction to advanced problem solving, which will help build confidence, fluency and speed. An excellent starting point. https://nrich.maths.org/advancedps

STEP questions with solutions at Underground Mathematics. The Underground Mathematics website, funded by the DfE and based at the University of Cambridge, offers free resources to support the teaching of A level mathematics, as well as selected past STEP questions with fully worked solutions and explanations. https://undergroundmathematics.org/browse?typeOption=ReviewQuestion&reviewQuestionType= 6

Advanced Problems in Mathematics by Dr Stephen Siklos. We emphasise that Dr Siklos' book is free to download in PDF format. The book, which is a revised and extended version of two earlier books, analyses recent STEP questions selected to address the syllabus for Papers I and II. Each question is followed by a comment and a full solution. The solutions point students to the methodology required to address advanced mathematical problems critically and independently. https://www.openbookpublishers.com/product/1050 - Link to download

All past papers from 2014 are available to download from Cambridge Assessment and include answers to all questions. Solutions with explanation and mark scheme for the 2011 STEP I paper are also available. Preparing for STEP – OCR

Meikleriggs Mathematics: Dr Peter Mitchell's web site contains lots of useful mathematics including complete solutions to STEP papers from past years. http://meikleriggs.org.uk/

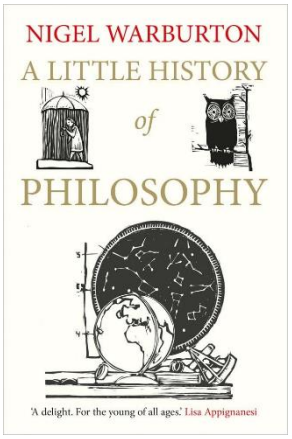
HE+ Website - For 6th Form students who want to further their interest in Maths https://myheplus.com/subject/mathematics

Oxford University's Maths Courses: For those of you who really want to push yourselves, the entirety of Oxford University's Undergraduate Maths courses are available online at https://courses.maths.ox.ac.uk/course/index.php?categoryid=99

PHILOSOPHY

Philosophy Reading List and Summer Work

Books



Nigel Warburton: 'A Little History of Philosophy' is a good starting point and very accessible Warburton

Edward Craig, Philosophy: A very Short Introduction Craig

Slightly more challenging…

Thomas Nagel, 'What does it all Mean?' 1989 or 'Mortal Questions' 2012

Bertrand Russell, 'The Problems of Philosophy' (a classic)

Alyssa Ney, 'Metaphysics: An Introduction, 2014

Earl Conee and Theodore Sider 'Riddles of Existence: A Guided Tour of Metaphysics'

W. Hodges, Logic (Penguin)

Articles

Read some articles from 'Philosophy now' – you can read these for free.

Examples:

What Did Mary Know? | Issue 99 | Philosophy Now

https://philosophynow.org/issues/99/Does_God_Exist

More challenging… some classic philosophical articles

Edmund Gettier 'Is Justified true Belief Knowledge?'1963
Is justified true belief knowedge

JME McTaggart, 'The Unreality of Time, Mind, 1908

Judith Jarvis Thomson 'A defence of Abortion,' The Journal of Philosophy, 1971

John Searle, 'Minds, Brains and Programs,' Behavioral and Brain Sciences 3, 1980

GEM Anscombe, 'Modern Moral Philosophy, 1958

Thomas Nagel, "Moral Luck, 1979

Elizabeth Anderson, 'What is the Point of Equality?,1999

Peter Strawson, 'Freedom and Resentment,' 1962

Peter Singer, Famine, Affluence and Morality, '1972

Dan Moeller 'Love and Death,' 2007

Podcasts/lectures etc

Philosophy Bites

Listen to any of the podcasts in the Philosophy Bites series: e.g.

Philosophy Bites episode on trolley problems

Peter Singer on consequentialism

Christine Korsgaard on the status of animals

Massolit – set up an account with your school email

https://www.massolit.io/

Courses

Oxford Scholastica online summer school – 1 and 2 week courses available for World History and Philosophy for students 15 – 18

Free online courses | The University of Edinburgh – courses available on: Intro to Philosophy, Philosophy and Science etc.

Top Philosophy Courses - Learn Philosophy Online (coursera.org) – lots of 4 week free courses on a variety of topics – check that it says 'enrol for free'

Massolit – set up an account with your school email

https://www.massolit.io/

Courses

Oxford Scholastica online summer school – 1 and 2 week courses available for World History and Philosophy for students 15 – 18

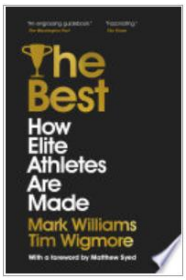
Free online courses | The University of Edinburgh – courses available on: Intro to Philosophy, Philosophy and Science etc.

Top Philosophy Courses - Learn Philosophy Online (coursera.org) – lots of 4 week free courses on a variety of topics – check that it says 'enrol for free'

PHYSICAL EDUCATION

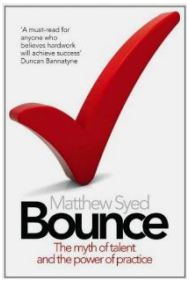
As you begin A Level PE, you will be expected to think critically about the factors that influence sporting performance, from physiology and skill acquisition to psychology, leadership, and elite athlete development. The books below go beyond the A Level syllabus, providing insights from world-class athletes, coaches, sports scientists, and business leaders. They will help you develop a deeper understanding of performance, success, resilience, and the characteristics that separate good performers from great ones.

- **The Best: How Elite Athletes Are Made-by A. Mark Williams, Tim Wigmore**



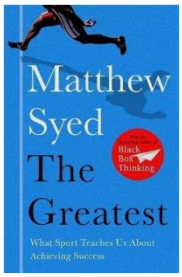
This book explores what truly creates elite athletes, drawing on sports science, psychology, genetics, coaching, and athlete development research. The authors challenge common myths about talent and success, examining factors such as practice, environment, family influences, decision-making, resilience, and performance under pressure. It provides evidence-based insights into how world-class performers develop and sustain excellence

- **Bounce-By Matthew Syed**



Written by a former Olympian, *Bounce* challenges the idea that success is primarily the result of natural talent. Syed argues that deliberate practice, opportunity, mindset, and environment play a much greater role in achievement than most people realise. The book draws on examples from sport, business, and science to demonstrate how excellence is developed rather than inherited

- **The Greatest: What Sport Teaches Us About Achieving Success-Matthews Syed**

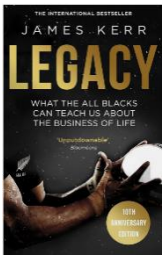


This book examines the lessons sport can teach about high performance, learning, leadership, resilience, and continual improvement. Syed explores what separates exceptional performers from the rest and shows how principles used by elite athletes can be applied in education, business, and everyday life. The focus is on developing a growth mindset and embracing challenges as opportunities for improvement.

- **Shoe dog-Phill Knight**

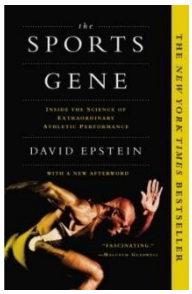
A memoir by Nike founder Phil Knight, *Shoe Dog* tells the story of how Nike grew from a small start-up selling running shoes out of a car boot into one of the world's most successful sports brands. The book provides insights into entrepreneurship, leadership, risk-taking, perseverance, team building, and the challenges of creating a high-performance culture.

- **Legacy-James Kerr**



Drawing on the culture of New Zealand's legendary All Blacks rugby team, *Legacy* identifies key leadership principles that underpin sustained success. Themes include humility, accountability, teamwork, purpose, resilience, and servant leadership. The book's lessons are highly relevant not only to sport but also to leadership and organisational culture

- **Sports Gene-David Epstein**



Epstein investigates the long-running debate of nature versus nurture in sport. Using scientific research and case studies, he explores the role genetics plays in athletic performance while also examining the importance of training, environment, opportunity, and culture. The book provides a nuanced understanding of what contributes to sporting excellence

PHYSICS

Name and email address of Subject Leader to be contacted if you have any issues with this Bridging Work:	**Mr J Keys jkeys@habselstree.org.uk**
Time required to complete this task	**3 hours approx**
Task details:	1) **Click this link and setup an account https://isaacphysics.org/login. If you attended the school for your GCSEs you may find it easier to 'log in with google' using your school account** 2) **You will need to confirm your account by clicking on the link in the email they send.** 3) **When you have logged into your account click this link. https://isaacphysics.org/account?authToken=3HGWB4 all you are granting is that I can see your name. You should now see 'J Keys' under teacher connections.** **Alternatively: login and click on 'My Isaac' then 'My account', click on the 'teacher connections tab', Enter the code 3HGWB4; and click 'apply code'. You may have to grant access to your information; all you are granting is that I can see you name. You should see now 'J Keys' under teacher connections.**
	4) **Click 'My Isaac' again and then on 'my assignments' you should then see 3 boards to complete GCSE to A level Physics - quick skills 1 and 2 and getting to grips with sig figs). Click on the purple hexagons to answer the questions. You are expected to answer all the questions.** 5) **To help you may need to refer to the information here on significant figures: https://isaacphysics.org/solving_problems. If you get the 'correct' numerical answer but it is to the wrong number of significant figures Isaac Physics will mark it incorrect – more on sig figs next year! You may need some help on SI units, if so please refer to these videos: https://www.youtube.com/watch?v=jLRoseFxm30; https://www.youtube.com/watch?v=Sb8cxC4lOy8.** 6) **You will need to show your working when you submit your bridging work.** 7) **Some information on Isaac Physics:** ● **We use it to set homework so will need an account for the next two years.**

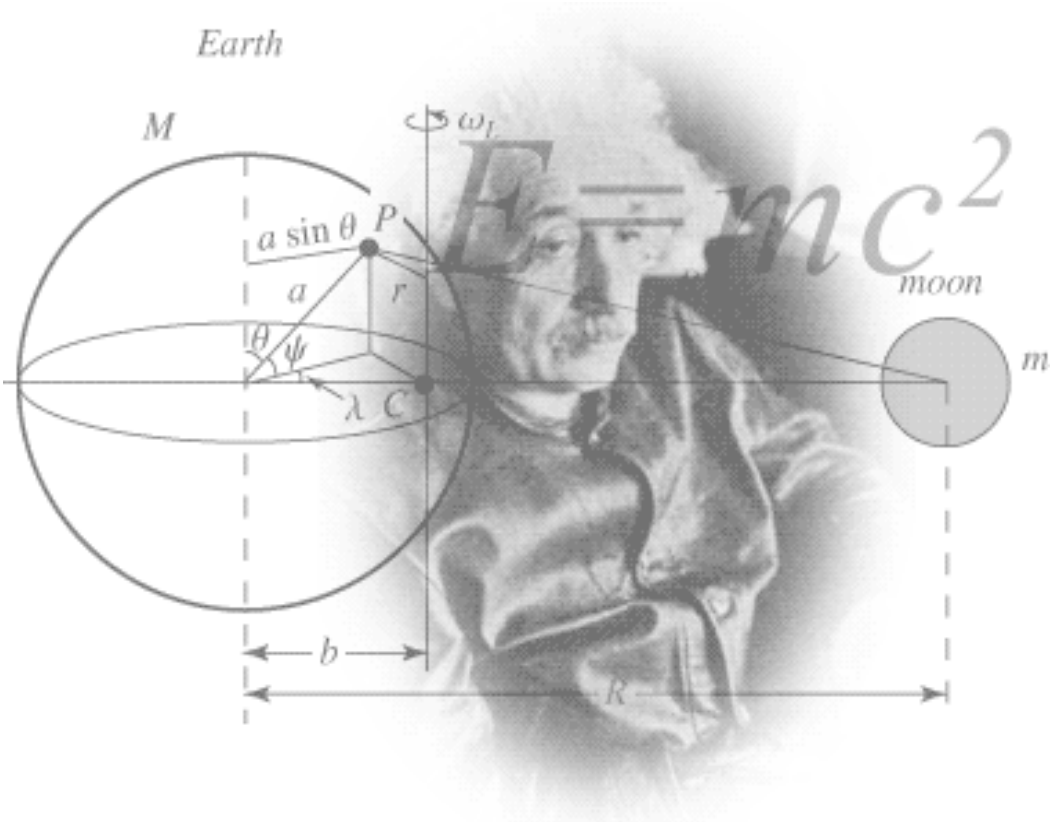
	• It is used to give you experience of the concepts we cover in lessons with instant feedback. • The homeworks starts with practice of the basics and then finishes with some challenging questions. • The idea is to gain mastery of a particular area of physics. Your teacher cannot see how many times you have attempted a question, but only whether you eventually got the right answer or not.
Resources required:	**Internet connected device & calculator**
Submission details:	**Ensure you have completed the questions online by Wednesday 10th September**
Other resources	**Pixl Transition pack below**

Reading list

This is the book used for the course if you wish to purchase it.

