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Aim High Progress Study Programme _ (Year 12) - September 2025

Subject	Focus	Activities	Useful website
Accounting	<ul style="list-style-type: none">To comprehend the accounting rules which are applied in the preparation of accounting statements.	<p>Research, identify and show the application of the following accounting principles with relevant examples –</p> <p>This could be presented either as notes or as Sway presentation.</p> <ul style="list-style-type: none">business entityhistoric costmoney measurementgoing concernconsistencyprudencerealisationduality (double-entry)materialitymatchingsubstance over form. <p>On completion, prepare a quiz to consolidate learning of these accounting concepts. Follow this up with a class discussion on the need for and purpose of these accounting principles.</p>	<p>www.accounting-simplified.com/financial-accounting/accounting-concepts-and-principles/</p> <p>www.dineshbakshi.com</p> <p>www.cie.org.uk</p> <p>www.sway.com</p>



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	<ul style="list-style-type: none">To differentiate between managerial accounting and financial accounting.To list the elements and uses of managerial accounting.	<ul style="list-style-type: none">Research and present a Sway presentation showing differentiation between managerial accounting and financial accounting and also list the elements of managerial accounting. <p>Identify the areas in accounting where the elements of managerial accounting is applied and show the purpose of dividing accounting into managerial and financial accounting. Present your findings in a word document with suitable examples.</p>	<p>www.accounting-simplified.com/financial-accounting/accounting-concepts-and-principles/</p> <p>www.dineshbakshi.com</p> <p>www.cie.org.uk</p> <p>www.sway.com</p>
Arabic	<p>TOPIC:</p> <p>* مراجعة التشبيه التام.</p> <p>* مراجعة قواعد النحو السابقة (الجملة الأسمية والفعلية – الصفة – الحال)</p> <p>Learning objectives:</p> <p>أن يميز الظواهر النحوية والصرفية.</p> <p>* أن يربط بين خبراته السابقة</p> <p>TOPIC:</p>	<p>* يكتب فقرات باستخدام الجمل الاسمية والفعلية.</p> <p>* يشرح الآية مستخدماً التشبيه التمثيلي.</p> <p>يميز الظواهر النحوية والصرفية.</p> <p>* يكتب فقرات باستخدام التشبيه التام.</p> <p>* يطبق ذلك على نص قرآني آخر.</p> <p>* يبين المعنى الإجمالي للنص الشعري .</p> <p>* يوظف ما تعلمه من إنتاجه الشفوي والكتابة</p>	<p>http://www.drmosad.com/index76.htm</p> <p>https://www.youtube.com/watch?v=Q5aW-xYdCTE</p>



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	<p>* آيات من سورة النور.</p> <p>Learning objectives:</p> <ul style="list-style-type: none">* أن يبين المعنى الإجمالي للنص الشعري .* أن يفسر المفردات من خلال السياق .* أن يشرح الآية مستخدماً التشبيه التمثيلي.		<p>https://www.youtube.com/watch?v=6ix2WHRT-tI</p> <p>https://www.youtube.com/watch?v=fv-ELHrLH-c</p>
Islamic Studies Arabs	<p>سورة النور 1-10 TOPIC: 10-1 وقاية المجتمع من الجرائم الأخلاقية</p> <p>مناهج المفسرين</p> <p>Learning objectives:</p> <ol style="list-style-type: none">1- يستنبط عقوبة جريمة الزنا والآثار المترتبة - عليها.2- يكتشف مفهوم القذف وبيان عقوبته.3- يستنتج الحكمة الإلهية من اللعان. <p>يفسر مفردات الآيات الكريمة</p> <p>يبين الآثار المترتبة على الزنا</p>	<p>من خلال فهمك لآيات سورة النور ما هو سبب تسميتها بسورة النور؟</p> <p>ما الحكمة من حضور عدد من المؤمنين لهذه العقوبة ؟</p> <p>ما الآثار المترتبة لجريمة الزنا على الفرد والمجتمع؟</p> <p>برأيك هل تستحق جريمة الزنا كل هذا التغليف في العقوبة؟</p> <p>ويعتبر الزنا في الإمارات جريمة ويعاقب عليها القانون. ادم رأيك بنص القانون .</p> <p>قدّم اقتراحات لزملائك تتبعها تقيك من الوقوع في القذف؟</p>	<p>https://seraj-uae.com/file/2869/</p> <p>https://quizlet.com/ae/460571070/islamic%D8%A7%D9%84%D8%AF%D8%B1%D8%B3-%D8%A7%D9%84%D8%A7%D9%88%D9%84-%D9%88%D9%82%D8%A7%D9%8A%D8%A9-%D8%A7%D9%84%D9%85%D8%AC%D8%AA%D9%85%D8%B9-%D9%85%D9%86-%D8%A7%D9%84%D8%AC%D8%B1%D8%A7%D8%A6%D9%85-</p>



