



# The Winchester School



## Aim High Progress Study Programme \_ (Year 12) January \_2025

Subject	Focus	Activities	Useful website
<b>Accounting</b>	<ul style="list-style-type: none"><li>• To analyse the structure of limited companies and the sources of raising capital.</li><li>• To describe the type of businesses that would use of unit, job and batch costing system.</li><li>• To apply costing concepts to make business decisions and recommendations.</li></ul>	<ul style="list-style-type: none"><li>• Prepare a sway presentation analyzing the structure of limited companies which should include the following –<ul style="list-style-type: none"><li>➤ Features of limited companies</li><li>➤ Share capital - meaning of and accounting for</li><li>➤ Capital and revenue reserves</li><li>➤ Loan capital</li><li>➤ Preparation of internal final accounts and balance sheets of limited companies.</li></ul></li><li>• Present a write up on type of businesses that would use of unit, job and batch costing system. OR</li><li>• Prepare a Ted Ed Flipped Lesson on the topic.</li></ul>	<p><a href="http://www.myaccountinglab.com">www.myaccountinglab.com</a>, <a href="http://www.bized.co.uk">www.bized.co.uk</a> <a href="http://www.cie.org.uk">www.cie.org.uk</a>, <a href="http://www.accounting-world.com/">http://www.accounting-world.com/</a> <a href="https://www.investopedia.com/">https://www.investopedia.com/</a> <a href="https://study.com/search/text/academy.html?q=accounting#/toresults/accounting">https://study.com/search/text/academy.html?q=accounting#/toresults/accounting</a></p>
<b>Arabic (Arabs)</b>	TOPIC: مراجعة على أنواع التشبيه والاستعارة <b>Learning objectives:</b>	ارسم خريطة ذهنية موضحاً فيها أنواع التشبيه مع التمثيل عبر عن المواقف بجمل من إنشائك تحوي التشبيه -	<p><a href="https://www.youtube.com/watch?v=Mat6R0toiql">https://www.youtube.com/watch?v=Mat6R0toiql</a></p>



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	<p>أن يقارن بين أنواع التشبيهات والتشبيه التمثيلي</p> <p>أن يحلل التشبيه التمثيلي موضحا موطن الجمال فيه . أن ينتج فقرة تتضمنه .</p> <p>أن يتعرف الاستعارة ويستخدمها في كتابة فقرة</p> <p>TOPIC</p> <p>البدل</p> <p><b>Learning objectives:</b></p> <p>أن يحدد الطالب البدل في الجمل</p> <p>أن يوظف الطالب البدل في فقرة</p>	<p>مثّل لكل نوع من أنواع التشبيه</p> <p>حول الأمثلة من تشبيه تام أو بليغ إلى تشبيه تمثيلي - والعكس.</p> <p>يفتح المعلم باب الحوار المنظم للاستماع إلى ملاحظات الطلاب حول المفاهيم النحوية التي تعلموها</p> <p>(مثّل لكل من (البدل - (عمل قطعة ويقوم الطلاب باستخراج (البدل - (قم بعمل خريطة ذهنية (البدل - إجراء اختبار ختامي قصير للتأكد من مستوى التعلم لدى الطلاب من خلال ورقة عمل</p>	<p><a href="https://www.youtube.com/watch?v=ZwGlxw4ik0M">https://www.youtube.com/watch?v=ZwGlxw4ik0M</a></p> <p><a href="https://www.youtube.com/watch?v=H4MGzCuUKes">https://www.youtube.com/watch?v=H4MGzCuUKes</a></p>
<p><b>Islamic Studies</b></p> <p><b>Arabs</b></p>	<p>TOPIC:</p> <p>(التواصل الاجتماعي سلوك وآداب، سورة النور(1-31-27)</p> <p>المنهج النبوي في الرعاية الصحية-2</p> <p><b>Learning objectives:</b></p>	<p>نشاط جماعي(1):حدد من الآيتين (30-31) سورة النور التداير الوقائية التي تمنع الوقوع في الزنا</p> <p>نشاط جماعي(2): استنتج ثمرات غض البصر على الفرد والمجتمع</p>	<p><a href="https://seraj-uae.com/file/212/">https://seraj-uae.com/file/212/</a></p> <p><a href="https://uae-school.com/archives/64069">https://uae-school.com/archives/64069</a></p> <p><a href="https://seraj-uae.com/file/213/">https://seraj-uae.com/file/213/</a></p>



