

AL AIN JUNIORS SCHOOL- BRITISH SYSTEM

LEARNING TRAILS

AY 2023-24: Term 2\_Week 9 (26<sup>th</sup> to 1<sup>st</sup> March 2024)

GRADE 11

MATHEMATICS	IT
<p><b>Topics:</b> THE NORMAL DISTRIBUTION <math>X \sim N(\mu, \sigma^2)</math></p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"> <li>recall conditions under which the normal distribution can be used as an approximation to the binomial distribution and use this approximation with a continuity correction in solving problems with n sufficiently large to ensure that both <math>np &gt; 5</math> and <math>nq &gt; 5</math>.</li> </ul> <p><b>Resources needed:</b> Textbook <a href="#">CAIE Mathematics: Topic-Wise Study Guides, Questions, and Resources   Search Results (cambridgepapers.net)</a></p> <p><b>Homework/Assignments:</b> <a href="#">CAIE Mathematics: Topic-Wise Study Guides, Questions, and Resources   Search Results (cambridgepapers.net)</a></p>	<p><b>Topics:</b> Modelling: What-if analysis The characteristics of modelling software. The need for computer models. The effectiveness of spreadsheet models. The use of a model to create and run simulations.</p> <p><b>Learning Objectives:</b> Use what-if analysis Create and apply a test plan to test a spreadsheet model Including for: financial forecasting, population growth, climate change, weather systems, queue management, traffic flow, construction. Analyze the use of modelling in natural disaster planning, pilot training, learning to drive a car, nuclear science research.</p> <p><b>Resources needed:</b> Textbook, activity sheets, computer system</p> <p><b>Homework/Assignments:</b> Solve past paper questions.</p>
ADVANCED ARABIC	GENERAL ARABIC
<p><b>Topics:</b> البدل</p> <p><b>Learning Objectives:</b> أن يتعرف المتعلم البدل أن يعرب البدل إعرابا صحيحا أن يوظف البدل في مواقف حياتية</p> <p><b>Resources needed:</b> الكتاب المدرسي - منصة ألف - اختبار الكتروني</p> <p><b>Homework/Assignments:</b> حل أسئلة منصة ألف</p>	<p><b>Topics:</b> المكتبة الإلكترونية</p> <p><b>Learning Objectives:</b> أن يتعرف على المكتبة الإلكترونية أن يذكر كيف بدأت المكتبة الإلكترونية أن يبحث عن طريقة التعامل والعمل في المكتبة الإلكترونية</p> <p><b>Resources needed:</b> العرض - الكتاب - الإنترنت</p> <p><b>Homework/Assignments:</b> اكتب فقرة عن المكتبة الإلكترونية</p>

PHYSICS	BIOLOGY
<p><b>Topics:</b> Electricity- Revision</p> <p><b>Learning Objectives:</b> Full chapter Success criteria</p> <p><b>Resources needed:</b> Text Book, Task sheet, Copy Book</p> <p><b>Homework/Assignments:</b> [2016-2020] both MCQ and SQ</p>	<p><b>Topics:</b> Immunity</p> <p><b>Learning Objectives:</b> describe the mode of action of phagocytes (macrophages and neutrophils) explain what is meant by an antigen and state the difference between self-antigens and non-self-antigens</p> <p><b>Resources needed:</b> <a href="http://highered.mheducation.com/sites/0072507470/student_view0/chapter3/animation_phagocytosis.html">http://highered.mheducation.com/sites/0072507470/student_view0/chapter3/animation_phagocytosis.html</a></p> <p><b>Homework/Assignments:</b> Research on autoimmune disorders such as myasthenia gravis, psoriasis and multiple sclerosis.</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><b>Topics:</b> <u>المتوادر والآحاد</u></p> <p><b>Learning Objectives:</b> أن يفرق بين الحديث المتواتر والحديث الآحاد يستنبط شروط الحديث المتواتر - يميز بين أنواع الحديث الآحاد -</p> <p><b>Resources needed:</b> 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> Hadith Mutawatir and ahaad</p> <p><b>Learning Objectives:</b> Explain the meaning of Hadith Discuss different types of Hadith.</p> <p><b>Resources needed:</b> Board, projector, marker, textbook</p> <p><b>Homework/Assignments:</b> Solve students' activity in textbook</p>
CHEMISTRY	ACCOUNTING
<p><b>Topics:</b> Casrboxylic Acids</p> <p><b>Learning Objectives:</b> describe: (a) the redox reaction with reactive metals to produce a salt and H<sub>2</sub>(g)</p>	<p><b>Topics:</b> CVP Chart a and Revision</p> <p><b>Learning Objectives:</b> Analyse the usefulness of cost–volume–profit data as a support for management decision-making</p> <ul style="list-style-type: none"> <li>• how to apply costing concepts to make business</li> </ul>

- (b) the neutralization reaction with alkalis to produce a salt and H<sub>2</sub>O(l)  
(c) the acid–base reaction with carbonates to produce a salt and H<sub>2</sub>O(l) and CO<sub>2</sub>(g)  
(d) esterification with alcohols with concentrated H<sub>2</sub>SO<sub>4</sub> as catalyst  
(e) reduction by LiAlH<sub>4</sub> to form a primary alcohol

Resources needed:

[www.docbrown.info/page06/OrgMechs2.htm](http://www.docbrown.info/page06/OrgMechs2.htm)

[www.youtube.com/watch?v=Bg3c5c9b1BQ&t=117s](https://www.youtube.com/watch?v=Bg3c5c9b1BQ&t=117s)

[mechanisms compared in detail]

[www.rsc.org/education/teachers/resources/aflchem/resources/55/index.htm](http://www.rsc.org/education/teachers/resources/aflchem/resources/55/index.htm)

**Homework/Assignments:**

Textual and Topical Questions

decisions and recommendations using supporting data

**Resources needed:**

Topical questions

Formats

**Homework/Assignments:**

Topical questions

## BUSINESS

**Topics:**

Unit 1 – Revision - Understanding Business activity

**Learning Objectives:**

To revise and practice students for upcoming CIE exam

**Resources needed:**

ISBN: 978-1108921220

<https://schoolsupporthub.cambridgeinternational.org/past-exam-papers/?keywords=9609>

**Homework/Assignments:**

Solve the data response questions