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	<ol style="list-style-type: none">1. يشرح المقصود بمناهج المفسرين.2. يفرق بين مناهج المفسرين.3. يختار التفسير المناسب حسب موضوع البحث..	<p>اربط بين تحريم (الغيبة والنميمة) والقذف .</p> <p>ما لحكمة من تقديم التخويف بالعقوبة الدنيوية على التخويف بعذاب الآخرة في آيات حد الزنا...!!!</p> <p>أثر وسائل التواصل الاجتماعي في نشر الجرائم الأخلاقية خاصة القذف؟؟ .</p> <p>وضح ذلك بالدليل من القرآن والسنة</p> <p>ما هي صفات المجتمع الذي يخلو من الجرائم الأخلاقية؟؟</p> <p>استنبط دور القانون في علاج الجرائم الأخلاقية .</p> <p>ما معنى كلمتي (مناهج - التفسير). -1</p> <p>في اللغة؟</p> <p>ثم ناقش واكتب المعنى الاصطلاحي لمناهج المفسرين.</p> <p>حدد فوائد تنوع مناهج التفسير للقرآن الكريم-2</p> <p>للتفسير مصادر متعددة ومنايع كثيرة-3</p> <p>اذكر أهم هذه المصادر.</p> <p>بالتعاون مع زملائك حدد العلوم التي يجب على المفسر -4 امتلاكها.</p>	<p>https://uae-school.com/archives/9517</p> <p>https://almanahj.com/ae/id=16981</p> <p>https://seraj-uae.com/file/2861/</p> <p>https://uae-school.com/archives/13210</p> <p>https://shamela.ws/book/38093</p>
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		<p>أَبْحَثْ عَنْ آيَةٍ تُفَسِّرُ الظُّلْمَ فِي قَوْلِهِ تَعَالَى:</p> <p>الَّذِينَ آمَنُوا وَلَمْ يَلْبِسُوا إِيمَانَهُمْ بِظُلْمٍ أُولَئِكَ لَهُمُ الْأَمْنُ وَهُمْ مُهْتَدُونَ</p> <p>اكتب عنوان خمسة كتب من كتب التفسير، محددًا مجال كل تفسير والعلم الذي اعتمد عليه المفسر في عمله</p>	
Business Studies	<p>To Analyse the role of business enterprise in the development of a country. the benefits and limitations of business plans</p>	<p>Research and prepare a presentation of a recent successful new business in their own country outlining:</p> <ul style="list-style-type: none">• what benefits such businesses create for the people and economy of the country• What role does entrepreneurship play in fostering these benefits.• Research ideas for a business and write a business plan using the business planning tools provided by banks. The exact content of their plan is less important than learners gaining familiarity with the detail and elements of the business plan in operation.• Provide support for small businesses by producing packs for writing a business plan. If possible, use an online version or ask the	<p>www.shell.co.uk/sustainability/society/encouraging-enterprise/shell-livewire.html</p> <p>Business planning tools from a selection of banks (others available too):</p> <p>www.barclays.co.uk/Startup-support/Writingasmallbusinessplan/P1242559649359</p> <p>www.lloydsbank.com/business/resource-centre/business-guides/writing-a-business-plan.html</p> <p>www.rbcroyalbank.com/business/advice/starting-a-</p>



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		bank for enough packs for group work. Some potential links are provided below.	business.html?utm_source=redirect&utm_medium=redirect&utm_campaign=bfs_srvr_redirect https://bizconnect.standardbank.co.za/start/business-planning/reference-documents/business-plan-template.aspx www.business.hsbc.uk/en-gb/corporate/gb/article/business-plan
Biology	Cell Structure <ol style="list-style-type: none">1. To review the principles of microscopy with reference to light and electron microscopes.2. To calculate the linear magnifications of drawings, photomicrographs and electron micrographs3. To distinguish between resolution and magnification,	<ol style="list-style-type: none">4 Create 30 Kahoot questions on Cell structure and its organelles.4 Identifying tissues and drawing low power plan diagrams of TS of a leaf, stem or root can make a good introduction to the use of a microscope.4 This can lead to the calculation of magnification of drawings made from microscope slides.	<ul style="list-style-type: none">• Bio Factsheet 75: Microscopes and their uses in Biology. http://www.rothamsted.bbsrc.ac.uk/notesbook/index.html• http://www.biochem4schools.org/results_topic.htm?qry=cell_biology