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	<p>الأهداف، هذا الدرس يعلمني أن:</p> <ol style="list-style-type: none"><li>1. أتلو الآيات مع مراعاة أحكام التلاوة-</li><li>2. أفسر مفردات الآيات وأوضح المعنى الإجمالي لها-</li><li>3. أستنتج ثمرات غض البصر على الفرد والمجتمع-</li><li>4. أبين ضوابط دخول بيوت الآخرين-</li></ol> <p>أحدد مقومات الصحة في السنة النبوية-1</p> <ol style="list-style-type: none"><li>2. أعبر عن كيفية محافظتي على صحي شكرًا لله تعالى-</li><li>3. أستنتج أسباب انتشار الأمراض رغم تقدم علوم الطب-</li></ol>	<p>نشاط جماعي(1): أستنتج وناقش أسباب انتشار الأمراض في العصر الحاضر رغم تقدم علوم الطب.</p> <p>نشاط جماعي (2): دلت من السنة النبوية على عناية الإسلام بالإجراءات الصحية وأنها ليست من قبيل النظافة، ولكنها عبادة لله..</p>	<p><a href="https://uae-school.com/archives/19760">https://uae-school.com/archives/19760</a> <a href="https://teacherhelp.info/%D8%A7%D9%84%D9%85%D9%86%D9%87%D8%AC-%D8%A7%D9%84%D9%86%D8%A8%D9%88%D9%8A-%D9%81%D9%8A-%D8%A7%D9%84%D8%B1%D8%B9%D8%A7%D9%8A%D8%A9-%D8%A7%D9%84%D8%B5%D8%AD%D9%8A%D8%A9/">https://teacherhelp.info/%D8%A7%D9%84%D9%85%D9%86%D9%87%D8%AC-%D8%A7%D9%84%D9%86%D8%A8%D9%88%D9%8A-%D9%81%D9%8A-%D8%A7%D9%84%D8%B1%D8%B9%D8%A7%D9%8A%D8%A9-%D8%A7%D9%84%D8%B5%D8%AD%D9%8A%D8%A9/</a></p>
<p><b>Islamic Studies</b> <b>Non-Arabs</b></p>	<ul style="list-style-type: none"><li>• TOPIC: CREATIVE THINKING IN ISLAM</li><li>• <b>Learning objectives:</b></li><li>• <b>TO COMPREHEND THE CONCEPT OF PRODUCTIVE (CREATIVE) THINKING IN ISLAM</b></li><li>• <b>-TO EVALUATE THE ROLE OF KNOWLEDGE IN CREATIVE THINKING</b></li></ul>	<ul style="list-style-type: none"><li>• The most important skills of innovative thinking are eloquence, flexibility and focusing towards problems. In the light of this statement, how important is innovative thinking for the development of a nation. What a society</li></ul>	<p><a href="https://islamqa.info/en/answers/306654/thinking-in-islam">https://islamqa.info/en/answers/306654/thinking-in-islam</a></p>



