

**AL AIN JUNIORS SCHOOL- BRITISH SYSTEM  
LEARNING TRAILS**

**AY 2023-24: Term 1\_ Week 10 (30th to 3rd November 2023)**

**GRADE 12**

MATHEMATICS	IT
<p><b><u>Topics:</u></b> Differentiation,</p> <p><b><u>Learning Objectives:</u></b> To be able to differentiate the given implicit functions. To be able to differentiate the Parametric functions.</p> <p><b><u>Resources needed:</u></b> Topical questions, Sample questions.</p> <p><b><u>Homework/Assignments:</u></b> Topical past paper questions.</p>	<p><b><u>Topics:</u></b> Prototyping. Methods of software development.</p> <p><b><u>Learning Objectives:</u></b> Differentiate between throwaway prototyping, evolutionary prototyping, and incremental prototyping. Apply the appropriate type of prototyping based on the project requirements. Analyze the advantages of throwaway prototyping, such as quick feedback and exploration of design alternatives. Evaluate the advantages of incremental prototyping, such as iterative development and reduced development risks. Identify the incremental development phases in incremental prototyping, with each iteration adding new features or functionality. Analyze the overall effectiveness of throwaway prototyping in exploring design possibilities and eliciting user feedback.</p> <p><b><u>Resources needed:</u></b> <a href="http://searchmanufacturingerp.techtarget.com/definition/prototype">http://searchmanufacturingerp.techtarget.com/definition/prototype</a> Cambridge International AS and A level IT- course book. Past paper questions (9626 paper2)</p> <p><b><u>Homework/Assignments:</u></b> Solve Past paper questions.</p>

ADVANCED ARABIC	GENERAL ARABIC
<p><b>Topics:</b> كان وأخواتها</p> <p><b>Learning Objectives:</b> أن يحدد المتعلم عناصر الجملة عند دخول كان أو إحدى أخواتها أن يعرب المتعلم الجملة إعراباً صحيحاً أن يوظف المتعلم كان أو إحدى أخواتها في جمل مفيدة</p> <p><b>Resources needed:</b> الكتاب المدرسي - الدفتر - العرض التقديمي</p> <p><b>Homework/Assignments:</b> حل أسئلة الدرس ص 46-47 كتابة سيرة ذاتية مع مراعاة قواعد الكتابة السليمة</p>	<p><b>Topics:</b> قصيدة الشمس</p> <p><b>Learning Objectives:</b> أن يقرأ الطالب الدرس قراءة جهريّة صحيحة أن يتعرف الطالب على المفردات الجديدة أن يحلل الطالب الدرس تحليلاً لغوياً صحيحاً أن يستنتج الطالب أهمية الشمس للإنسان</p> <p><b>Resources needed:</b> كتاب الطالب - العرض التقديمي - فيديو عن الشمس</p> <p><b>Homework/Assignments:</b> <u>يكتب فقرة عن فوائد الشمس</u></p>
PHYSICS	BIOLOGY
<p><b>Topics:</b> Electric field</p> <p><b>Learning Objectives:</b> Should be able to</p> <ol style="list-style-type: none"> <li>1. State and apply Coulomb's law</li> <li>2. Define and use electric field strength</li> <li>3. Define and use electric potential</li> <li>4. Compare gravitational force and electrical force</li> </ol> <p><b>Resources needed:</b> Copy book, Calculator and stationery</p> <p><b>Homework/Assignments:</b> Topical Past papers - SHM</p>	<p><b>Topics:</b> Control and Coordination</p> <p><b>Learning Objectives:</b></p> <ol style="list-style-type: none"> <li>1) Explain the roles of neuromuscular junctions, the T-tubule system and sarcoplasmic reticulum in stimulating contraction in striated muscle</li> <li>2) describe the ultrastructure of striated muscle with reference to sarcomere structure using electron micrographs and diagrams</li> <li>3) explain the sliding filament model of muscular contraction including the roles of troponin, tropomyosin, calcium ions and ATP</li> <li>4) Describe the rapid response of the Venus fly trap to stimulation of hairs on the lobes of modified leaves and explain how the closure of the trap is achieved</li> </ol> <p><b>Resources needed:</b> Text Book, Note Book, Stationaries</p> <p><b>Homework/Assignments:</b> <u>Solve the activity sheet and topical questions</u></p>

ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><b>Topics:</b> رسول الله والحياة الاجتماعية</p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"> <li>• أن يستدل بأحداث من السيرة على حرص الرسول " ص " على بناء مجتمع متماسك</li> <li>• أن يبين الاستراتيجيات التي استخدمها الرسول " ص " لتقوية العلاقات الاجتماعية</li> <li>• أن يربط بين السلم المجتمعي وتطور الدولة المسلمة</li> <li>• أن يحرص على السلم المجتمعي بالتفاعل مع مكونات المجتمع</li> <li>•</li> </ul> <p><b>Resources needed:</b></p> <p>الكتاب المدرسي بوربوينت أنشطة تعليمية منصة ألف</p> <p><b>Homework/Assignments:</b></p> <ul style="list-style-type: none"> <li>• حل أنشطة الطالب</li> <li>• حل أسئلة منصة ألف</li> </ul>	<p><b>Topics:</b> Social life of the Prophet SAW</p> <p><b>Learning Objectives:</b> Explain the hadith of the Prophet SAW Explain the benefits of sunnah in daily life Describe social Islamic life</p> <p><b>Resources needed:</b> Textbook PowerPoint Educational Activities</p> <p><b>Homework/Assignments:</b> Student Activities, Solving Questions from the Alf Platform"</p>
CHEMISTRY	ACCOUNTING
<p><b>Topics:</b> Topic 26 Equilibria</p> <p><b>Learning Objectives:</b> Ksp solubility product concept Common ion effect</p> <p><b>Resources needed:</b> Smart board Laptop Past papers</p> <p><b>Homework/Assignments:</b></p> <p>Text book questions</p>	<p><b>Topics:</b> Manufacturing account</p> <p><b>Learning Objectives:</b> How to prepare a manufacturing account, to differentiate between direct and indirect expenses and to include factory profit • how to prepare, for a manufacturing business, a statement of profit or loss and a statement of financial position • how to account for manufacturing profit and the elimination of unrealised profit from unsold inventory • the reasons why a business may account for manufacturing profit</p> <p><b>Resources needed:</b> Formats, PPT, Task sheets and Topical questions</p> <p><b>Homework/Assignments:</b> Topical questions</p>

BUSINESS	ECONOMICS
<p><b>Topics:</b> 6.2.2 Corporate planning and implementation</p> <p><b>Learning Objectives:</b> To analyse the meaning and importance of transformational leadership To analyse the management and control of strategic change</p> <p><b>Resources needed:</b> ISBN:9781108921220 <a href="http://www.tutor2u.net/blog/index.php/business-studies/comments/researching-the-royal-mail-a-great-case-study-in-change-management">www.tutor2u.net/blog/index.php/business-studies/comments/researching-the-royal-mail-a-great-case-study-in-change-management</a></p> <p><b>Homework/Assignments:</b></p> <ul style="list-style-type: none"> <li>• 9609/33 Jun 2020 Q7 (contingency planning)</li> <li>• 9609/33 Nov 2017 Q7 (crisis management)</li> </ul>	<p><b>Topics:</b> Different Market structures: Monopoly and monopolistic competition</p> <p><b>Learning Objectives:</b> To understand the meaning of monopoly and monopolistic competition To analyze the efficiency points in both monopoly and monopolistic competition To critically evaluate monopoly and monopolistic competition</p> <p><b>Resources needed:</b> Economics-Second Edition by Peter Smith</p> <p><b>Homework/Assignments:</b> Go through the CIA paper 2022 and address the questions that are asked from the unit-Market structures</p>