Title:	Author(s):	ISBN:	Amazon Link:
AQA Physics: A Level Student Book	Jim Breithaupt	978-0-19-835187-0	AQA Physics: A Level Student Book (AQA A Level Sciences 2014): Amazon.co.uk: Breithaupt, Jim: 9780198351870: Books

So you are considering A Level Physics?



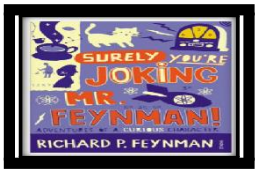
This pack contains a programme of activities and resources to prepare you to start an A level in Physics in September. It is aimed to be used after you complete your GCSE, throughout the remainder of the Summer term and over the Summer Holidays to ensure you are ready to start your course in September.

Book Recommendations

Below is a selection of books that should appeal to a physicist – someone with an enquiring mind who wants to understand the universe around us. None of the selections are textbooks full of equation work (there will be plenty of time for that!) instead each provides insight to either an application of physics or a new area of study that you will be meeting at A Level for the first time.

These are NOT essential and we strongly suggest that if you are interested in these you try to borrow them from a library to keep your costs down!

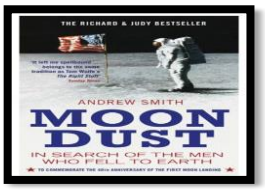
1. **Surely You're Joking Mr Feynman: Adventures of a Curious Character**



ISBN - 009917331X - Richard Feynman was a Nobel Prize winning Physicist. In my opinion he epitomises what a Physicist is. By reading this books you will get insight into his life's work including the creation of the first atomic bomb and his bongo playing adventures and his work in the field of particle physics.

(Also available on Audio book)
https://www.waterstones.com/books/search/term/surely+youre+joking+mr+feynman++adventures+of
+a+curious+character

2. **Moondust: In Search of the Men Who Fell to Earth**



ISBN – 1408802384 - One of the greatest scientific achievements of all time was putting mankind on the surface of the moon. Only 12 men made the trip to the surface, at the time of writing the book only 9 are still with us. The book does an excellent job of using the personal accounts of the 9 remaining astronauts and many others involved in the space program at looking at the whole space- race era, with hopefully a new era of space flight about to begin as we push on to put mankind on Mars in the next couple of decades.

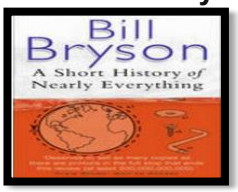
https://www.waterstones.com/books/search/term/moondust++in+search+of+the+men+who+fell+to+e arth

3. **Quantum Theory Cannot Hurt You: Understanding the Mind-Blowing Building Blocks of the Universe**

ISBN - 057131502X - Any Physics book by Marcus Chown is an excellent insight into some of the more exotic areas of Physics that require no prior knowledge. In your first year of A-Level study you will meet the quantum world for the first time. This book will fill you with interesting facts and handy analogies to whip out to impress your peers.

https://www.waterstones.com/book/quantum-theory-cannot-hurt-you/marcus- chown/9780571315024

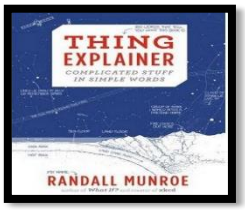
4. **A Short History of Nearly Everything**



ISBN – 0552997048 - A modern classic. Popular science writing at its best. A Short History of Nearly Everything Bill Bryson's quest to find out everything that has happened from the Big Bang to the rise of civilization - how we got from there, being nothing at all, to here, being us. Hopefully by reading it you will gain an awe-inspiring feeling of how everything in the universe is connected by some fundamental laws.

https://www.waterstones.com/books/search/term/a+short+history+of+nearly+everything

5. **Thing Explainer: Complicated Stuff in Simple Words**



ISBN – 1408802384 - This final recommendation is a bit of a wild-card – a book of illustrated cartoon diagrams that should appeal to the scientific side of everyone. Written by the creator of online comic XTCD (a great source of science humour) is a book of blueprints from everyday objects such as a biro to the Saturn V rocket and an atom bomb, each one meticulously explained BUT only with the most common 1000 words in the English Language. This would be an excellent coffee table book in the home of every scientist.

https://www.waterstones.com/book/thing-explainer/randall-munroe/9781473620919

Movie / Video Clip Recommendations

Hopefully you'll get the opportunity to soak up some of the Sun's rays over the summer – synthesising some important Vitamin-D – but if you do get a few rainy days where you're stuck indoors here are some ideas for films to watch or clips to find online.

Science Fictions Films

1. **Moon (2009)**
2. **Gravity (2013)**
3. **Interstellar (2014)**
4. **The Imitation Game (2015)**
5. **The Prestige**

(2006) Online Clips /

Series

1. **Minute Physics –** Variety of Physics questions explained simply (in felt tip) in a couple of minutes. Addictive viewing that will have you watching clip after clip – a particular favourite of mine is "Why is the Sky Dark at Night?"

https://www.youtube.com/user/minutephysics

2. **Wonders of the Universe / Wonders of the Solar System –** Both available of Netflix as of 17/4/16 – Brian Cox explains the Cosmos using some excellent analogies and wonderful imagery.

3. **Shock and Awe, The Story of Electricity –** A 3 part BBC documentary that is essential viewing if you want to see how our lives have been transformed by the ideas of a few great scientists a little over 100 years ago. The link below takes you to a stream of all three parts joined together but it is best watched in hourly instalments. Don't forget to boo when you see Edison. (alternatively watch any Horizon documentary – loads of choice on Netflix and the I-Player)

https://www.youtube.com/watch?v=Gtp51eZkwoI

4. **NASA TV –** Online coverage of launches, missions, testing and the ISS. Plenty of clips and links to explore to find out more about applications of Physics in Space technology.

http://www.nasa.gov/multimedia/nasatv/

5. **The Fantastic Mr. Feynman –** I recommended the book earlier, I also cannot recommend this 1 hour documentary highly enough. See the life's work of the "great explainer", a fantastic mind that created mischief in all areas of modern Physics.

https://www.youtube.com/watch?v=LyqIeIxXTpw

Research activity

To get the best grades in A Level Physics you will have to get good at completing independent research and making your own notes on difficult topics. Below are links to 5 websites that cover some interesting Physics topics.

Using the Cornell notes system: http://coe.jmu.edu/learningtoolbox/cornellnotes.html make 1 page of notes

from each site covering a topic of your choice.

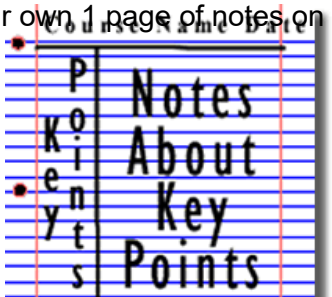
a) http://home.cern/about
CERN encompasses the Large Hadron Collider (LHC) and is the largest collaborative science experiment ever undertaken. Find out about it here and make a page of suitable notes on the accelerator.

b) http://joshworth.com/dev/pixelspace/pixelspace_solarsystem.html
The solar system is massive and its scale is hard to comprehend. Have a look at this award winning website and make a page of suitable notes.

c) https://phet.colorado.edu/en/simulations/category/html
PhET create online Physics simulations when you can complete some simple experiments online. Open up the resistance of a wire html5 simulation. Conduct a simple experiment and make a one page summary of the experiment and your findings.

d) http://climate.nasa.gov/
NASA's Jet Propulsion Laboratory has lots of information on Climate Change and Engineering Solutions to combat it. Have a look and make notes on an article of your choice.

e) http://www.livescience.com/46558-laws-of-motion.html
Newton's Laws of Motion are fundamental laws for the motion of all the object we can see around us. Use this website and the suggested further reading links on the webpage to make your own 1 page of notes on the topics.



Pre-Knowledge Topics

Below are ten topics that are essential foundations for you study of A-Level Physics. Each topics has example questions and links where you can find our more information as you prepare for next year.

Symbols and Prefixes

Prefix	Symbol	Power of ten
Nano	n	$\times 10^{-9}$
Micro	μ	$\times 10^{-6}$
Milli	m	$\times 10^{-3}$
Centi	c	$\times 10^{-2}$
Kilo	k	$\times 10^{3}$
Mega	M	$\times 10^{6}$
Giga	G	$\times 10^{9}$

At A level, unlike GCSE, you need to remember all symbols, units and prefixes. Below is a list of quantities you may have already come across and will be using during your A level course

Quantity	Symbol	Unit
Velocity	v	ms^{-1}
Acceleration	a	ms^{-2}
Time	t	S
Force	F	N
Resistance	R	Ω
Potential difference	V	V
Current	I	A
Energy	E or W	J
Pressure	P	Pa

Momentum	p	$kgms^{-1}$
Power	P	W
Density	ρ	kgm^{-3}
Charge	Q	C

Solve the following:

1. How many metres in 2.4 km?

2. How many joules in 8.1 MJ?

3. Convert 326 GW into W.

4. Convert 54 600 mm into m.

5. How many grams in 240 kg?

6. Convert 0.18 nm into m.

7. Convert 632 nm into m. Express in standard form.

8. Convert 1002 mV into V. Express in standard form.

9. How many eV in 0.511 MeV? Express in standard form.

10. How many m in 11 km? Express in standard form.

Standard Form

At A level quantity will be written in standard form, and it is expected that your answers will be too.

This means answers should be written as ….x 10^{y}. E.g. for an answer of 1200kg we would write 1.2 x 10^{3}kg. For more information visit:
www.bbc.co.uk/education/guides/zc2hsbk/revision

1. Write 2530 in standard form.

2. Write 280 in standard form.

3. Write 0.77 in standard form.

4. Write 0.0091 in standard form.

5. Write 1 872 000 in standard form.

6. Write 12.2 in standard form.

7. Write 2.4×10^{2} as a normal number.

8. Write 3.505×10^{1} as a normal number.

9. Write 8.31×10^{6} as a normal number.

10. Write 6.002×10^{2} as a normal number.

11. Write 1.5×10^{-4} as a normal number.

12. Write 4.3×10^{3} as a normal number.

1. Write 2530 in standard form.

2. Write 280 in standard form.

3. Write 0.77 in standard form.

4. Write 0.0091 in standard form.

5. Write 1 872 000 in standard form.

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10. Write 6.002×10^{2} as a normal number.

11. Write 1.5×10^{-4} as a normal number.

12. Write 4.3×10^{3} as a normal number.

Rearranging formulae

This is something you will have done at GCSE and it is crucial you master it for success at A level. For a recap of GCSE watch the following links:

www.khanacademy.org/math/algebra/one-variable-linear-equations/old-school-equations/v/solving-for-a- variable

www.youtube.com/watch?v=_WWgc3ABSj4

Rearrange the following:

1. E=m x g x h to find h
2. Q= I x t to find I
3. E = ½ m v^2 to find m
4. E = ½ m v^2 to find v
5. v = u + at to find u
6. v = u + at to find a
7. $v^2 = u^2 + 2as$ to find s
8. $v^2 = u^2 + 2as$ to find u

Significant figures

At A level you will be expected to use an appropriate number of significant figures in your answers. The number of significant figures you should use is the same as the number of significant figures in the data you are given. You can never be more precise than the data you are given so if that is given to 3 significant your answer should be too. E.g. Distance = 8.24m, time = 1.23s therefore speed = 6.75m/s

The website below summarises the rules and how to

round correctly.

http://www.purplemath.com/modules/rounding2.htm

Give the following to 3 significant figures:

1. 3.4527

2. 40.691

3..838991

4. 1.0247

5. 59.972

Calculate the following to a suitable number of significant figures:

6. 63.2/78.1

7. 39+78+120

8. (3.4+3.7+3.2)/3

9. 0.0256 x 0.129

10. 592.3/0.1772

Atomic Structure

You will study nuclear decay in more detail at A level covering the topics of radioactivity and particle physics. In order to explain what happens you need to have a good understanding of the model of the atom. You need to know what the atom is made up of, relative charges and masses and how sub atomic particles are arranged.

The following video explains how the current model was discovered www.youtube.com/watch?v=wzALbzTdnc8

Describe the model used for the structure of an atom including details of the individual particles that make up an atom and the relative charges and masses of these particles. You may wish to include a diagram and explain how this model was discovered by Rutherford

Recording Data

Whilst carrying out a practical activity you need to write all your raw results into a table. Don't wait until the end, discard anomalies and then write it up in neat.

Tables should have column heading and units in this format quantity/unit e.g. length /mm

All results in a column should have the same precision and if you have repeated the experiment you should calculate a mean to the same precision as the data.

Below are link to practical handbooks so you can familiarise yourself with expectations.

http://filestore.aqa.org.uk/resources/physics/AQA-7407-7408-PHBK.PDF

http://www.ocr.org.uk/Images/295483-practical-skills-handbook.pdf

http://www.ocr.org.uk/Images/295483-practical-skills-handbook.pdf

Below is a table of results from an experiment where a ball was rolled down a ramp of different lengths. A ruler and stop clock were used.