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	<ul style="list-style-type: none"> <li>• <b>TOPIC; PROPHET'S (P.B.U.H) AND HIS SOCIAL LIFE.</b></li> <li>• <b>Learning objectives:</b></li> <li>• <b>To signify the keenness of Prophet (P.B.U.H) on building coherent society.</b></li> <li>• <b>-To infer a link between communal peace and the development of Islamic State.</b></li> </ul>	<p>lose if there is lack of creativity among its people</p> <p><b>WRITE DOWN AN ESSAY ON THE VIRTUES OF BEING POLITE TO OTHERS AND HOW THE LIFE OF PROPHET (P.B.U.H) CAN HELP US TO IMPROVE OUR BEHAVIOUR TOWARDS OTHERS SOCIETY.</b></p>	
Biology	<p><b>Transport in Plants</b></p> <ul style="list-style-type: none"> <li>• Elaborate the pathways and explain symplastic pathway and apoplastic pathway and Casparian strip)</li> <li>• Justify that the term transpiration is an inevitable consequence of gas exchange in plants</li> <li>• Explore the factors that affect transpiration rate using leaf impressions, epidermal peels, and grids for determining surface area</li> </ul>	<ul style="list-style-type: none"> <li>• Construct a summary table of xylem vessel element structure linked to an explanation of function. Work out which way water will flow to and from cells / environments with given water potentials (no calculations of water potential are expected).</li> <li>• Research, (apoplast, symplast and vacuolar) and the role of the endodermis and Casparian strip, by giving a brief written / diagrammatic summary of findings.</li> </ul>	<p><a href="http://www.microscopy-uk.org.uk/mag/artmar00/watermvt.html">http://www.microscopy-uk.org.uk/mag/artmar00/watermvt.html</a></p> <p><a href="http://www.mhhe.com/biosci/pae/botany/histology/html/memtrans.html">http://www.mhhe.com/biosci/pae/botany/histology/html/memtrans.html</a></p> <p><a href="http://users.rcn.com/jkimball.m.a.ultranet/BiologyPages/X/Xylem.html">http://users.rcn.com/jkimball.m.a.ultranet/BiologyPages/X/Xylem.html</a></p>



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	<ul style="list-style-type: none"><li>• State that assimilates, such as sucrose and amino acids, move between sources (e.g. leaves and storage organs) and sinks.</li></ul> <p><b><u>Transport in Mammals</u></b></p> <ul style="list-style-type: none"><li>• Explain the relationship between the structure and function of arteries, veins and capillaries.</li><li>• Describe the role of haemoglobin in carrying oxygen and carbon dioxide with reference to the role of carbonic anhydrase, the formation of haemoglobinic acid and carbaminohaemoglobin.</li><li>• Describe the role of hemoglobin in carrying oxygen and carbon dioxide with reference to the role of carbonic anhydrase.</li><li>• Describe and explain the significance of the higher red blood cell count of humans at high altitude</li></ul>	<ul style="list-style-type: none"><li>• Justify and explain why transpiration is inevitable, and list the advantages of transpiration.</li><li>• Diagrammatically explain the structure of heart, highlighting the differences in chambers.</li><li>• Using Bloom's taxonomy to create different level questions on Transport in mammals.</li><li>• Make plan diagrams of the structure of arteries, veins and capillaries using photomicrographs, showing the distribution of various tissues.</li><li>• Using a mind map explain the working of cardiac cycle.</li><li>• Write a report on the structural adaptations of people living at high altitude</li></ul>	<p><a href="https://bio.libretexts.org/Books/helves/Botany/Botany_(Harmer_and_Algiers)/04%3A_Plant_Physiology_and_Regulation/4.05%3A_Transport/4.5.02%3A_Translocation_(Assimilate_Transport)">https://bio.libretexts.org/Books/helves/Botany/Botany (Harmer and Algiers)/04%3A Plant Physiology and Regulation/4.05%3A Transport/4.5.02%3A Tanslocation (Assimilate Transport)</a></p> <p><a href="https://alevelnotes.com/notes/biology/exchange-and-transport/transport-in-animals">https://alevelnotes.com/notes/biology/exchange-and-transport/transport-in-animals</a></p> <p><a href="https://courses.lumenlearning.com/wm-biology2/chapter/transport-of-carbon-dioxide-in-the-blood/">https://courses.lumenlearning.com/wm-biology2/chapter/transport-of-carbon-dioxide-in-the-blood/</a></p> <p><a href="https://www.savemyexams.com/international-a-level/biology/edexcel/18/revision-notes/1-molecules-transport--health/the-circulatory-system/1-8-the-cardiac-cycle/">https://www.savemyexams.com/international-a-level/biology/edexcel/18/revision-notes/1-molecules-transport--health/the-circulatory-system/1-8-the-cardiac-cycle/</a></p>
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	<ul style="list-style-type: none"><li>• Describe the cardiac cycle (including blood pressure changes during systole and diastole.</li><li>• Explain how heart action is initiated and controlled (reference</li><li>• should be made to the sinoatrial node, the atrioventricular node and the Purkyne tissue</li></ul>		
Chemistry	<p><b>REDOX REACTIONS:</b></p> <ul style="list-style-type: none"><li>• To calculate oxidation numbers of elements in compounds and ions.</li><li>• To describe and explain redox processes in terms of electron transfer and changes in oxidation number</li><li>• To use changes in oxidation numbers to help balance chemical equations.</li></ul> <p><b>HALOGENOALKANES:</b></p> <ul style="list-style-type: none"><li>• To explain the chemistry of halogenoalkanes as exemplified by:</li></ul>	<ul style="list-style-type: none"><li>• Prepare an Infographic poster on the concept of disproportionation</li><li>• Give some real life applications for the uses of halogens</li><li>• Create a checklist for determining the oxidation number of elements in compounds.</li><li>• Balancing chemical equations using change in oxidation number.</li><li>• Writing half-equations for species oxidised and species reduced.</li><li>• Give real life applications of redox reactions.</li></ul>	<p><a href="https://www.chemguide.co.uk/inorganic/group7/properties.html">https://www.chemguide.co.uk/inorganic/group7/properties.html</a></p> <p><a href="https://edu.rsc.org/resources/reactions-of-halogens-as-aqueous-solutions/733.article">https://edu.rsc.org/resources/reactions-of-halogens-as-aqueous-solutions/733.article</a></p> <p><a href="https://www.chemguide.co.uk/inorganic/group7/halogensasoas.html">https://www.chemguide.co.uk/inorganic/group7/halogensasoas.html</a></p>