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	<p>with reference to light microscopy and electron microscopy</p> <ol style="list-style-type: none"> 4. To calculate actual sizes of specimens from drawings, photomicrographs and electron micrographs 5. To analyse detailed structure of typical animal and plant cells, as seen under the electron microscope and Outline functions of organelles in plant and animal cells. 6. To differentiate features of prokaryotic and eukaryotic cells. <p><u>Cell membranes and transport</u></p> <ul style="list-style-type: none"> • To describe and explain the fluid mosaic model of membrane structure, including an outline of the roles of phospholipids, cholesterol, glycolipids, proteins and glycoproteins. 	<p>4 Students should progress to drawing individual cells under high power</p> <ul style="list-style-type: none"> • Create/Draw a model of fluid mosaic membrane • Students will demonstrate the movement of substances in and out of the cell • Research the effect of various drugs on the cellular membrane and its working. • Investigate the movement of substances in various solutions <p>Survey the bio fortified food with the types of biomolecules in the foods sold in UAE</p> <ul style="list-style-type: none"> • Evaluate whether the little brown grains of yeast obtained from the grocery store are alive by testing for metabolism and growth. • https://mrsmillersblog.wordpress.com/as-biology/ • For students interested in research and further studies • Making a 3D and 2D structure of biomolecules for better understanding. • question 3,7,8 & 9 from the course book 	<ul style="list-style-type: none"> • http://publications.nigms.nih.gov/insidethecell/chapter1.html • http://www.cellsalive.com/cells/cell_model.htm • http://learn.genetics.utah.edu/content/begin/cells/insideacell/ • http://www.ellenjmc henry.com/download s/Cells_Activities_Chapters1and2.pdf • https://www.teachengineering.org/activities/view/van_membrane_activity3 • http://www.amybrownscience.com/2011/09/free-osmosisdifusion-lab.html • https://www.pinterest.com/pin/410742428488301074
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	<ul style="list-style-type: none">• To outline the process of cell signaling involving the release of chemicals that combine with cell surface receptors on target cells, leading to specific responses.• To describe and demonstrate the Movement of substances into and out of cells.• Investigating the effect of increasing the size of model cells and understanding of the constraints of obtaining resources across the cell surface and moving substances out of cells <p>Biological molecules</p> <ul style="list-style-type: none">• Justify the Structure of carbohydrates, proteins and Lipids and signify their roles In living organisms.		<ul style="list-style-type: none">• https://www.ukessay.com/essays/biology/practical-investigation-on-osmosis-biology-essay.php• http://brilliantbiologystudent.weebly.com/osmosis.html• http://www.rpi.edu/dept/bcbp/molbiochem/MBWeb/mb1/part2/sugar.htm has a comprehensive review of carbohydrate structure including examples of polysaccharides• http://www.calfnotes.com/pdffiles/CN102.pdf• https://alevelnotes.com/Lipids/58
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	<ul style="list-style-type: none">• Enlight the importance of Hydrogen bond in the formation of Biological molecules.• Explore the unique properties of water to enable it to serve as universal solvent in cells.		<p>http://study.com/academy/lesson/structure-and-function-of-lipids.html</p> <p>http://biology4alevel.blogspot.ae/2014/08/10-lipids.html</p> <p>https://youtu.be/VGHD9e3yRIU</p> <p>http://www.markedbyteachers.com/as-and-a-level/science/biological-importance-of-water.html</p> <p>https://youtu.be/FziG5LgrXPo</p> <p>https://youtu.be/mfC9RB7IL9A</p> <p>https://youtu.be/QU0VBcHnQOk</p>