1) Identify the errors the student has made.

	Time			
Length/cm	**Trial 1**	**Trial 2**	**Trial 3**	**Mean**
10	1.45	1.48	1.46	1.463
22	2.78	2.72	2.74	2.747
30	4.05	4.01	4.03	4.03
41	5.46	5.47	5.46	5.463
51	7.02	6.96	6.98	6.98
65	8.24	9.68	8.24	8.72
70	9.01	9.02	9.0	9.01

Graphs

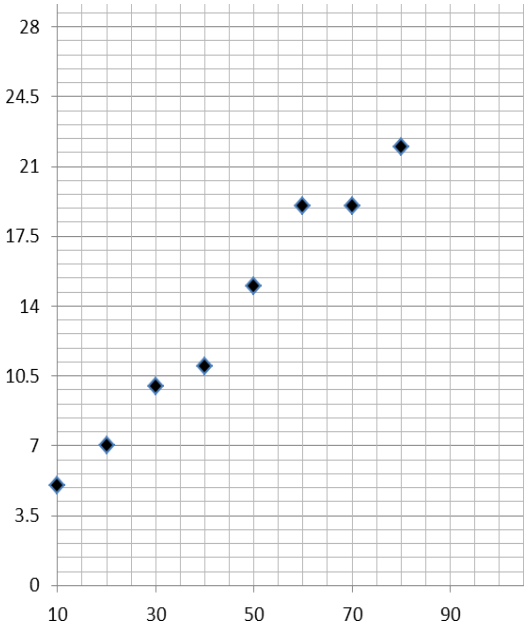
After a practical activity the next step is to draw a graph that will be useful to you. Drawing a graph is a skill you should be familiar with already but you need to be extremely vigilant at A level. Before you draw your graph to need to identify a suitable scale to draw taking the following into consideration:

- the maximum and minimum values of each variable
- whether 0.0 should be included as a data point; graphs don't need to show the origin, a false origin can be used if your data doesn't start near zero.

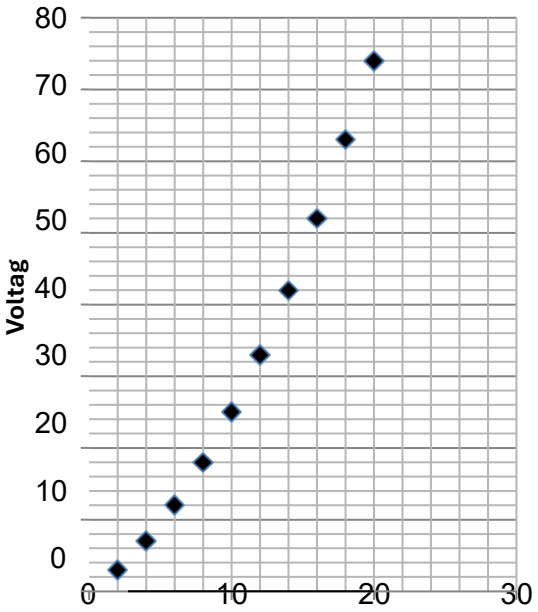
- the plots should cover at least half of the grid supplied for the graph.
- the axes should use a sensible scale e.g. multiples of 1,2, 5 etc)

Identify how the following graphs could be improved

Graph 1



Graph 2



Forces and Motion

At GCSE you studied forces and motion and at A level you will explore this topic in more detail so it is essential you have a good understanding of the content covered at GCSE. You will be expected to describe, explain and carry calculations concerning the motion of objects. The websites below cover Newton's laws of motion and have links to these in action.

http://www.physicsclassroom.com/Physics-Tutorial/Newton-s-Laws

http://www.sciencechannel.com/games-and-interactives/newtons-laws-of-motion-interactive/

Sketch a velocity-time graph showing the journey of a skydiver after leaving the plane to reaching the ground. Mark on terminal velocity.

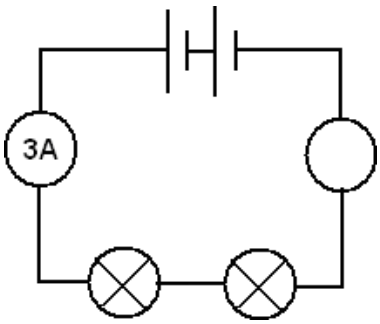
Electricity

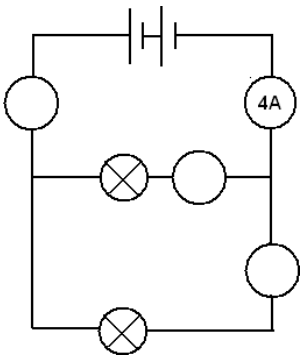
At A level you will learn more about how current and voltage behave in different circuits containing different components. You should be familiar with current and voltage rules in a series and parallel circuit as well as calculating the resistance of a device.

http://www.allaboutcircuits.com/textbook/direct-current/chpt-1/electric-circuits/

http://www.physicsclassroom.com/class/circuits

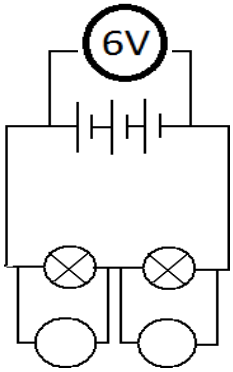
1a) Add the missing ammeter readings on the circuits below.

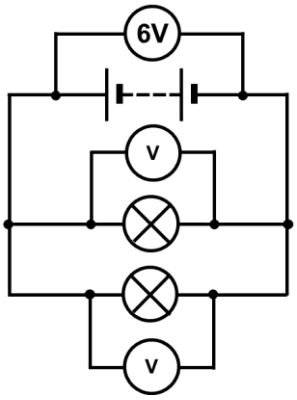




b) Explain why the second circuit has more current flowing than the first.

2) Add the missing potential differences to the following circuits





Waves

You have studied different types of waves and used the wave equation to calculate speed, frequency and wavelength. You will also have studied reflection and refraction.

Use the following links to review this

topic.

http://www.bbc.co.uk/education/clips/zb

7gkqt

https://www.khanacademy.org/science/physics/mechanical-waves-and-sound/mechanical- waves/v/introduction-to-waves

https://www.khanacademy.org/science/physics/mechanical-waves-and-sound/mechanical- waves/v/introduction-to-waves

1) Draw a diagram showing the refraction of a wave through a rectangular glass block. Explain why the ray of light takes this path.

2) Describe the difference between a longitudinal and transverse waves and give an example of each

3) Draw a wave and label the wavelength and amplitude

Pre-Knowledge Topics Answers:

Symbols and prefixes

1. 2400
2. 8 100 000
3. 326 000 000 000
4. 54.6
5. 240 000
6. 1.8×10^{-8}
7. 6.32×10^{-7}
8. 1.002
9. 5.11×10^{-5}
10. 1.1×10^{4}

Standard Form:

1. 2.53
2. 2.8
3. 7.7
4. 9.1
5. 1.872
6. 1.22
7. 2400
8. 35.05
9. 8 310 000
10. 600.2
11. 0.00015
12. 4300

Rearranging formulae

1. $h = E / (m \times g)$
2. $I = Q/t$
3. $m = (2 \times E)/v^2$ or $E/(0.5 \times v^2)$
4. $v = \sqrt{((2 \times E)/m)}$
5. $u = v - at$
6. $a = (v-u)/t$
7. $s = (v^2 - u^2) / 2a$
8. $u = \sqrt{(v^2-2as)}$

Significant figures

1. 3.35
2. 40.7
3. 0.839
4. 1.02
5. 60.0
6. 0.809
7. 237
8. 3.4
9. 0.00330
10. 334

Atomic Structure

contains protons, neutrons and electrons

Relative charge:

protons are positive (+1)

electrons are negative (-1)

neutrons are uncharged (0)

Relative mass:

proton 1

neutron 1

electron (about) 1/2000

protons and neutrons make up the

nucleus

the nucleus is positively charged

electrons orbit the nucleus at a relatively large distance from the

nucleus most of the atom is empty space

nucleus occupies a very small fraction of the volume of the

atom

most of the mass of the atom is contained in the nucleus

total number of protons in the nucleus equals the total number of electrons orbiting it in an atom

Recording data

Time should have a unit next to it

Length can be measured to the nearest mm so should be 10.0,

22.0 etc Length 65 trial 2 is an anomaly and should have been

excluded from the mean All mean values should be to 2 decimal

places

Mean of length 61 should be 6.99 (rounding error)

Graphs

Graph 1:

Axis need labels

Point should be x not

dots Line of best fit is

needed y axis is a

difficult scale

x axis could have begun at zero so the y-intercept could be found

Graph 2:

y-axis needs a unit

curve of best fit needed not a

straight line

Point should be x not dots

Forces and motion

Graph to show acceleration up to a constant speed (labelled terminal velocity). Rate of acceleration should be decreasing. Then a large decrease in velocity over a short period of time (parachute opens), then a decreasing rate of deceleration to a constant speed (labelled terminal velocity)

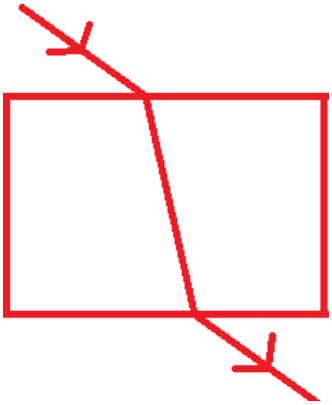
Electricity

1a) Series: 3A, Parallel top to bottom: 4A,2A,2A

b) Less resistance in the parallel circuit. Link to R=V/I. Less resistance means higher current.

2) Series: 3V, 3V, Parallel: 6V 6V

Waves

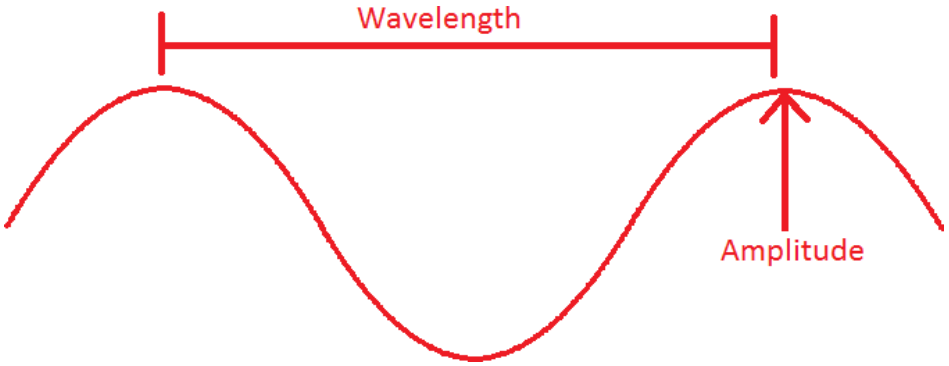


1) When light enters a more optically dense material it slows down and therefore bends towards the normal. The opposite happened when it leaves an optically dense material.

2) A longitudinal wave oscillates parallel to the direction of energy transfer (e.g. sound). A transverse waves oscillated perpendicular to the direction of energy transfer (e.g. light)

3)

.



Ideas for Day Trips

Here are some suggestions for some physics-themed days out for you to enjoy over the summer break. Try and have some fun as you prepare for two tough but rewarding years ahead!

Northern England and Scotland

1. **Jodrell Bank Observatory** – Cheshire – one of the largest moveable radio telescopes in the world and the location of the filming of the BBC's Stargazing Live. The site has both indoor and outdoor activities.
2. **MOSI** – Manchester – Massive free museum showing how science helped Britain lead the way through the industrial revolution. Contains hands on exhibits and displays and often host regular travelling exhibitions.
3. **Liverpool World Museum** / **Spaceport –** Liverpool/Wirral – Start the day off at an excellent family science museum with a top floor dedicated to astronomy including a planetarium. Take the ferry cross the Mersey to another family friendly museum dedicated to spaceflight.
4. **Kielder Observatory** – Northumberland – Book ahead at this popular observatory in the midst of the darkest night skies the UK has to offer. Regular tours and opportunities to view the stars through professional telescopes take place on a nightly basis.
5. **Glasgow Science Centre** - The Centre is home to hundreds of interactive exhibits throughout the three engaging floors

The Midlands and Wales

1. **Electric Mountain** – Snowdonia – Set against a mountainous backdrop is a working pumped storage power station. Take a tour deep into the heart of the mountain and see the turbines spring into action to meet our ever increasing demand for electricity. Take a stroll up on of the UKs highest peaks in the afternoon.
2. **National Space Centre** – Leicester - With six interactive galleries, the UK's largest planetarium, unique 3D Simulator experience, the award-winning National Space Centre in Leicester is an out of this world visitor attraction
3. **Alton Towers** – Staffordshire – Treat yourself to a go on a few rollercoasters whilst discussing Newton's Laws. You may want to download and take these handy rollercoaster physics notes with you http://www.explainthatstuff.com/rollercoasters.html

Southern England

1. **Royal Observatory** – London - Visit the Royal Observatory Greenwich to stand on the historic Prime Meridian of the World, see the home of Greenwich Mean Time (GMT), and explore your place in the universe at London's only planetarium.
2. **Herschel Museum of Astronomy –** Bath – As you walk around the picturesque Roman city – take an hour or two out at the home of one of the great scientists – discoverer of Infra-red radiation and Uranus.
3. **@Bristol –** Bristol - home to the UK's only 3D Planetarium and one of the biggest science centres.
4. **The Royal Institution –** London – The birthplace of many important ideas of modern physics, including Michael Faraday's lectures on electricity. Now home to the RI Christmas lectures and many exhibits of science history.