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	<p>the following nucleophilic substitution reactions :</p> <ol style="list-style-type: none"><li>I. hydrolysis, formation of nitriles, formation of primary amines by reaction with ammonia</li><li>II. the elimination of hydrogen bromide from 2-bromopropane</li></ol> <ul style="list-style-type: none"><li>• To describe the SN1 and SN2 mechanisms of nucleophilic substitution in halogenoalkanes including the inductive effects of alkyl groups</li></ul> <p>To explain that primary halogenoalkanes tend</p> <ol style="list-style-type: none"><li>1. to react via the SN2 mechanism; tertiary halogenoalkanes via the SN1 mechanism and secondary halogenoalkanes by a mixture of the two, depending on structure</li><li>2. To interpret the different reactivities of halogenoalkanes</li><li>3. To recognise the concern about the effect of chlorofluoroalkanes on the ozone layer.</li></ol> <p><b>ALCOHOLS, ESTERS AND CARBOXYLIC ACIDS:</b></p>	<p>Create a mind map or table of reactions of halogenoalkanes, including the equations and conditions for each.</p> <ul style="list-style-type: none"><li>• Investigate the kinetics of SN1 and SN2 reactions.</li><li>• Solve problems based on equations, to<ul style="list-style-type: none"><li>- predict a mechanism, SN1 or SN2</li><li>- justify their choice, explaining why it's SN1 or SN2</li><li>- describe the mechanisms with curly arrows etc.</li></ul></li><li>• To investigate practically the speed that the silver halide precipitates appear when halogenoalkanes are put into ethanolic aqueous silver nitrate, followed by determining the bond energies of the carbon-halogen bond to explain their observations.</li><li>• Create an infographic poster to spread awareness about the effect of</li></ul>	<p><a href="https://www.chemguide.co.uk/inorganic/group7/halideions.htm">https://www.chemguide.co.uk/inorganic/group7/halideions.htm</a> <a href="http://molview.org/">http://molview.org/</a> <a href="http://www.docbrown.info/page06/OrgMechs2.htm">http://www.docbrown.info/page06/OrgMechs2.htm</a> <a href="https://www.ocr.org.uk/Images/163774-explaining-observations-activity-teacher-instructions.pdf">https://www.ocr.org.uk/Images/163774-explaining-observations-activity-teacher-instructions.pdf</a> <a href="#">Markhint   Topical Questions</a></p>
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	<ul style="list-style-type: none"><li>To explain the chemistry of alcohols, exemplified by ethanol, in the following reactions:<ul style="list-style-type: none"><li>(i) combustion</li><li>(ii) substitution to give halogenoalkanes</li><li>(iii) reaction with sodium</li><li>(iv) oxidation to carbonyl compounds and carboxylic acids</li><li>(v) dehydration to alkenes</li><li>(vi) formation of esters by esterification with carboxylic acids.</li></ul></li><li>To explain characteristic oxidation reactions of alcohols using various oxidizing agents.</li><li>To deduce the presence of a <math>\text{CH}_3\text{CH}(\text{OH})-</math> group in an alcohol from its reaction with alkaline aqueous iodine to form triiodomethane</li></ul>	<p>chlorofluoroalkanes on the ozone layer.</p> <p>Create a mind map showing reactions of alcohols and also how they relate to other classes of compound already learnt.</p> <ul style="list-style-type: none"><li>Practice making molecular models of isomers of alcohols with 3, 4 and 5 carbon atoms.