



LEARNING TRAILS AY 2024-25

GRADE: 11

TERM 1_WEEK 9 (21st to 25th October 2024)

IT	MATHEMATICS
<p>Topics: Database and file concepts. Report generation.</p> <p>Learning Objectives: Apply appropriate validation rules for database fields to ensure data accuracy and integrity.</p> <p>Design simple and complex queries to retrieve specific data from a relational database.</p> <p>Generate reports from the queries created.</p> <p>Resources needed: Computers with database management software (e.g., Microsoft Access). Sample data sets for practice. Smart board.</p> <p>Homework/Assignments: design at least two queries (one simple and one complex) for a given database scenario.</p> <p>Solve past paper questions.</p>	<p>Topics: Representation Of data</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Draw and interpret stem-and-leaf diagrams, box-and-whisker plots, histograms and cumulative frequency graphs • Understand and use different measures of central tendency (mean, median, mode) and Dispersion (range, interquartile range, standard deviation) • use a cumulative frequency graph to estimate medians, quartiles, percentiles, the proportion of a distribution above (or below) a given value, or between two values • calculate and use the mean and standard deviation of a set of data (including grouped data) either from the data itself or from given totals $\sum x$ and $\sum x^2$, or coded totals $\sum (x - a)$ and $\sum (x - a)^2$, and use such totals in solving problems which may involve up to two data sets. <p>Resources needed: MS PowerPoint, Activinspire software, Textbook, Smartboard, White Board and markers. Question bank</p> <p>Homework/Assignments: Search Results (cambridgepapers.net) Search Results (cambridgepapers.net) Search Results (cambridgepapers.net)</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: مرثية مالك بن الربيع</p> <p>Learning Objectives: <u>أن يحدد الفكرة الرئيسية والفكر الفرعية في النص</u> <u>أن يستنتج الدلالات التعبيرية والإحائية في النص</u> <u>أن يفسر معاني المفردات في النص ويوظفها في مواقف حياتية</u></p> <p>Resources needed: الكتاب المدرسي - العرض التقديمي - أنشطة تعليمية</p> <p>Homework/Assignments: حل أسئلة الكتاب المدرسي - حفظ أبيات القصيدة</p>	<p>Topics: <u>سياق الهجن</u></p> <p>Learning Objectives: <u>أن يتعرف الطالب على معنى الهجن</u> <u>أن يذكر أنواع الهجن</u> <u>أن يستنتج الكلمات الجديدة</u></p> <p>Resources needed: الكتاب - العرض - الانترنت</p> <p>Homework/Assignments: اكتب فقرة عن أنواع الهجن</p>
PHYSICS	BIOLOGY
<p>Topics: Forces density and pressure</p> <p>Learning Objectives: understand that the weight of an object may be taken as acting at a single point known as its centre of gravity define and apply the moment of a force understand that a couple is a pair of forces that acts to produce rotation only define and apply the torque of a couple define and use density define and use pressure derive, from the definitions of pressure and density, the equation for hydrostatic pressure $\Delta p = \rho g \Delta h$ use the equation $\Delta p = \rho g \Delta h$</p> <p>Resources needed: Digital simulations (optional) Whiteboard & markers Metre rule or lever Diagrams for moments and couples (visual aids) A worksheet for practice problems on moments and torque Torque simulation: https://phet.colorado.edu/en/simulation/legacy/torque</p> <p>Homework/Assignments: Activity sheet</p>	<p>Topics: 2 &3 Water & Enzymes</p> <p>Learning Objectives: Water - explain how hydrogen bonding occurs between water molecules and relate the properties of water to its roles in living organisms, limited to solvent action, high specific heat capacity and latent heat of vaporisation. Explain the mode of action of enzymes in terms of an active site, enzyme-substrate complex, lowering of activation energy and enzyme specificity, including the lock-and-key hypothesis and the induced-fit hypothesis.</p> <p>Resources needed: https://www.youtube.com/watch?v=EeovHW0nBJ8</p> <p>Homework/Assignments: Solve Past Paper questions 2018, Paper22</p>



CHEMISTRY	ACCOUNTING
<p>Topics: Enthalpy Change</p> <p>Learning Objectives:</p> <p>[1] understand that energy transfers occur during chemical reactions because of the breaking and making of chemical bonds</p> <p>[2] use bond energies (ΔH positive, i.e., bond breaking) to calculate enthalpy change of reaction, ΔH_r</p> <p>[3] understand that some bond energies are exact, and some bond energies are averages</p> <p>Resources needed:</p> <ul style="list-style-type: none">• Khan Academy Chemistry• Textbook <p>Homework/Assignments:</p> <p>Topical and textual questions</p>	<p>Topics:</p> <p>Accounts of Limited Company</p> <p>Learning Objectives:</p> <p>To formulate Income Statement of Limited Companies in the prescribed format in accordance with UK Companies Act .</p> <p>Resources needed:</p> <p>Text book PPT Task Sheets</p> <p>Homework/Assignments:</p> <p>Topical questions</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p>Topics:</p> <p>غزوة الأحزاب</p> <p>Learning Objectives:</p> <p>أن يتلو الطلاب الآيات تلاوة مجودة</p> <p>أن يستنتج الطلاب معاني مفردات الآيات الكريمة</p> <p>Resources needed:</p> <p>الكتاب المدرسي البوربوينت أنشطة صفية</p> <p>Homework/Assignments:</p> <p>حل أنشطة الطالب بالكتاب المدرسي</p> <p>مراجعة البوربوينت للدرس</p>	<p>Topics:</p> <p>Surah al Ahzab (9-20) The Battle of the Confederates</p> <p>Learning Objectives:</p> <p>Analyze the Quranic verses (9-20) of Surah al-Ahzab to comprehend the message of perseverance, faith, and divine assistance during the battle.</p> <p>Recognize the role of the Prophet Muhammad (PBUH) as a leader and the importance of unity and trust in Allah during challenging times.</p> <p>Resources needed:</p> <p>Quran with Tafseer Islamic history textbook Video/documentary</p>



	<p>Whiteboard or digital projector</p> <p><u>Homework/Assignments:</u></p> <p>Briefly introduce the verses of Surah al-Ahzab, providing context on when and why these verses were revealed.</p>
ECONOMICS	BUSINESS
<p><u>Topics:</u></p> <p>Shifts in demand and supply</p> <p><u>Learning Objectives:</u></p> <p>To analyze the effects of shifts in demand and supply curves on equilibrium price and quantity</p> <p>To analyze the relationships between different markets</p> <p><u>Resources needed:</u></p> <p>Smart board</p> <p>Textbook</p> <p>Topical questions</p> <p>Case studies</p> <p><u>Homework/Assignments:</u></p> <p>Solve past papers questions</p>	<p><u>Topics:</u></p> <p>Marketing strategy</p> <p><u>Learning Objectives:</u></p> <p>To evaluate the relative advantages of mass marketing and niche marketing</p> <p>To assess the significance of market segmentation and how this might be achieved</p> <p><u>Resources needed:</u></p> <p>E book</p> <p>Topical case studies</p> <p><u>Homework/Assignments:</u></p> <p>Practice end of chapter questions</p>