A Level Physics Transition Baseline Assessment

40 Marks – 40 Minutes

A single piece of graph paper is required for the completion of the assessment. You may use a calculator.

Question Number	Topic	Score
1	Symbols and Prefixes	/3
2	Standard Form	/4
3	Re-arranging Equations	/3
4	Atomic Structure	/3
5	Recording Data	/3
6	Graphing	/4
7	Forces and Motion	/10
8	Electrical Circuits	/5
9	Waves	/5
	Total	/40

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Q1 Complete the following table:

Unit prefix	Meaning
k (kilo)	x 1000
	X 0.000001
M (mega)	
N (nano)	

[3]

Q2

a) Write the following numbers into standard form.

i. 0.012

ii. 120000

iii. 0.00000012

[3]

b) Complete the following calculations and right your answers to an appropriate number of significant figures. i. 2.1 X 0.15

ii. 0.345 ÷ 0.114

[4]

Q3 Re-arrange the following equations to make R the subject of the equation. a) $QQ = WWWWWWWWWW$

b) $QQ^{22} = WWWW^{22}$

c) $QQ = WW - WWWW^{22}$

[3]

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Q4 Name the 3 particles (from GCSE) that make up an atom.

..... [1]

a) Which one of the above particles is not found in the nucleus of an atom?

..... [1]

b) Which of the above particles will be found in varying quantities in the nuclei of isotopes of the same element?

..... [1]

Q5

a) Complete the following table

Voltage (_)	_____ (A)		
	Repeat 1	Repeat 2	Average
2	0.23	0.26	0.25
4	0.46	0.53	
6	0.69	0.78	0.74
8	0.92	1.04	0.98
10	1.15	1.30	1.23

[3]

Q6

a) Use your piece of graph paper to plot a graph of Current (x-axis) against Voltage (y-axis) drawing a line of best fit through your data points.

[4]

b) Find the gradient of your line of best fit [3]

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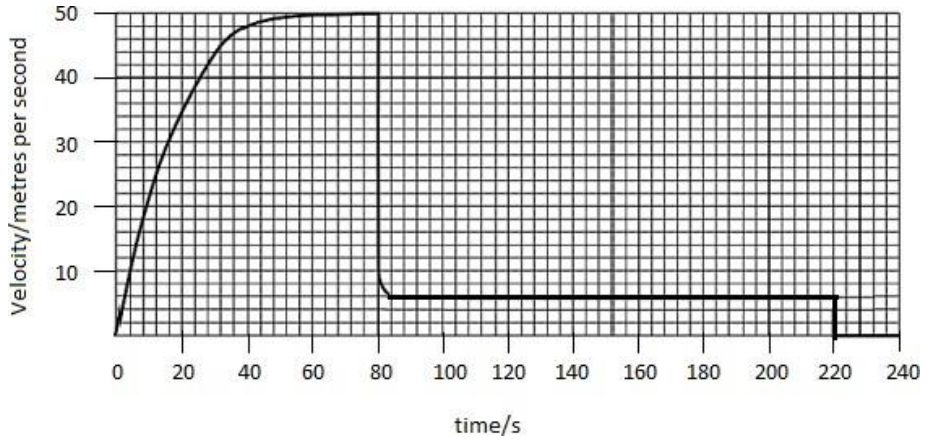
Q7 The graph below shows the journey of a skydiver after they have left the plane.



a) Explain the shape of the graph commenting on how and why the forces have changed.

[6]

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b) Calculate the distance travelled whilst at the second terminal velocity.

[2]

c)Calculate the **average** acceleration in the first 20 seconds.

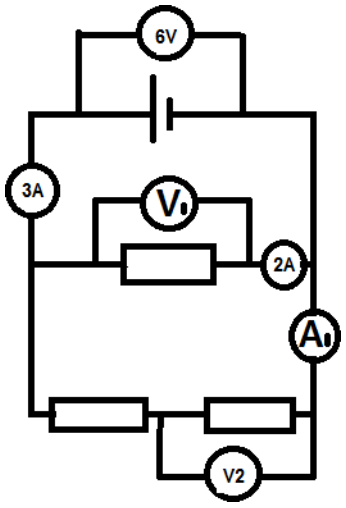
[2]

Q8

a) Draw a circuit diagram to show how the resistance of a filament bulb could be measured using an ammeter and a voltmeter.

[2]

b) Look at the circuit diagram below. All of the resistors are identical.



Write the missing values of current and potential difference:

i. V1 =
ii. V2 =
iii. A1 =

[3]

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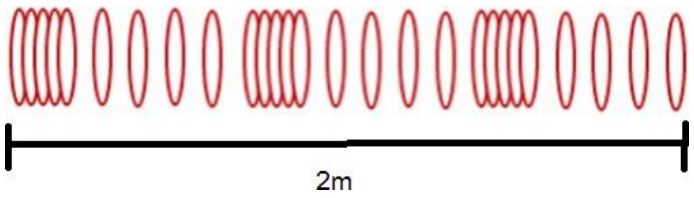
Q9 The diagram below shows a diagram of 3 complete longitudinal wave oscillations on a slinky:



a) State the wavelength of the wave shown

[1]

b) Label a complete wavelength on the diagram above with the correct symbol used for wavelength in GCSE and A Level Physics

[1]

c) If the above wave had a frequency of 5Hz how long would it take an individual hoop to complete 1 full oscillation?

[1]

d) Calculate the speed of the wave

$$wwwwwwwwwwwwwwww = ffffwwffuuwwuuuuuu \times wwwwwwwwwwwuuwwwwww$$

Wave speed =_____Unit_____[2]

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A Level Physics Baseline Assessment SUGGEST MARKSCHEME

Q1

a)

Unit prefix	Meaning
k (kilo)	x 1000
μ(micro)	X 0.000001
M (mega)	x 1000000
N (nano)	x 0.000000001

[3]

Q2

c) Write the following numbers into standard form i. 0.012 11.22×1111^{-22}

ii. 120000 11.22×1111^{55}

iii. 0.00000012 11.22×1111^{-77}

[3]

d) Complete the following calculations and right your answers to an appropriate number of significant figures. i. 2.1 X 0.15

a. 0.315 = 0.32(2sf)

ii. 0.345 ÷ 0.114

a. 3.0263…=3.03 (3sf)

Award 1 mark for correct answer and 1 mark for correct number of s.f. [4] Q3 Re-arrange the following equations to make R the subject of the equation.

a) $QQ = WWWWWWWWWW$

$$WW = \frac{QQ}{WWWWWWWW}$$

b) $QQ^{22} = WWWW^{22}$

$$WW = \sqrt{\frac{QQ^{22}}{WW}}$$

c) $QQ = WW - WWWW^{22}$

$$WW = \frac{WW - QQ}{WW^{22}}$$

[3]

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Q4

a) Name the 3 particles (from GCSE) that make up an atom

Proton, Neutron, Electron (any order) [1]

b) Which one of the above particles is not found in the nucleus of an atom?

Electron [1]

c) Which of the above particles will be found in varying quantities in the nuclei of isotopes of the same element?

Neutron [1]

Q5

a)

Voltage (V)	Current (A)		
	Repeat 1	Repeat 2	Average
2	0.23	0.26	0.25
4	0.46	0.53	0.50
6	0.69	0.78	0.74
8	0.92	1.04	0.98
10	1.15	1.30	1.23

1 Mark for correct unit (V or volts)

1 Mark for correct heading (Current in Amps or A)

1 Mark for correct average, 1 Mark if rounded to correct number of s.f.

[3]

Q6

a) Use your piece of graph paper to plot a graph of Current (x-axis) against Voltage (y-axis) drawing a line of best fit through your data points.

1 mark if BOTH x and y axis cover half the graph

paper 1 mark for correctly labelling x and y axis

including units 1 mark if data points are correctly

plotted (check 3)

1 mark for correct line of best fit (with even spread of points above and below)

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b) Find the gradient of your line of best fit

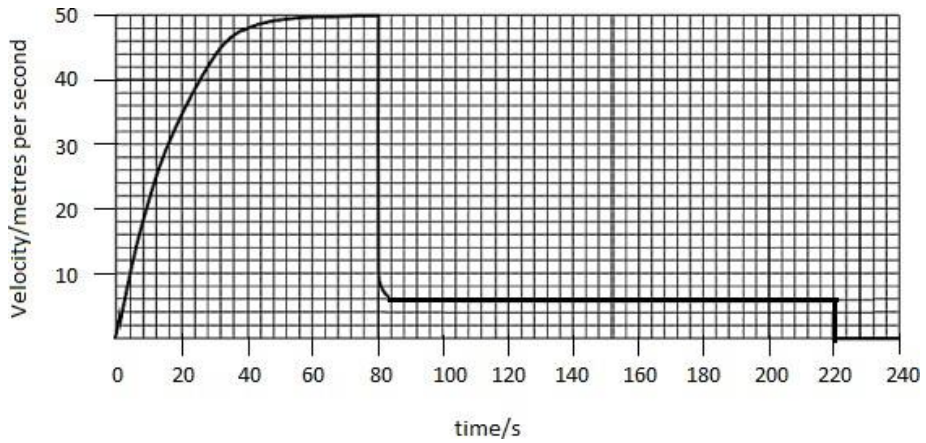
Woking must be shown for the award of any marks 1 mark for correct y axis read offs

1 mark for correct x axis read offs

1 mark for correct calculation of their own gradient

[3]

Q7 The graph below shows the journey of a skydiver after they have left the plane.



a) Explain the shape of the graph commenting on how and why the forces have changed.

Band 1 (1/2 Marks)	Band 2 (3/4 Marks)	Band 3 (5/6 Marks)
Correctly describes the motion of the parachutists. E.g. Acceleration (at reducing rate) Terminal velocity/constant speed, deceleration, lower terminal velocity. There may be small errors in spelling and grammar.	Correctly describes motion and links to the balancing and unbalancing of the forces of weight and drag. Almost faultless spelling and grammar.	Explains why increasing velocity produces increased drag and why opening the parachute produces increase drag, using ideas of collisions of air particles with the surface of the skydiver/parachute. Faultless spelling and grammar

[6]

b) Calculate the distance travelled whilst at the second terminal velocity.

$$(220ss - 84ss) \times 6mmss^{-1} = 816mm$$

[2]

c) Calculate the average acceleration in the first 20 seconds.

$$\frac{34mmss^{-1}}{20ss} = 1.7\ [1] \quad mmss^{-2}\ [1]$$

Award 1 mark for correct unit [2]

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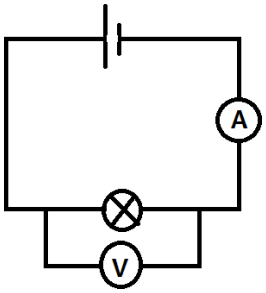
Q8

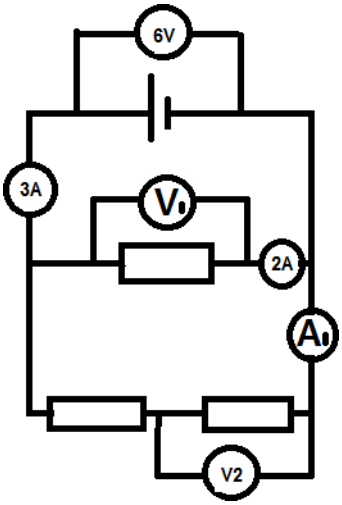
a) Draw a circuit diagram to show how the resistance of a filament bulb could be measured using an ammeter and a voltmeter.

Award 1 mark for correctly positions ammeter [1] and voltmeter [1]



[2]

b) Look at the circuit diagram below. All the resistors are identical.