</li><li>Solve questions based on examples of primary, secondary and tertiary alcohols, to<ul style="list-style-type: none"><li>decide which can be oxidised and which cannot</li><li>name a suitable oxidising agent</li><li>give visible observations</li><li>state conditions and give formulae of products. construct balanced chemical equations.</li></ul></li><li>Predict the alcohols from a given list, which will give positive iodoform test and to construct balanced chemical equations.</li></ul>	<p><a href="https://www.chemguide.co.uk/organicprops/alcoholmenu.html">https://www.chemguide.co.uk/organicprops/alcoholmenu.html</a></p> <p><a href="https://en.wikibooks.org/wiki/Organic_Chemistry/Alcohols">https://en.wikibooks.org/wiki/Organic_Chemistry/Alcohols</a></p> <p><a href="https://www.chegg.com/home-work-help/questions-and-answers/classify-alcohols-prima">https://www.chegg.com/home-work-help/questions-and-answers/classify-alcohols-prima</a></p> <p><a href="#">TOPICAL PAST PAPER QUESTIONS   exam-mate</a></p>
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Business Studies	Marketing Mix – Product and Price  1. To critically examine the factors influencing pricing decisions, such as costs, competition, customer value perception, and pricing objectives.  2. To Apply pricing strategies in competitive markets and understand their effect on market share and profitability.	<ul style="list-style-type: none"><li>• How does the product life cycle influence pricing decisions? Provide examples of pricing strategies at each stage of the product life cycle.</li><li>• Research based task:</li><li>• Task 1 - Discuss the importance of product differentiation in setting prices. How can a company effectively differentiate its product to justify a premium price?</li><li>• Task 2 - What factors should a company consider when determining the optimal pricing strategy for a new product? How does the competitive landscape, customer demand, and production costs affect pricing decisions?</li><li>• Produce your findings in the form of a report.</li></ul>	<a href="http://www.dineshbakshi.com">www.dineshbakshi.com</a> <a href="http://www.tutor2u.com">www.tutor2u.com</a>
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Economics	<ul style="list-style-type: none"><li>• To research and be familiar with definitions and measurement of several types of exchange rates</li><li>• To analyze fluctuations in foreign exchange rates, why and how these occur and how can it be controlled</li></ul>	<ul style="list-style-type: none"><li>• Research and prepare a short presentation outlining why the devaluation/ revaluation was introduced in your country and whether the strategy was successful.</li><li>• Produce your findings in the form of a report.</li></ul>	Bamford Chap4 <a href="http://www.tutor2.u.net">www.tutor2.u.net</a> <a href="http://www.bized.co.uk">www.bized.co.uk</a>
Psychology	<b>Learning Approach</b> <b>Assumptions for learning approach</b>	Students explain the basic concepts of learning to their parents: <ul style="list-style-type: none"><li>• <b>Classical Conditioning:</b> Learning by association.</li><li>• <b>Operant Conditioning:</b> Learning through rewards and punishments.</li><li>• <b>Social Learning Theory:</b> Learning by observing and imitating others.</li></ul> <b>Task Instructions</b> <ul style="list-style-type: none"><li>• <b>Part 1: Association Game (Classical Conditioning)</b></li></ul>	