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Chemistry	<p>Moles and Equations</p> <ul style="list-style-type: none">To define the relative atomic, isotopic, molecular and formula masses and moles.To analyze the mass spectrum of a given compoundTo define empirical and molecular formula and calculate the same using RAM.To use mole concepts in calculating reacting masses, volumes of gases and concentration of solution <p>Atomic Structure:</p> <ul style="list-style-type: none">To describe the structure of an atomTo recall the relative mass and relative charge of protons, neutrons and electronsTo calculate the subatomic particles of an atom/ion <p>Electrons in atoms:</p>	<ul style="list-style-type: none">Practice writing definitions of RAM, relative isotopic mass, relative molecular mass, empirical formula, molesResearch – (a) 'why ^{12}C was chosen as the standard' (b) 'how Avogadro determined the value of his constant'Use the concept of moles in calculating reacting masses, volumes of gases and concentration of solutions using questions from past papers.Practice calculating relative atomic mass using the data obtained from mass spectrometer.Find the concentration of NaCl in intravenous saline, glucose in isotonic sports drinks and other similar calculations for everyday solutions.Investigate the use of mass spectroscopy in drug testing athletesPrepare a TED-Ed lesson on 'how the model of the atom changed over time'Prepare a table on the properties of subatomic particlesSolve past paper questions based on the calculation of subatomic particlesPrepare an infographic poster on the shapes of orbitals	<p>https://www.chemguideforcie.co.uk/section1/learninga.html</p> <p>https://alevelchemistry.co.uk/notes/relative-atomic-mass-relative-molecular-mass-mass-spectrometry/</p> <p>http://www.docbrown.info/page04/4_73calcs11msc.htm</p> <p>Finding the molecular formula from a mass spectrum - YouTube</p> <p>Analytical Chemistry Mass Spectrometry. - ppt video online download (slideplayer.com)</p> <p>Mass spectrometry menu (chemguide.co.uk)</p> <p>https://study.com/academy/lesson/calculating-percent-composition-and-determining-empirical-formulas.html</p>
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	<ul style="list-style-type: none">• To describe the number and relative energies of the s, p and d orbitals for the principal quantum numbers 1, 2 and 3 and also the 4s and 4p orbitals• To describe and sketch the shapes of s and p orbitals• Describe I.E, factors affecting I. E, predicting group or period or an element from successive ionisation energy data <p>Chemical Bonding</p> <ul style="list-style-type: none">• Describe the different types of bonding based using 'dot and cross' diagram• Explain the shapes of, and bond angles in molecules using electron-pair repulsion theory• Describe covalent bonding in terms of orbital overlap including the concept of hybridisation	<ul style="list-style-type: none">• Practice writing electronic configuration of elements with atomic number 1 to 36• Make a Power-Point presentation on ionisation energy and the various factors affecting it• Plot the ionisation energies of elements with atomic number 1 to 36 on a graph and then explain trends• Practice drawing dot-and-cross diagrams for ionic compounds as well as covalent compounds• Make a power-point presentation to explain VSEPR theory as well as σ and π bonds• List at least 10 molecules with their shapes and bond angles• Research on hydrogen bonding as well as metallic bonding• Solve past paper questions based on identifying the coordinate covalent bonding, shapes of molecules, bonding and physical properties	<p>http://www.a-levelchemistry.co.uk/11-atomic-structure.html</p> <p>https://www.s-cool.co.uk/a-level/chemistry/atomic-structure/revise-it/the-structure-of-the-atom</p> <p>https://www.chemguide.co.uk/atoms/properties/gcse.html</p> <p>https://alevelchemistry.co.uk/notes/electron-configurations/</p> <p>https://www.chemguide.co.uk/atoms/properties/ies.html</p> <p>https://revisionworld.com/a2-level-level-revision/chemistry/atomic-structure-bonding-periodicity/ionisation-energy</p> <p>http://www.docbrown.info/page07/ASA2ptable2a.htm</p>
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	<ul style="list-style-type: none">• Explain the term bond energy, bond length, and bond polarity• Describe intermolecular forces based on permanent and induced dipoles, hydrogen bonding and metallic bonding		<p>https://www.chemguide.co.uk/atoms/bondingmenu.htm</p> <p>!</p> <p>https://alevelchemistry.co.uk/notes/chemical-bonding/</p> <p>http://www.physicsandmathstutor.com/chemistry-revision/a-level-edexcel/topic-2/</p> <p>http://www.chembook.co.uk/chap4.htm</p>