Write the missing values of current and potential difference:

i. V1 = 6V
ii. V2 = 3V
iii. A1 = 1A

[3]

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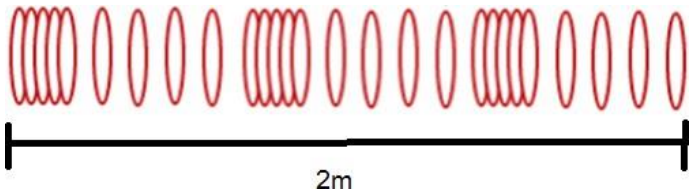
Q9 The diagram below shows a diagram of 3 complete longitudinal wave oscillations on a slinky:



a) State the wavelength of the wave shown

……2/3m = 0.7m……[1]

b) Label a complete wavelength on the diagram above with the correct symbol used for wavelength in GCSE and A Level Physics

[1]

c) If the above wave had a frequency of 5Hz how long would it take an individual hoop to complete 1 full oscillation?

0.2s

[1]

d) Calculate the speed of the wave

$$\text{wavelength} = \text{frequency} \times \text{wavelength}$$

$$\text{wavelength} = 55 \times \frac{22}{33} = 3333/\text{wavelength}$$

Wave speed =_____Unit_____[2]

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POLITICS

A Level Politics Year 11 Bridging the Gap

Welcome, year 11! This is you first 'Bridging the Gap' task for A level Politics, which you've chosen to take at A level this September. The pack is designed to give you a flavour of what A level Politics is all about. The pack will introduce you to some core political concepts and events, to aid your understanding of politics ready for sixth form. The second pack will be an independent research project. The work in these packs will take a long time, so you can break it up. Don't feel you need to complete it all in one go! You can complete the tasks in this booklet in the spaces provided.

A Level course outline		
Year 12: UK Politics	**Year 12-13: Ideologies**	**Year 13: Global Politics**
UK Constitution, Parliament & Prime Minister	**Liberalism**	**Theories of Global Politics, Polarity**
UK Democracy	**Conservatism**	**Role of IGOs- UN, IMF, WB, IMF, G20**
UK Parties	**Socialism**	**EU and Regional bodies**
UK Elections & Voting	**Nationalism**	**Human Rights, Humanitarian Intervention, Global Poverty, Environment**

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Task One: What is Politics?

"Politics is the study of how a people, a nation or a state is governed."

When most people think of politics, they think of old, wealthy men (only sometimes women, and only sometimes ethnic minorities) in offices, making deals and agreements that will affect millions of people, just for personal gain. And it's true that some decisions are made that way, but politics is much more than that.

Politics is about power, about people, equality, war, conflict, debate, cooperation, freedom, money, etc. – it's about the relationship between the state (the government) and its citizens, or the state and other states. It governs everything we can and will do in our lives.

One of the reasons politics is so exciting is that it changes every single day based on the actions of individuals. Fewer than 500 people (in a country of 330 million) decided the result of the 2000 presidential election that made George Bush president. In 2001 he invaded Afghanistan and in 2003 he invaded Iraq. These two things have changed the Middle East and global politics, perhaps forever. Closer to home, if just one out of every 50 people who voted to leave the EU had voted differently, we wouldn't have left. Each individual vote is vital, and yet 28% of all the people who could vote and registered to vote in that referendum didn't turn out on June 23rd. It would take just a small number of them to change the result.

Your first task is to help you garner an understanding of what Politics is really all about. Use the internet (e.g. Wikipedia, YouTube and other sources) to research and understand what the following key terms mean and create a short definition for each *in your own words*.

You are welcome to try to get your families involved in this – they may have some understanding of these concepts already! The most important thing in an A level is *your understanding* – so it's not about having the "right" or "word-perfect" definition, it's about you *understanding* what a concept means J

Term	Explanation
Power	-
Authority	-
Legitimacy	-
Government	-
Politics	-
Civil society	-
Executive branch	-
Prime minister	-
Cabinet	-
Legislative branch	-

Parliament	
House of Commons	

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House of Lords	
Judicial branch	
Supreme Court (UK – not US!)	
Rule of Law	
Westminster Model	
Elective dictatorship	
Direct democracy	
Representative democracy	
Sovereignty	
Parliamentary sovereignty	
Referendum (UK – not US!)	
Constitutional monarchy	
Fusion of powers	
Separation of powers	
Devolution	
Labour Party	
Conservative Party	
Liberal Democrats	
Brexit Party	
Nation- state	
Globalisation	
Hard and Soft power	

International Anarchy	-
NGOs	-

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Realism versus Liberalism	-
Emerging powers	-
Liberalism (Ideology)	-
Conservatism (Ideology)	-
Socialism (Ideology)	-
Nationalism (Ideology)	-

-

Task Two: British Politics

Go to these links here for the UK's five major parties:

Labour manifesto 2024: 12 key policies analysed - BBC News

Conservative manifesto 2024: 12 key policies analysed - BBC News

Lib Dem manifesto: 11 key policies explained - BBC News

Reform UK manifesto 2024: 11 key policies analysed - BBC News

Green Party manifesto 2024: Key policies analysed - BBC News

These links summarise their key manifesto policies in the 2024 general election, which you may remember voting in at school. I would like you to choose a few policies of your choose and explain below why you support OR do not support that policy. You must choose at least 1 policy from each manifesto to discuss your agreement to or opposition to (therefore compulsory is to do 3) – if you want to extend yourself and go further, you can do more than 3 by copying and pasting the spaces I have provided.

Party:

Manifesto policy:

Agree/disagree & why:

Party:

Manifesto policy:

Agree/disagree & why:

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Party:

Manifesto policy:

Agree/disagree & why:

Next I want you to conduct some research into the role of your local MP.

I would like you to find out who your local MP is and the following details about them:

MP's name:

Political party:

Constituency (the area they represent):

Areas they have a particular interest in:

And finally, look at their voting record (found here https://www.theyworkforyou.com/ by clicking 'voting record') and jot down some ways in which they've voted in parliament.

Task Three: Making a Case

Now I would like you to make a case for and against a particular issue. Politics at A level will require you to make judgements about issues. You need to create a for/against case for the issue of: *should we lower the voting age from 18 to 16?*

This will require you to write at least three paragraphs (approximately ¾ to 1 full typed A4 page – but if you like you can write more). You can use websites like this: https://yougov.co.uk/topics/politics/articles-reports/2012/02/15/and-against-lowering-voting-age or Google search "for and against [issue]" to get more information about the issue at hand. I've written a sample paragraph below – I'm interested in you ARGUING your case with evidence!

Some who think we should extend the vote to 16- and 17-year-olds say that it may lead them to understand political issues more if they have to research them. If under 18s have to make choices on issues like taxes, the NHS and the size of the army, they would have to research them, so this will improve their understanding and they will make good choices. However, this argument doesn't hold water because over-18s as it is rarely research political issues – if we don't have adults researching taxes, the NHS or the size of the army before elections why would we expect children to? Therefore, this is not a good argument for extending the vote to 16- and 17-year-olds.

Write your paragraphs below. Once you have completed this, you have finished the first Bridging the Gap task for A level politics – well done!

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PSYCHOLOGY

Below is a list of books that relate to topics covered in the course specification. Please note that some of these texts contain, or refer to, sensitive themes and subject matter. We encourage you to be mindful of this when selecting and reading these books.

Book name	Subject
Hidden Valley Road	Schizophrenia
The Skeleton Cupboard	Psychopathology/ Schizophrenia
Room	Attachment
Sapiens	Evolutionary/ Biopsychology
The Man Who Mistook His Wife for a Hat	Biopsychology/Approaches/Issues and Debates
Blink	Research Methods
Great Myths of the Brain	Biopsychology
Opening Skinner's Box	Social Influence, Memory, Attachment, Psychopathology, Biopsychology, Research Methods
Patient HM	Memory, Biopsychology, Issues and Debates
Elephants on Acid	Biopsychology/Research Methods
The Memory Illusion	Memory/Research Methods
Trick or Treatment	Research Methods/Psychopathology/Schizophrenia
The Red Book: Liber Novus	Personality/Psychopathology/Spiritualism
Thinking Fast and Slow	Cognitive Psychology
The Jigsaw Man	Forensic Psychology
The Idiot Brain	
The Happy Brain	Neuroscience/Evolutionary/Cognitive/Biopsychology
Psycho-Logical: Why Mental Health Goes Wrong – and How to Make Sense of It	Psychopathology
A long way from home - Cathy Glass	Attachment
Cordelia Fine's A mind of its own (?)	Bio Psyc

-

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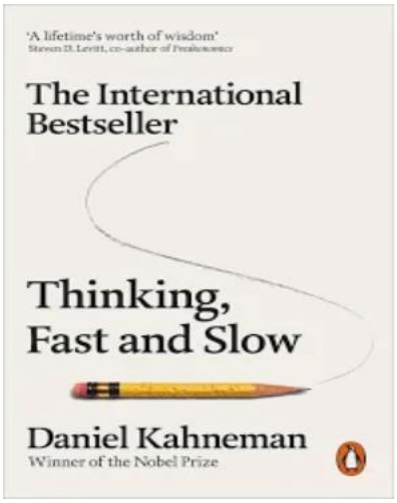
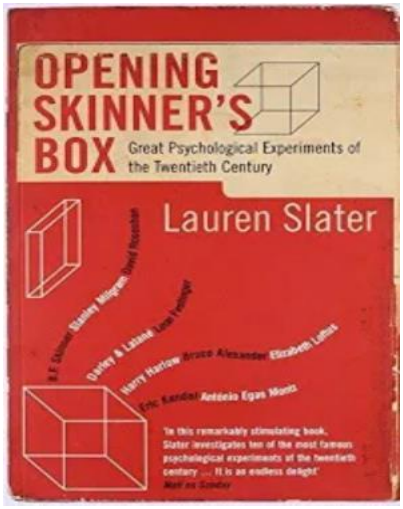
If you have found any of these books interesting, here are some additional books which have been written more recently:

- The Anxious Generation (Jonathan Haidt, 2024) – *Examines phone-based childhoods; great for Attachment and Social Influence.*
- Good Reasonable People (Keith Payne, 2024) – *Explores modern political polarisation through conformity and ingroup dynamics.*
- The Lucifer Effect (Philip Zimbardo) – *Deep dive into the Stanford Prison Experiment and systemic obedience.*
- Unlocked: The Real Science of Screen Time (Pete Etchells, 2024) – *Deconstructs headlines to teach correlation vs. causation.*
- The New Psychology (Adrian Furnham, 2024) – *Covers 50 new concepts including AI, eco-psychology, and modern unconscious bias.*
- Mad Woman (Bryony Gordon, 2024) – *A modern personal exploration of OCD, eating disorders, and mental health diagnosis.*
- A Little History of Psychology (Nicky Hayes, 2024) – *Traces the evolution of theories; ideal background for Approaches in Psychology.*
- The Psychopath Test (Jon Ronson) – *An engaging investigation into the diagnosis of psychopathy and corporate madness.*





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Summer Work
Psychology A Level
Lower 6

Important Info

The exam board used for A Level Psychology is AQA: AQA | AS and A-level | Psychology | Specification at a glance

Course resources:

https://illuminate.digital/aqapsych2edy1/

Login: SHABSGIRLS7

Password: Green7

https://illuminate.digital/aqapsych2edy2/

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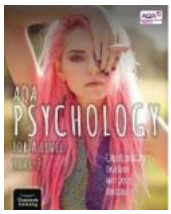

login: SHABSGIRLS8

Paper	Assessment structure	Topic/Questions
Paper 1: **Introductory Topics in Psychology**	• Written exam: 2 hours • 96 marks in total • 33.3% of A-level • Multiple choice, short answer and extended writing, 24 marks	• Section A: Social Influence • Section B: Memory • Section C: Attachment • Section D: Psychopathology
Paper 2: **Psychology in Context**	• Written exam: 2 hours • 96 marks in total • 33.3% of A-level • Multiple choice, short answer and extended writing, 24 marks • Research Methods is out of 48 marks	• Section A: Approaches • Section B: Biopsychology • Section C: Research Methods
Paper 3: **Issues and Options in Psychology**	• Written exam: 2 hours • 96 marks in total • 33.3% of A-level • Multiple choice, short answer and extended writing, 24 marks	• Section A: Issues and Debates • Section B: Relationships • Section C: Schizophrenia • Section D: Forensic

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Course resources:

What to expect:

- You will need to bring a device to all lessons
- Lesson content will be mainly delivered through OneNote and PowerPoint. Teachers will mainly use Teams to communicate with you outside of lessons
- Lessons are interactive and there are plenty of opportunities for discussion, independent and group work
- Pre-reading/HW completion is necessary for full participation in the lesson – you will also enjoy/develop a deeper curiosity in the subject this way 😊

Recommend Summer Reading List:

Below is an optional (not exhaustive) list for Psychology. This will also help you develop your knowledge about the subject within and outside of the curriculum.
*NB: Due to the nature of the subject content, some of these books may contain distressing themes/reference to mental health.