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		<ul style="list-style-type: none"><li>○ Identify something at home that creates a routine (e.g., a bell signaling dinner).</li><li>○ Parents and children create a new cue, like clapping hands before dinner.</li><li>○ Repeat for 2-3 days and see if the child starts associating the cue with the activity.</li><li>● <b>Part 2: Behavior Rewards (Operant Conditioning)</b><ul style="list-style-type: none"><li>○ Choose a behavior to encourage (e.g., cleaning up toys).</li><li>○ Parents set up a reward system, like giving a sticker for every day the behavior is done.</li><li>○ Reflect on how rewards influence the behavior.</li></ul></li><li>● <b>Part 3: Role Model Imitation (Social Learning Theory)</b></li></ul>	
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		<ul style="list-style-type: none"><li>○ Parents and children identify a skill to teach (e.g., tying shoes or drawing).</li><li>○ Parents model the skill step-by-step, encouraging the child to imitate.</li><li>○ Discuss whether observing made the learning easier.</li></ul> <p><b>Reflection Questions</b></p> <p>Students will write down their observations:</p> <ul style="list-style-type: none"><li>● How did associations (classical conditioning) work at home?</li><li>● Did rewards/punishments (operant conditioning) affect behavior?</li><li>● Was observing parents helpful in learning new skills?</li></ul>	
Physics	<p><b><u>Waves</u></b></p> <ul style="list-style-type: none"><li>● To understand that energy is transferred by a progressive wave.</li></ul>	<ul style="list-style-type: none"><li>● Describe how to measure the frequency of sound waves using cathode ray oscilloscope</li></ul>	<p><a href="http://www.acoustics.salford.ac.uk/feschools/waves/contents.php">www.acoustics.salford.ac.uk/feschools/waves/contents.php</a></p>