Economics	<p>To Understand why the fundamental economic problem of scarcity occurs.</p> <ul style="list-style-type: none">• Understand why individuals, firms and governments have to make choices because resources are scarce.• Understand that opportunity cost results from the need to make choices and is the next best alternative.• Analyse why the fundamental economic problem requires all economies to answer three	<ol style="list-style-type: none">1. Research a current event (e.g., drought, energy crisis, food shortage) and explain how scarcity has forced individuals or governments to make difficult economic choices. What were the trade-offs involved?2. Choose a government policy (e.g., free education, military spending, or healthcare subsidies) and explain what opportunity cost is involved. Evaluate whether the policy's benefits justify the cost.3. Compare how two countries (developed vs. developing) approach the problem of "for whom to produce." Explain how income inequality affects the outcome of this decision.	<p>www.tutor2u.net/economics/revisionnotes/as-markets-scarcity-andchoice.html</p> <p>www.bized.co.uk/educators/16-19/economics/micro/presentation/econintro_map.htm</p> <p>AS Level Economics Workbook</p> <p>Project Syndicate ; BBC News ; Econplus Dal; Welker's Wikinomics ; Ted Talks ; Stimulus Readings from Project Syndicate and</p>



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	<p>important questions: what to produce, how to produce, for whom to produce.</p>		<p>BBC .com https://www2.deloitte.com/ch/en/pages/consumerbusiness/articles/shifting-sands-sustainableconsumer.html Video linking SDG and production factors: https://youtu.be/JNwhtQS5zoQ</p>
<p>Mathematics <u>Pure Mathematics 1</u></p>	<p>Quadratics</p> <ul style="list-style-type: none"> Apply completing the square to find vertex of a quadratic equation. Apply discriminant to find the number of roots of a quadratic equation. Solve quadratic equations. Solve linear and quadratic inequalities. Solve by substitution a pair of simultaneous equations one linear and the other quadratic <p>Coordinate geometry:</p> <ul style="list-style-type: none"> To find the length between two points. 	<p>Activities</p> <p><u>UM Proving the Quadratic formula</u></p> <p><u>Completing the square activity</u></p> <p>Modelling</p> <p><u>UM Two Points on the Axis</u> Geogebra required for this task. Find midpoint, length and gradient of the line joining them using required formulae.</p> <p><u>UM: Can we find the coordinates of this tilted rectangle?</u></p> <p><u>Risp 9: A circle property</u></p>	<p>Links</p> <p><u>UM Proving the Quadratic formula</u></p> <p><u>UM - Quadratic Solving Sorter</u></p> <p><u>UM Discriminating</u></p> <p><u>Quadratics in disguise</u></p> <p><u>UM Parabolic Mirrors</u></p>



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	<ul style="list-style-type: none">• To find the gradient of a line.• To find the midpoint, given two points.• To find the equation of a line if two points are given or a point and a gradient is given.• Apply algebraic methods to solve problems involving lines and circles.• Determine the equation of a circle given its radius and center or given equation in a different form.• Solve problems involving straight lines and circles		UM: Teddy Bear or simpler matching activity
Art& Design	Candidates explore and develop coursework based on a theme, producing a portfolio of work leading to a final outcome.	<ul style="list-style-type: none">• to record ideas and observations from first-hand studies, such as their own drawings and photography, and secondary imagery and sources• to explore and experiment with different media, techniques and processes• to carry out in-depth research into artists, designers and cultural influences to inform the development of ideas	www.studentartguide.com



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		<ul style="list-style-type: none"> to develop the selected, reviewed and refine their work throughout the whole process to plan and produce a personal and coherent outcome. 	