- Hidden Valley Road
- Brain on Fire
- The Skeleton Cupboard
- Room
- Sapiens
- The Man Who Mistook His Wife for a Hat
- Blink
- Great Myths of the Brain
- Opening Skinner's Box
- Patient HM
- Elephants on Acid
- The Memory Illusion
- Trick or Treatment
- The Red Book: Liber Novus
- Thinking Fast and Slow
- The Jigsaw Man
- The Idiot Brain
- The Happy Brain
- Psycho-Logical: Why Mental Health Goes Wrong – and How to Make Sense of It
- A long way from home - Cathy Glass
- Cordelia Fine's A mind of its own (?)

There is a great selection of wider reading in the Psychology office and school library. If you have read a book that is not on this list and would recommend it, please let one of your teachers know.
Other great ways to enrich your knowledge of Psychology outside of lessons:

- Psychology Review
- Podcasts: The 11 Best Psychology Podcasts to Listen to in 2024 | Podcast Review
- TED talks: Ideas about Psychology (ted.com)
- Films and documentaries: 101 Psychology Films You Must See | Psychreg

Tasks to complete

When you start your lessons in September, you will study a combination of Paper 1 and Paper 2 content. Below are some activities that will give you an introduction to these topic areas.

Task 1:

Watch

Watch this TED talk about common myths in Psychology.

https://www.ted.com/talks/ben_ambridge_10_myths_about_psychology_debunke

Summarise some of the myths and explain why these are not true.

Time: 30m

Task 2:

Read

History of psychology

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Note down interesting developments in the field of Psychology. Do you notice any overlap with other disciplines?

https://allpsych.com/timelin

Time: 30m

Task 3:

Watch

Attachment

Watch this TED talk about media and behaviour.

Consider what behaviours you can relate to in this video. Explain why we need to develop relationships?

https://www.ted.com/talks/sherry_turkle_connected_but_alo

Time: 40m

Task 4:

Read

Social Influence

Conformity is a type of social influence involving a change in belief or behaviour in order to fit in with a group.

Make notes on what conformity is, and the types of conformity that have been identified.

What is conformity?

Time: 30m

Task 5:

Watch

Elizabeth Loftus: How reliable is your memory? |TED Talk Memory

Watch this TED talk on false memories and note down your reflections. What do you find most interesting from the talk?

Task 6:

Read

AQA Psychology for A Level Year 1 AS 2nd Ed Research Methods

Read pages 168-169 of the Year 1 textbook.

Note down definitions of the following key terms: experimental method, aim, hypothesis, directional/non-directional hypothesis, IV, DV, operationalisation

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Content list

1. **Welcome 2**
2. **Grammar booklet and resources 2**
3. **Cultural resources 5**
4. **Vocabulary 6**
5. **Film study..... 7**

1. Welcome to A Level Spanish!

We are delighted that you have chosen Spanish as one of your A Level subjects and are looking forward to working with you from September.

The following booklet contains suggested resources and activities to help you with your transition from GCSE to A level Spanish. We hope that once you have enjoyed a well-deserved rest from your GCSE exams, you will find the time to keep up with your Spanish to ensure a smooth transition into your A Level Spanish studies.

2. Grammar booklet and resources

As you can guess, it is expected that you have a secure knowledge of key tenses and grammatical structures from GCSE. Even if you think you do, it is a good idea to keep practicing so that you don't forget key verb endings.

- **Grammar Booklet from MFL Magic:** This is a fantastic resource that some of you might have already used to prepare for your GCSE. The booklet and the answers can be found here so you can mark them yourself. https://www.mflmagic.com/ks4-grammar.html

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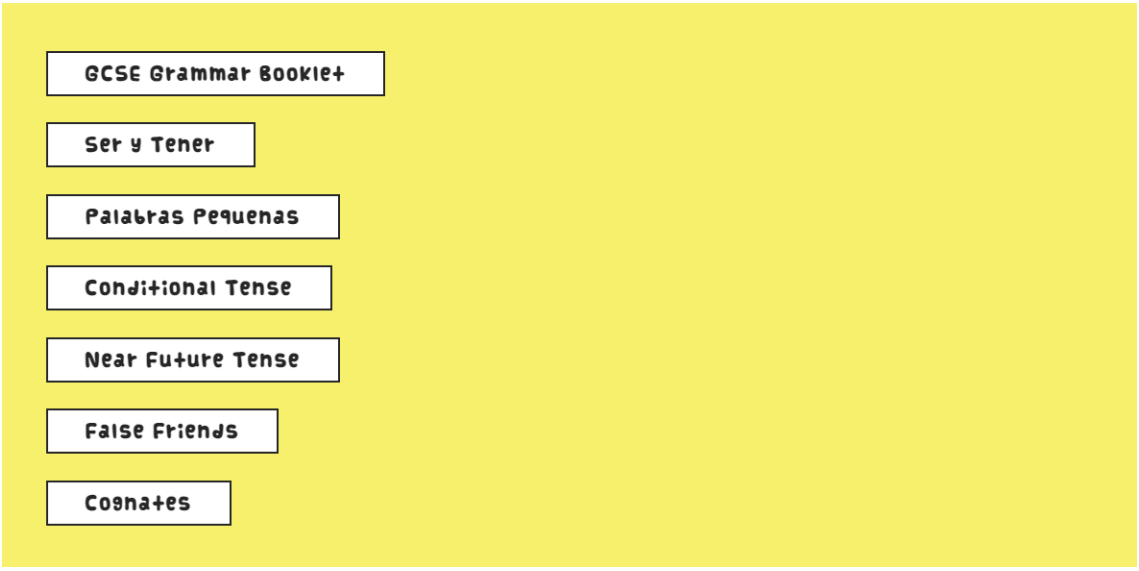
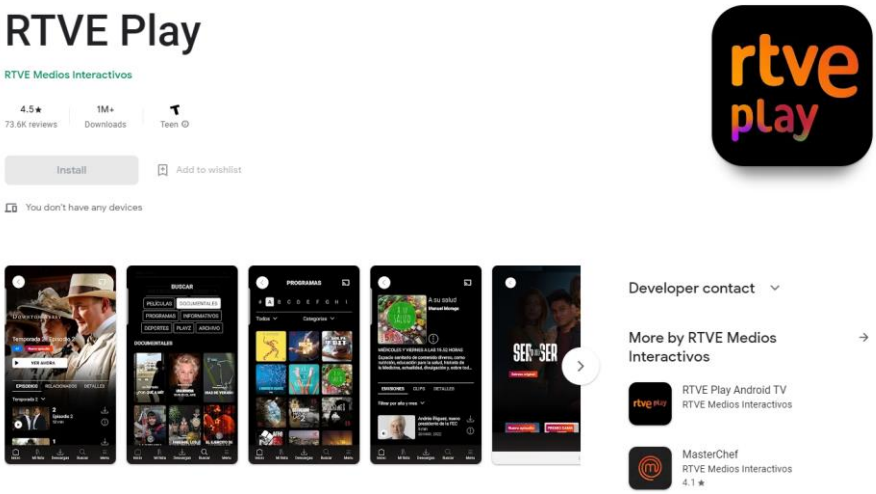


There is also www.spanishdict.com very useful website – choose the advanced options

3. Cultural resources

A key aspect of A Level Spanish is knowledge of Hispanic culture, so below you can find some suggestions of things that you can watch/listen to/read in Spanish. As most of these are authentic resources, you might struggle at the beginning to understand but do not worry and keep trying, eventually you will begin to understand more. You might want to get a small notepad where you make a note of key vocabulary that you have learnt.

- **RTVE Play:** You can download the app following this link **https://play.google.com/store/apps/details?id=rtve.tablet.android&hl=en_GB&gl=US** or access from your computer or web browser **https://www.rtve.es/play/** This is a great app for staying up to do date with current affairs in Spain, something which will become increasingly important as you progress through the course. It's also an excellent way to practice listening. Try listening to the news for ten minutes during your morning commute or while you eat your breakfast. Even if it's only for a short amount of time each day, if you make this part of your daily routine, it will have a significant effect on your understanding of spoken Spanish. You shouldn't expect to understand everything that is said right now; that will come with daily practice. The great thing about watching the news is that it is very repetitive and they often use infographics showing you the spellings of certain words.



- **Radio 3**: You can download the app following this link https://www.rtve.es/radio/app-radio-3/ or access from your computer https://www.rtve.es/radio/radio3/ . This is also a great app to practise your listening skills as you can listen to different radio programs and podcasts.

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- **Spanish newspapers** - Read some articles from the following online newspapers:
  https://elpais.com/
  https://www.elmundo.es/
  https://www.bbc.com/mundo
  https://www.eldiario.es/

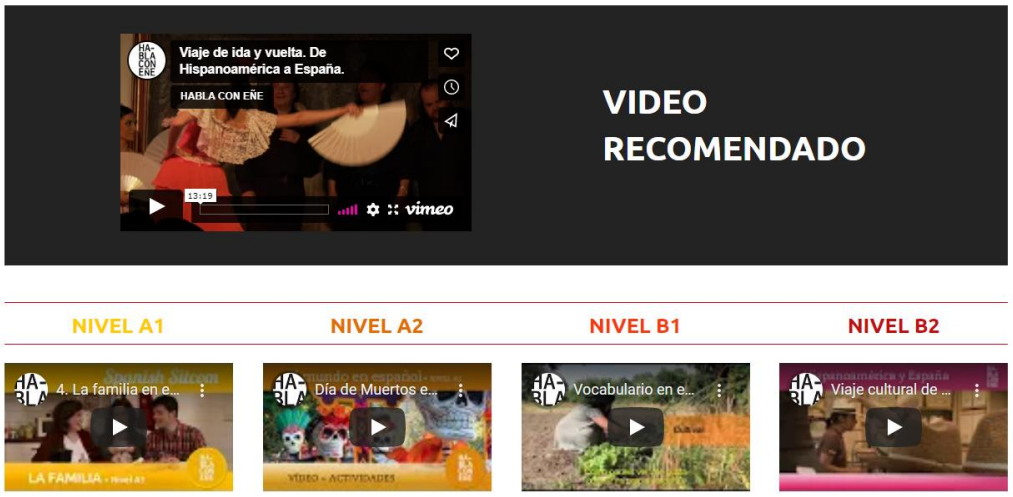
elDiario.es 10 AÑOS Periodismo a pesar de todo desde 2012

EL MUNDO

EL PAÍS EL PERIÓDICO GLOBAL

BBC NEWS | MUNDO

- **Habla cultura**: This is another amazing website designed for Spanish learners where you can find articles, videos and podcasts.



https://hablacultura.com/

- Watch some movies/series on **Netflix** (in Spanish!) – see some suggestions below:

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- 

Films:

- *Perdiendo el Norte* (English title: *Off Course*)
- *Ocho apellidos catalanes* (English title: *Spanish Affair 2*)
- *Nuestros amantes* (English title: *Our Lovers*)
- *Tenemos que hablar* (English title: *We need to talk*)
- *A cambio de nada* (English title: *Nothing in Return)*
- *Ahora o Nunca* (English title: *It's Now or Never*)
- *Fe de etarras* (English title: *Bomb Scared*)
- *El faro de las orcas* (English title: *The Lighthouse of the Orcas*)
- *Sin filtro* (English title: *No Filter*)
- *3 metros sobre el cielo (3 steps above heaven)*

A number of films are available on HabsTube – Los Domingos (girl who wants to be a nun) , El Laberinto del Fauno, (civil war + fantasy), La lengua de las mariposas (civil war, story of a young boy and teacher)

TV series

- *Las chicas del cable* (English title: *Cable Girls*)
- *Velvet*
- *La Casa de Papel (English title: Money Heist)*
- *Olympo*
- *Entrevias*
- *Vivir sin permiso.*

More suggestions here: https://www.profedeele.es/blog/netflix-series-para-aprender-espanol/

Lyrics training. Listen to some Spanish songs and complete some activities while you listen and enjoy. Select the language and genre and click on play now. You don't need to sign up. https://lyricstraining.com/es/