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	<ul style="list-style-type: none"><li>• To analyse and interpret graphical representations of transverse and longitudinal waves.</li><li>• To know the experimental arrangement of Young's double slit experiment.</li></ul>	<ul style="list-style-type: none"><li>• Compare the diffraction pattern of water waves and light waves.</li><li>• State the properties of electromagnetic waves.</li><li>• In Young double-slit experiment, state the effect of<ul style="list-style-type: none"><li>-Using slits of narrower width (but the same separation)</li><li>-Using slits with smaller separation but of same width.</li></ul></li></ul>	<p><a href="https://www.islandphysics.com/waves-and-sound.html">https://www.islandphysics.com/waves-and-sound.html</a></p> <p><a href="http://www.physicsclassroom.com/class/light/Lesson-3/Young-s-Experiment">http://www.physicsclassroom.com/class/light/Lesson-3/Young-s-Experiment</a></p>
Sociology	Changing Identities	<ul style="list-style-type: none"><li>• How do changing class, gender, ethnic, and age identities help us understand the transitions from modern to postmodern societies.</li></ul>	Sociology Textbook



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English Language	Discursive/ Argumentative writing	<ul style="list-style-type: none"> <li>• Research and discuss on topics. a few examples are:</li> <li>• Is a lottery a good idea?</li> <li>• Do curfews keep teens out of trouble?</li> <li>• Are law enforcement cameras an invasion of privacy?</li> <li>• Are we too dependent on computers?</li> </ul> <p>Then give yourself 1 hour to write on one of the topics.</p>	<a href="http://learn.lexiconic.net/essays/pers.htm">http://learn.lexiconic.net/essays/pers.htm</a>
Art and Design	AO2 and AO3: Creativity	<ul style="list-style-type: none"> <li>• To investigate, experiment and take risks to create works that are original and meaningful. Creative use in imagination and innovation to solve art and design problems in new ways.</li> </ul>	<a href="http://www.studentartguide.com">www.studentartguide.com</a>
<b>Information Technology</b>	Theory: Hardware and software <ul style="list-style-type: none"> <li>• Discussion on user Interfaces</li> <li>• Types of software</li> <li>• Differentiate between compilers and Interpreters. Esafety and Heath and safety Describe how personal data can be gathered by unauthorized persons (including: by smishing,</li> </ul>	<ul style="list-style-type: none"> <li>• Activities: Students to create presentations on hardware and software and highlight key points on types of hardware and software. Students to work on advanced Database and spreadsheet concepts and Past paper Practice. Describe how</li> </ul>	<a href="http://Cambridge International AS &amp; A Level Information Technology (9626)">Cambridge International AS &amp; A Level Information Technology (9626)</a>



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	<p>vishing, phishing and pharming), and How this might be prevented</p> <ul style="list-style-type: none"> <li>• Discuss why Esafety is necessary</li> <li>• Describe malware issues (including: Trojan horse, worms, spyware, adware, rootkit, malicious bots, ransomware)</li> </ul>	<p>typical features found in sound editing software are used in practice Describe how file sizes depend on sampling rate and sampling resolution.</p>	
Computer Science	<p>Importance and functions of an OS</p>	<ol style="list-style-type: none"> <li>1. Study different OS types and their interfaces.</li> <li>2. Explore how OS manages resources like memory and hardware.</li> <li>3. Analyze security features.</li> </ol>	<p>HowStuffWorks: Operating Systems</p>
Statistics 1	<p>Topic : <u>Permutation and combination- Consolidation</u></p> <ul style="list-style-type: none"> <li>• Understand the terms permutation and combination, and solve simple problems involving selections.</li> <li>• solve problems about arrangements of objects in a line, including those involving repetition and restriction.</li> </ul> <p>Topic: <u>Discrete random variables</u></p>	<p>Research and present your work on application of permutation and combination in real life.</p> <p>Model a situation on discrete random variable from a real life situation.</p>	<p><a href="https://revisionmaths.com/advanced-level-maths-revision/statistics/permutations-and-combinations">https://revisionmaths.com/advanced-level-maths-revision/statistics/permutations-and-combinations</a></p> <p><a href="https://www.youtube.com/watch?v=zQAmwgZgObk">https://www.youtube.com/watch?v=zQAmwgZgObk</a></p>



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	<ul style="list-style-type: none"><li>• use formulae for probabilities for the binomial and geometric distributions, and recognise practical situations where these distributions are suitable models.</li><li>• use formulae for the expectation and variance of the binomial distribution and for the expectation of the geometric distribution.</li></ul>	Compare and contrast Binomial distribution and Geometric distribution.	<p><a href="https://www.khanacademy.org/rth/ap-statistics/random-variables-ap/geometric-random-variable/e/geometric-distribution/">https://www.khanacademy.org/rth/ap-statistics/random-variables-ap/geometric-random-variable/e/geometric-distribution/</a></p> <p><a href="https://www.statisticshowto.com/probability-and-statistics/binomial-theorem/binomial-distribution-formula/">https://www.statisticshowto.com/probability-and-statistics/binomial-theorem/binomial-distribution-formula/</a></p>
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