Statistics 1	<p>Topic: Representation of data</p> <ul style="list-style-type: none"> Differentiate different types of data and evaluate measures of central tendency. Analyse and evaluate mean, variance and standard deviation of given data set. Construct and use stem and leaf diagram and box and whisker plots to evaluate central tendency and spread. Draw and interpret histograms and cumulative frequency for grouped data. Evaluate mean and variance using coded data. Solve application problems on representation of data. 	<p>Compare and contrast histograms and cumulative frequency diagrams.</p> <p>Summarize your learning on representation of data and present your work in the form of notes including formulae and examples.</p> <p>Research and present your work on the application of measures of central tendency and variation in real life.</p>	<p>https://statisticsbyjim.com/basics/measures-central-tendency-mean-median-mode/</p> <p>https://www.khanacademy.org/math/statistics-probability/summarizing-quantitative-data/variance-standard-deviation-population/v/range-variance-and-standard-deviation-as-measures-of-dispersion</p>
Psychology	<p>Introduction to Psychology To introduce students to basic concepts in psychology by exploring</p>	<p>Psychology in Daily Life – Parent Interview</p>	<p>Textbook</p>



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	<p>thoughts, emotions, behavior, and memory through a fun family discussion and activity.</p>	<p>Instructions:</p> <ol style="list-style-type: none">1. The student asks their parent(s) the following questions:<ol style="list-style-type: none">a. What do you think psychology is?b. Have you ever used psychology in daily life? (e.g., calming down when angry, motivating yourself, dealing with stress)c. Can you recall a moment when you made a decision based on emotions rather than logic?2. The student notes responses and reflects on how psychology is used in everyday situations. <p>Mini Memory Test</p> <p>Instructions:</p> <ol style="list-style-type: none">1. Create a list of 10 unrelated words (e.g., apple, car, honesty, chair, blue, etc.).2. Read the list to your parent once, then ask them to recall as many words as possible after a 30-second break.3. Repeat the test with different word orders or include images to see if memory improves.	
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		<p>Discuss Together:</p> <ul style="list-style-type: none"> • How did memory work for each of you? • What helped you remember better? • How is memory important in school/work life? 	
Physics	<p>Introduction</p> <p>To understand physical quantities, consist of numerical magnitude and a unit</p> <p>To express the derived units as a products or quotients of the base units and use these units as appropriate.</p> <p>To show an understanding of the distinction between precision and accuracy</p> <p>To distinguish between scalar and vector quantities and give examples of each.</p>	<p>Revise the questions given in the worksheet</p> <p>Use base units to check the whether the following equations are balanced.</p> <ul style="list-style-type: none"> • Pressure = depth x density x gravitational field strength • Energy = mass (speed of light)² <p>Revise the rule of significant figures.</p> <p>Precision of instrument</p> <ul style="list-style-type: none"> • idea of precision of instruments • record as e.g. 14.2 cm 0.2 cm <p>Accuracy of readings</p> <p>Re-visit of recording of readings in previous experiments</p> <p>Calculation of percentage error</p> <p>idea of a resultant of two vectors</p> <p>use of vector triangle</p> <p>Experiment: 'verify' use of vector triangle</p> <p>Discussion: examples of use of triangle</p> <p>- scale drawing</p>	<p>www.cie.org.uk</p> <p>www.islandphysics.com</p> <p>http://www.physicsandmathstutor.com/physics-revision/</p> <p>https://www.savemyexams.co.uk/notes/a-level-physics-cie-until-2021/2-measurement-techniques-pre/2-1-measurements-errors-pre/2-1-3-calculating-uncertainty-pre/</p> <p>www.cie.org.uk</p> <p>www.islandphysics.com</p> <p>http://www.physicsandmathstutor.com/physics-revision/</p> <p>https://docbrown.info/ephysics/forces3.htm</p>



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	To add and subtract coplanar vectors. represent a vector as two perpendicular components	- sketch and calculation Discussion of vector subtraction Discussion: Single vector as two perpendicular Components using $\sin \theta$ and $\cos \theta$.	