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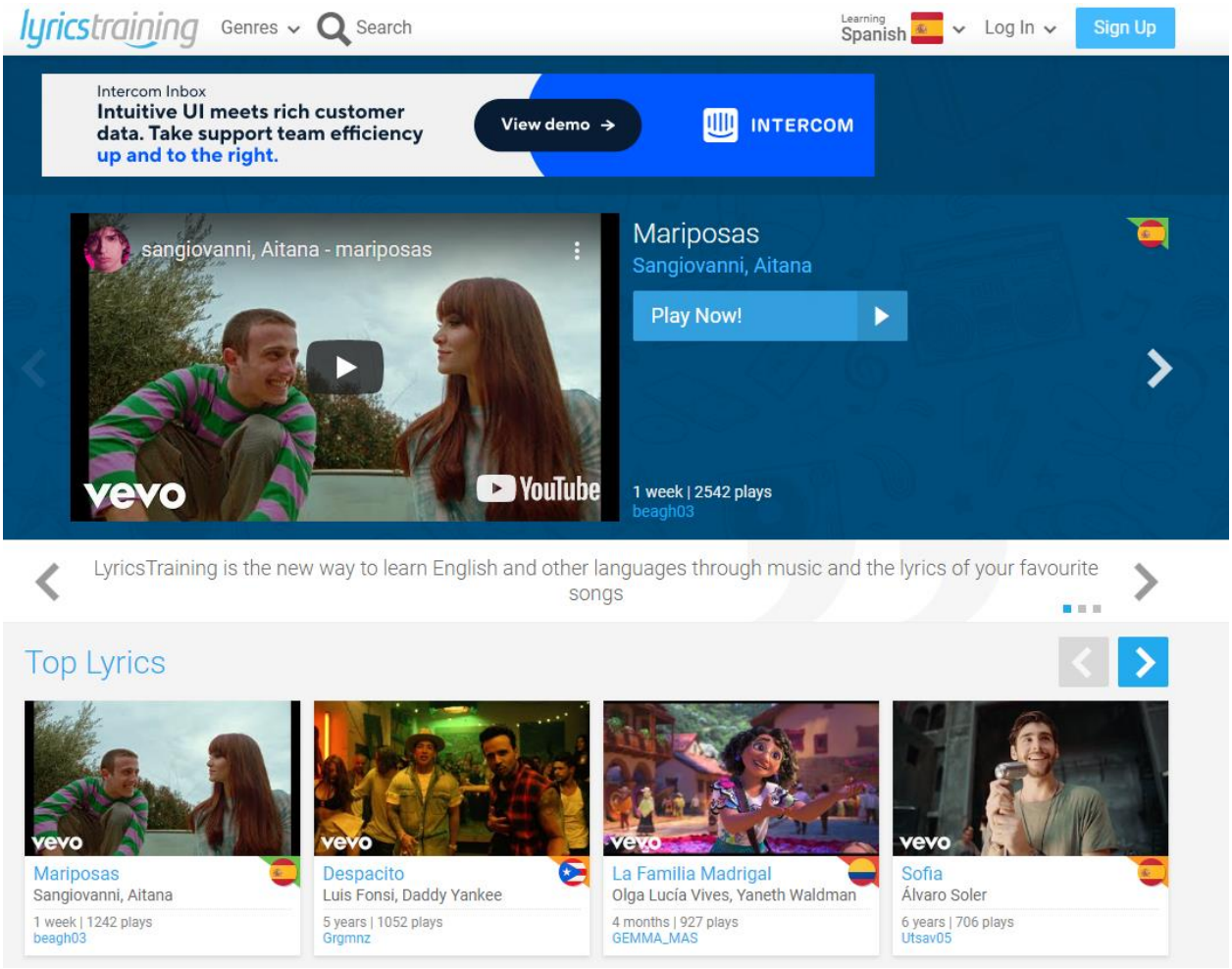

4. Vocabulary

If you are an avid quizlet user, you will be delighted to know that we use Quizlet too and you will all have a class with all the topic vocabulary and grammar from the A level Course.

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SPANISH A-LEVEL BRIDGING:
AN INTRODUCTION TO STUDYING FILM

As part of your Spanish A Level, you will study a film in Year 12 and a set text in Year 13. To prepare you for the film study, please complete the below activities.

Task 1: Enhancing your cinematographic language and vocabulary.
(Mejorar tu lenguaje y vocabulario cinematográfico.)

Translate this list of useful words and sentence starters into English:

Expresiones claves

el director utiliza un plano … que evoca …
tiene connotaciones de …
nos hace pensar que …
hay una yuxtaposición entre …
el sonido hace que la audiencia …
los efectos especiales impactan porque …
el encuadre en la pantalla da la impresión que …

Task 2: Describing a film and its characters accurately
(Describir una película y sus personajes de manera precisa)

Look up the meaning of the adjectives below which can be used to describe a film or its characters. Write P, N or P+N next to each adjective, based on their meaning. (+ Write the meaning in English of any new adjectives in the space provided.)

valiente engreído malhumorado prudente cobarde
encantador fiel ingenuo cortés fiable sensible
polemista de mala leche conservador tacaño severo
terco falso soso coqueta jovial

Task 3: Introduction to *Volver*
(Introducción a "Volver")

Watch the trailer and then read the summary of the film *Volver*. Find the vocabulary in the grid.
https://www.youtube.com/watch?v=T75_n6eeLJQ

Madrid. Ahora. Raimunda es una madre joven, emprendedora y muy atractiva, con un marido en el paro y una hija en plena adolescencia. La economía familiar es muy precaria, por lo que Raimunda tiene varios trabajos. Es una mujer muy fuerte, una luchadora, pero a la vez muy frágil emocionalmente. Desde su infancia guarda en silencio un terrible secreto.

Su hermana Sole es un poco mayor. Apocada y miedosa, se gana la vida con una peluquería ilegal (no declarada). Su marido la abandonó, yéndose con una clienta. Desde entonces vive sola.

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Paula es la tía de ambas mujeres, vive en un pueblo manchego donde nació toda la familia. Un pueblo barrido por el viento solano, causa directa del elevado índice de locura que registra el lugar. Ese maldito viento es el responsable de los múltiples incendios que asolan la zona cada verano. En uno de esos incendios murieron los padres de Sole y Raimunda.

Un domingo primaveral, Sole llama a Raimunda para decirle que la Agustina (una vecina del pueblo) le ha comunicado por teléfono que su Tía Paula ha muerto. Raimunda adoraba a su tía, pero no puede ir al entierro porque momentos antes de recibir la llamada de su hermana, cuando volvía de uno de sus trabajos, ha encontrado a su marido muerto en la cocina, con un cuchillo clavado en el pecho. Su hija le confiesa que lo ha matado ella porque el padre, borracho, la acosó insistentemente.

Lo más importante para Raimunda es salvar a su hija. Todavía no sabe cómo, pero desde luego no puede acompañar a Sole al entierro de su tía en La Mancha.

A regañadientes, Sole se desplaza sola al pueblo. Entre las mujeres que la acompañan en el duelo escucha rumores de que su madre (que murió en un incendio con su padre) volvió del otro mundo para cuidar en los últimos años a su Tía Paula, que estaba enferma. Las vecinas hablan con naturalidad del fantasma de la madre.

Cuando Sole vuelve a Madrid, después de aparcar su coche, escucha unos ruidos procedentes del maletero. Una voz le pide que lo abra y la deje salir, que es su madre.

Sole, al principio, está aterrada. Los golpes en el maletero no dejan de sonar. Sole lo abre y allí encuentra, rodeada de bolsas, al fantasma de su madre. No se atreve ni a mirarla, pero cuando consigue vencer el miedo se da cuenta de que el fantasma es igual que su madre en vida, exceptuando el pelo que lo tiene casi blanco y despeinado y la piel más pálida.

La sube con ella a casa, le pregunta hasta cuándo piensa quedarse. Hasta que Dios quiera, le responde el fantasma. Ante la amplitud de semejante respuesta, Sole no tiene otra opción que convivir con el fantasma materno e integrarlo en el trabajo de la peluquería. A las primeras clientas la presenta como a una vagabunda rusa que encontró en la calle. Le ha dado cobijo por caridad. Cuando hay clientas, la madre no habla, sólo lava cabezas y sonríe.

Sole no se atreve a confesarle a su hermana la situación en la que vive. Por su parte, Raimunda sólo le comenta que Paco, su marido, las ha dejado y que intuye que no volverá. En realidad está tratando de desembarazarse del cadáver, pero no encuentra el momento porque le ha salido un nuevo trabajo que económicamente la compensa además de proporcionarle una posible solución a su acuciante problema... (qué hacer con el cadáver).

Lo insostenible se convierte en cotidiano, cada cual por su lado, las dos hermanas emprenden una huida hacia adelante, sobreviviendo a situaciones muy tensas, melodramáticas, cómicas y también muy emocionantes. Ambas mujeres las solucionan a base de descaro y mintiendo sin la menor contención.

"Volver" es una historia de supervivencia. Todos los personajes luchan por sobrevivir, incluso el fantasma de la abuela.

La abuela fantasma le dice a Sole que quiere ver a su hija Raimunda, y a su nieta. Debe hablar con Raimunda, de hecho esa conversación es la razón por la que volvió del otro mundo... y esa urgencia sobrenatural está relacionada con el secreto que Raimunda esconde desde niña. Esto último no se lo dice a Sole.

Pero Raimunda tiene un carácter muy fuerte, no es tan blanda como Sole y no cree en fantasmas, ni siquiera cuando encuentra a su madre escondida debajo de la cama, en casa de Sole...

Todo esto es sólo el principio de una historia compleja y sencilla, emocionante y atroz que afecta a las mujeres de la familia de Raimunda, a sus vecinas, y a algunos hombres.

English	Spanish	English	Spanish
enterprising		shelter	
fighter		insinuates	
timid		to get rid of	
scared		to provide	
going off with		urgent	
both		unsustainable	
swept		becomes	
hot/easterly wind		everyday	
rate		undertake	

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madness		escape	
cursed		based on	
devastate/destroy		impertinence/cheek	
burial		lying	
knife		survival	
stuck		granddaughter	
reluctantly		not even	
mourning		hidden	
ghost		simple/plain	
noises		atrocious/terrible	
coming from			
(car) boot			
a voice			
terrified			
banging			
surrounded			
she doesn't dare			
to overcome			
messy			
pale			
faced with			
such			
beggar			

Task 4: Answering general questions about the film.
(Responder a preguntas generales sobre la película.)

- ¿Cómo se llama la película?

_____

- ¿Quién dirigió la película? ¿Cuándo?

_____

- ¿De qué género es la película?

_____

- ¿Es una película para adultos, niños o toda la familia? ¿Por qué?

_____

_____

- ¿Dónde tiene lugar la acción de la película?

_____

Task 5: Introduction to *María Llena Eres de Gracia*

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Watch the trailer of *María Llena Eres de Gracia* and then read the summary below. Find the vocabulary in the grid.

Maria Llena Eres De Gracia - Trailer

María es una joven colombiana de 17 años que vive con su familia en un pequeño pueblo. Trabaja en una plantación de flores, donde las condiciones laborales son duras y el salario escaso. María es fuerte, decidida y no teme enfrentarse a la autoridad. Cuando queda embarazada y se pelea con su jefe, decide dejar su trabajo.

En busca de una vida mejor, María acepta una oferta peligrosa: convertirse en "mula", es decir, transportar cápsulas de droga en su estómago hacia los Estados Unidos. Junto a otras chicas, emprende un viaje lleno de riesgos, miedo y decisiones difíciles. Durante el viaje, María se enfrenta a situaciones extremas que ponen a prueba su valentía y su deseo de sobrevivir.

En Nueva York, se encuentra con personas que la ayudan, pero también con un sistema que no siempre protege a los más vulnerables. María desarrolla una relación cercana con Blanca, otra mula, y juntas intentan encontrar una salida a su situación. La relación entre ellas se convierte en un pilar emocional para María, quien se siente sola y asustada en un país extranjero.

El riesgo de ser descubierta es constante, y María debe tomar decisiones difíciles para protegerse a sí misma y a su bebé. La presión emocional y física de llevar las cápsulas de droga en su estómago es enorme, y María lucha con el miedo y la incertidumbre en cada momento.

La historia de María es un retrato crudo y humano de la migración, la pobreza, y la lucha por una vida digna. Es una historia de supervivencia, coraje y esperanza. A medida que avanza la trama, María demuestra una increíble fortaleza y determinación, enfrentándose a cada desafío con valentía y resiliencia.

English	Spanish	English	Spanish
flower plantation		uncertainty	
scarce		portrait	
strong		raw	
resolute/determined		fight for	
to fear		survival	
to stand up to		courage	
pregnant		hope	
to leave		plot	
in search of		strength	
to undertake		challenge	
full of		bravery	
fear		resilience	
to put to the test			
bravery			
to survive			
to meet			
to develop			
to become			
shocked			
foreign			
discovered			
pressure			

Task 6: General Questions about the film

- ¿Cómo se llama la película?

- ¿Quién dirigió la película? ¿Cuándo?

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- ¿De qué género es la película?

- ¿Es una película para adultos, niños o toda la familia? ¿Por qué?

- ¿Dónde tiene lugar la acción de la película?

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Take your time with these tasks.

Read them carefully and try to get the gist of the text.

Don't use google translate but use www.wordreference.com if you're struggling.

If a task has a QR code, scan it to listen along. Amazing listening practice if you can read at the same time!

Re-read any translation to make sure it makes sense in English. Re-read it if you need to.