Sociology	Socialisation and the creation of social identity: To evaluate culture, norms, values, beliefs and customs as elements in the social construction of reality.	Activity- Nature Vs Nurture- Prepare a debate Refer to case studies of : <ul style="list-style-type: none"> • Feral children • Saturday Mthiyana – aged 5 – south Africa in 1987 • Genie – South Africa – 13 year old girl in 1970 	Textbook
English Language	<ul style="list-style-type: none"> • To be introduced to the syllabus and expectations of English Language. • To develop an understanding on analysis of language and content in texts. 	<ul style="list-style-type: none"> • Read the syllabus to be thorough with the contents and criteria of 9093/12 and 9093/22. • Read through various texts from resources such as speeches, diaries, biographies, articles, blogs etc. • Analyse the differences in the form, content, style, targeted audience and any other similarities or differences. • Review the learner guide to have a better understanding of the analysis and writing expectations. 	https://www.cambridgeinternational.org/Images/635901-2024-2026-syllabus.pdf https://5steps.academy/wp-content/uploads/2021/08/9093_Learner_Guide_for_examnation_from_2021.pdf



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<p>Information Technology</p>	<p>Theory: Data Processing and information</p> <ul style="list-style-type: none">• Differentiate between data, information and knowledge; direct and indirect data sources.• Explain the use of encryption to protect data• Factors that affect the quality of information• Importance of encryption, Advantages and disadvantages of different protocols and methods of encryption <p>Practical:</p> <ul style="list-style-type: none">• Database concepts• Import tables into database• Queries and Reports'• Grouped Reports <p>Normalization concepts</p> <ul style="list-style-type: none">• Dynamic and Static Queries	<p>Support your child in identifying examples of data, information, and knowledge from your daily routines. For instance, while checking the weather forecast, discuss the raw data , the interpreted information , and knowledge (e.g., “We should carry an umbrella”).</p> <p>Encourage your child to explore how encryption is used in real life. Together, visit a secure website (look for the padlock symbol in the browser). Discuss how this shows encryption is being used to protect personal data online.</p> <p>Next, using a simple substitution cipher (e.g., A=1, B=2...), support your child in encrypting a short messages and share it with a family member. Then decode it together to understand how encryption works.</p> <p>Finally, encourage your child to reflect on why accurate, secure information is important (e.g., in online banking, emails, or health records). Discuss what could go wrong if the information is inaccurate or if encryption is not used.</p>	<p>Teach-ICT Cambridge International Education</p>
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<p>Computer Science</p>	<ul style="list-style-type: none">Recognize and understand the use of basic control structures—sequence, selection, and iteration—in pseudocode.	<ul style="list-style-type: none">Write a simple algorithm written in a different high-level language (e.g., Pascal or Java).Rewrite the logic in pseudocode, using the correct structure and syntax.Then, trace or dry-run the pseudocode to verify that it produces the correct output.	<p>Commenting programs:</p> <p>http://en.wikibooks.org/wiki/A-level_Computing/AQA/Problem_Solving,_Programming,_Data_Representation_and_Practical_Exercise/Fundamentals_of_Programming/Comments</p> <p>Inputs and outputs in programming:</p> <p>http://en.wikibooks.org/wiki/A-level_Computing/AQA/Problem_Solving,_Programming,_Data_Representation_and_Practical_Exercise/Fundamentals_of_Programming/Input_and_output</p> <p>Operators:</p> <p>http://en.wikibooks.org/wiki/A-level_Computing/AQA/Problem_Solving,_Programming,_Data_Representation_and_Practical_Exercise/Fundamentals_of_Programming/Operators</p>
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			<p>level Computing/AQA/Problem Solving, Programming, Data Representation and Practical Exercise/Fundamentals of Programming/Arithmetic operators</p> <p>www.pp4s.co.uk/main/tu-op-intro.html</p>
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