Authentic Texts

Receta – Gambas al ajillo

Adapted from: https://www.recetasderechupete.com/gambas-al-ajillo/19825/

Ingredients :

- 1 kg. de gamba congelada o fresca
- 20 dientes de ajos
- 2 guindillas secas (también valen las pimientas de cayena)
- Aceite de oliva virgen extra (unas 20 cucharadas)
- Sal y pimienta negra recién molida (al gusto)

1. En una cazuela ponemos el aceite de oliva virgen extra con las guindillas.
2. Pelamos los dientes de ajo y cortamos en rodajas finitas.
3. Calentamos y doramos los dientes de ajo laminados, que se doren, no queremos que nos den un sabor quemado.
4. Echamos las gambas previamente escurridas al aceite. Subimos la temperatura y salpimentamos al gusto.
5. Añadimos las guindillas y los ajos extras. Removemos e juntamos sabores.
6. Servimos inmediatamente en cuanto esté la gamba en su punto justo de cocción, jugosa y con ese punto picante delicioso.
7. Acompañarlas de un buen pan y un buen vino blanco bien fresquito.

Busca el español en el texto:

a) Frozen _____
b) Garlic cloves _____
c) Chillies _____
d) Tablespoons _____
e) Ground _____
f) A casserole dish _____
g) we peel _____
h) we heat _____
i) a burnt flavour _____
j) we lower _____
k) we add _____
l) we serve _____

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Pon la receta en el orden correcto. Escribe la letra correcta.

A. Add the extra chillies and cooked garlic.
B. Put extra virgin olive oil and chillies in the casserole dish.
C. Accompany them with a nice bread and a nice cool white wine.
D. Peel and finely slice the garlic cloves.
E. Serve immediately when the prawns are cooked.
F. Put in the drained prawns and lower the temperature.
G. Heat and brown the garlic without burning it.

1	2	3	4	5	6	7

Kanye diseña la gorra de su campaña presidencial

From: https://holaquepasa.com/kanye-disena-la-gorra-de-su-campana-presidencial/

La campaña presidencial de Kanye West continúa. Es una campaña inusual: sin planes claros, sin posibilidades reales… ¡pero con gorras y camisetas! El rapero ha diseñado una gorra para promocionar su candidatura, y la ha presentado en Twitter**:** Como veis, la gorra es de color morado, con la visera negra. En el centro podemos leer el lema de su campaña ("Kanye 2020 Vision") en letras negras, moradas y naranjas.

Ah, y también está disponible esta camiseta a juego: En Estados Unidos, la propag
los meses previos a las elecciones. Los votantes pueden comprar muchos objetos cotidianos donde aparecen el logotipo o la cara de su candidato favorito. Gorras, camisetas, sudaderas, pines, tazas de café… hay de todo. En 2016, la gorra roja de Trump fue el gran icono de aquellas elecciones. Veremos si Kanye logra una repercusión similar con su gorra morada

Busca el español en el texto:

a) He has introduced it on twitter.

_____

b) This matching t-shirt is also available.

_____

c) In the months prior to the election.

_____

d) Where the logo or face of their favourite candidate appears.

_____

e) We'll see if Kanye achieves a similar repercussion.

_____

Contesta las preguntas en español:

a) ¿Cómo se describe la campaña de Kanye? (3)

_____

_____

_____

b) ¿Qué ha presentado en Twitter?

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c) ¿Qué se ve mucho en los meses antes de las elecciones presidenciales en EEUU?

d) ¿Qué dice el artículo sobre la gorra roja de Trump?

Gran exito de “Folklore”, el nuevo album de Taylor Swift

From: https://holaquepasa.com/gran-exito-de-folklore-el-nuevo-album-de-taylor-swift/

Hace diez días, Taylor Swift lanzó su nuevo álbum, llamado Folklore. El disco incluye 16 canciones.

Canciones que, en general, tienen un tono íntimo y un ritmo tranquilo. La voz de la cantante y los instrumentos (guitarra, piano, violines…) son los protagonistas de este trabajo, muy diferente de su anterior álbum “Lover”, que era más pop.

Diez días después de su lanzamiento, podemos confirmar que Folklore ha sido un enorme éxito. En Spotify, ¡ha alcanzado los 80 millones de reproducciones en un solo día! Un récord absoluto.

A continuación, podéis ver el videoclip de “Cardigan”, canción incluida en el disco. En el vídeo, los objetos que Taylor usa para tocar (el piano, la silla…) son como puertas interdimensionales a mundos de fantasía: El estribillo de la canción dice “cuando eres joven, suponen que no sabes nada”. Seguro que muchos jóvenes y adolescentes se identificarán con ese mensaje.

Busca el español en el texto:

a) She released.

b) Which was more pop.

c) Ten days after its release.

d) Has reached 80 million streams.

Translate the following paragraph of the text into English:

“Hace diez días, Taylor Swift lanzó su nuevo álbum, llamado *Folklore*. El disco incluye 16 canciones. Canciones que, en general, tienen un tono íntimo y un ritmo tranquilo. La voz de la cantante y los instrumentos (guitarra, piano, violines…) son los protagonistas de este trabajo, muy diferente de su anterior álbum “Lover”, que era más pop.”

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From: https://holaquepasa.com/joe-rogan-los-videojuegos-son-una-perdida-de-tiempo/

Joe Rogan ha sido “trending topic” esta semana, por unos comentarios negativos que ha hecho sobre los videojuegos.

El presentador de podcasts cree que jugar a videojuegos no es una actividad beneficiosa para los jóvenes:

“Los videojuegos son un auténtico problema, son un problema de verdad. ¿Sabes por qué? Porque son divertidos. Yo tengo un verdadero problema con ellos. Los juegas y son muy excitantes… pero no consigues nada”, ha dicho Rogan en un reciente episodio de su podcast.

Para Rogan, jugar al ordenador o a la consola es “perder el tiempo”, en comparación con otras actividades como leer, estudiar, hacer deporte, practicar artes marciales… Estas actividades te enseñan cosas útiles para la vida, y jugar a videojuegos no.

Busca el español en el texto:

a) Because of some negative comments he has made.

b) It’s not a beneficial activity for young people.

c) They are a real problem.

d) These activities teach you useful things.

Contesta las preguntas en español:

a) ¿Qué piensas tú de los videojuegos? ¿Estás de acuerdo con Joe Rogen?

b) ¿Hay otras actividades que te parecen más beneficiosas? ¿Por qué?

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Famosos usan sus cuentas de Instagram para dar voz a la comunidad negra

From: https://holaquepasa.com/famosos-usan-sus-cuentas-de-instagram-para-dar-voz- a-la-comunidad-negra/

La muerte de George Floyd a manos de un policía ha conmocionado a una mayoría de los americanos. Las manifestaciones masivas que hemos visto estos días son una prueba de esa indignación general.

Ahora, algunos famosos están utilizando sus redes sociales para dar voz a la comunidad negra. Por ejemplo, la cantante Lady Gaga ha publicado este mensaje

"A partir de mañana, voy a ceder mi cuenta de Instagram a cada una de las organizaciones a las que he donado últimamente, en un esfuerzo por amplificar sus importantes voces. Y después prometo, regularmente y a perpetuidad, publicar en todas mis redes sociales historias, contenido y más cosas para elevar las voces de los innumerables miembros y grupos inspiradores de la comunidad negra".

Otros artistas como Selena Gómez han publicado mensajes muy parecidos al de Lady Gaga. Un gran número de famosos se están uniendo en este esfuerzo por dar voz a personas que, hasta ahora, no han sido escuchadas.

Busca el español en el texto:

a) The death _____
b) Has deeply affected _____
c) Proof of _____
d) To give a voice to _____
e) To hand over _____
f) To amplify _____
g) To elevate _____
h) Messages _____
i) Have not been heard _____

Contesta las preguntas en español

a) ¿Qué causó la muerte de George Floyd en Estados Unidos?

_____

_____

b) ¿Para qué están utilizando las redes sociales los famosos?

_____

_____

c) ¿Qué promete Lady Gaga?

_____

_____

d) ¿Por qué necesitan las celebridades dar voz a la comunidad negra?

_____

_____

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El nuevo grafiti de Banksy: un homenaje a os trabajadores sanitarios

From: https://holaquepasa.com/el-nuevo-grafiti-de-banksy-un-homenaje-a-los- trabajadores-sanitarios/

El misterioso grafitero Banksy ha pintado un nuevo grafiti con un tema muy actual: la lucha de los trabajadores sanitarios contra el coronavirus.

La obra ha aparecido en un hospital inglés, en la ciudad de Southampton, y se llama “Game Changer”:

En el centro de la pintura vemos a un niño pequeño. Lleva una camiseta y un peto vaquero. El niño está de rodillas en el suelo, y juega con una muñeca muy original: una enfermera con capa. Muy cerca vemos también dos muñecos de Batman y Spiderman ignorados por el chico, en una papelera. El mensaje está claro: los superhéroes más guays de nuestro tiempo son los trabajadores sanitarios.

Los mensajes sociales como este son típicos de Banksy, el grafitero más popular del mundo. Popular y también misterioso, porque nadie conoce su identidad real. El nombre “Banksy” es solo un seudónimo.

Sea quien sea Banksy, su homenaje a los trabajadores sanitarios nos parece muy bonito y merecido.

Busca el español en el texto:

a) Is on his knees on the floor.

_____

b) The coolest superheroes of our time.

_____

c) Whoever Banksy is.

_____

d) Seems very beautiful and well deserved to us.

_____

Translate the following passage into English:

“Los mensajes sociales como este son típicos de Banksy, el grafitero más popular del mundo. Popular y también misterioso, porque nadie conoce su identidad real. El nombre “Banksy” es solo un seudónimo. Sea quien sea Banksy, su homenaje a los trabajadores sanitarios nos parece muy bonito y muy merecido. “

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Era una tarde calurosa y soleada cuando el conductor de bicitaxi iba a su trabajo. Vivía a quince minutos del centro del pueblo. Cada día, llevaba turistas en escénicos bici tours por la costa y el centro del pueblo. Sonreía mientras pedaleaba. Le gustaba su trabajo porque podía ejercitarse mientras trabajaba. Era el único bicitaxi en el pueblo. Siempre estaba ocupado y ganaba buen dinero. Él era popular especialmente con las parejas que estaban de vacaciones. Estaba cerca del centro del pueblo, a solo cinco minutos. Se acercó a una intersección. De repente, un coche no obedeció la señal de pare. El coche cruzó justo cuando el bicitaxi pasaba por la intersección.
Hubo un chillido de frenos cuando el coche vio el bicitaxi en el último momento. ¡Pum! El coche golpeó el bicitaxi y éste se fue bajo el coche. El sonido llamó la atención de la gente y ellos vinieron corriendo desde todas direcciones. Las personas vieron el bicitaxi bajo el coche y buscaron al conductor. No podían encontrarlo. Todos estaban confundidos. Algunas personas miraron debajo del coche, pero aún así no podían verlo. El conductor del coche estaba todavía en choque. Se
sentó en su coche sin moverse, con sus manos aún en el volante. La gente no sabía que era el día de suerte del conductor de bicitaxi. El impacto lo había tirado por el aire y lejos del accidente.
Afortunadamente, él había aterrizado sobre sus pies, a diez metros de distancia, sin ningún morado en él. Caminó de regreso al coche. Dijo a las personas que él era el conductor del bicitaxi. Al principio, las personas no le creían. Tuvo que decirlo varias veces antes de que el grupo de personas preocupadas le creyeran. Ellos no podían creer que él estaba bien ¡y él tampoco! Pronto, la ambulancia llegó y ellos tampoco creían la historia. El bicitaxi estaba arruinado por el coche, pero a su conductor no le importaba. Él estaba feliz por el escape afortunado.

Resalta (highlight) todos los ejemplos de verbos en el imperfecto

Resalta todos los ejemplos de verbos en el pretérito

Summarise in English what the story is about.

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Habs Diploma Summer Homework for EPQ/ERP Preparation.

Introduction to the EPQ and ERP Projects

As Part of your Habs Diploma you will undertake an: EPQ or ERP – you will get to choose this, and further information will be shared about this.

The Extended Project Qualification (EPQ) and the Extended Research Project (ERP) are both independent research projects that allow you to explore a topic of your choice in depth. Completing in-depth study of this kind is highly valued by universities and employers as it demonstrates your ability to manage a project, conduct research, and present your findings.

The EPQ and ERP can take the form of a dissertation, investigation/field study, Performance, or artifact.

This summer homework is designed to help you start thinking about your EPQ/ERP and prepare for the project you will undertake in Year 12.

You will be expected to hand in a digital copy of this work during the first few weeks of school, and it will be discussed when you first meet your supervisor.

Student Checklist

Use this checklist to ensure you have completed all parts of your summer homework:

- Brainstorm at least 3 potential EPQ/ERP topics.
- Write a short paragraph for each topic explaining why it interests you, what you already know, and what you hope to find out.
- Include at least 2 questions you would like to explore for each topic.
- Choose one topic and summarise 3 credible sources
- Reflect on how each source might help your project
- Write a short reflection on the skills you think you'll need for the EPQ / E

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