



LEARNING TRAILS AY 2024-25

GRADE: 11

TERM 1_WEEK 10 (28th October to 1st November 2024)

IT	MATHEMATICS
<p>Topics: Spreadsheets: Creating/editing spreadsheet structures. Controlling data input using validation techniques. Mainframe & Super computers.</p> <p>Learning Objectives: Create page/screen structures to meet the requirements of an audience and/or task specification/ house style.</p> <p>Use validation techniques to control data output.</p> <p>Protecting cells and their content.</p> <p>Create and use formulae and functions.</p> <p>Differentiate between mainframe & Super computers.</p> <p>Describe the characteristics of Mainframe & Super Computers.</p> <p>Resources needed: Computer systems, Spreadsheet software, smart board, task sheet.</p> <p>Homework/Assignments: Work out past paper questions.</p>	<p>Topics: Trigonometry</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> use the identities $\frac{\sin\theta}{\cos\theta} = \tan\theta$ and $\sin^2 \theta + \cos^2 \theta = 1$ e.g. in proving identities, simplifying expressions and solving equations. find all the solutions of simple trigonometrical equations lying in a specified interval. <p>Resources needed: Smartboard, Whiteboard and markers, Textbook, Topical Past paper questions from cambridgepapers.net</p> <p>Homework/Assignments: Search Results Search Results</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: <u>اسم التفضيل</u></p> <p>Learning Objectives: <u>يتعرف المتعلم اسم التفضيل</u> <u>يصوغ اسم التفضيل صياغة صحيحة</u> <u>يوظف اسم التفضيل في مواقف حياتية</u></p> <p>Resources needed: <u>الكتاب المدرسي - العرض التقديمي - أنشطة تعليمية</u></p> <p>Homework/Assignments: <u>حل أسئلة الكتاب المدرسي - كتابة موضوع تعبير</u></p>	<p>Topics: <u>حماية البيئة + المثنى</u></p> <p>Learning Objectives: <u>التعرف على ملوثات البيئة</u> <u>أن يذكر بعض الطرق لحماية البيئة</u> <u>أن يحول الكلمات المفردة إلى مثنى</u></p> <p>Resources needed: <u>الكتاب - الانترنت - أوراق العمل - العرض التقديمي</u></p> <p>Homework/Assignments: <u>كيف نحمي بيئنا؟</u></p>
PHYSICS	BIOLOGY
<p>Topic- Forces density and pressure</p> <p>Learning Objectives: Solving numerical for density, pressure, upthrust, moment, torque and vector triangle Revision of the whole topic forces density and pressure for the upcoming cycle test</p> <p>Resources needed: Course book, copy book, activity sheet, pictures, and images ppt</p> <p>Homework/Assignments: Past paper Question [2016-2022] Completion of the activity sheet uploaded</p>	<p>Topics: 3 Enzymes & Cell Membrane</p> <p>Learning Objectives: explain the effects of reversible inhibitors, both competitive and non-competitive, on enzyme activity describe the fluid mosaic model of membrane structure with reference to the hydrophobic and hydrophilic interactions that account for the formation of the phospholipid bilayer and the arrangement of proteins</p> <p>Resources needed: Text Book Past papers</p> <p>Homework/Assignments: Research and outline the use of a colorimeter for measuring the progress of enzyme-catalysed reactions that involve colour changes</p>



CHEMISTRY	ACCOUNTING
<p><u>Topics:</u> Chemical Energetics</p> <p><u>Learning Objectives:</u></p> <ul style="list-style-type: none">• Understand and state Hess’s Law: The enthalpy change for a reaction is independent of the pathway taken, provided the initial and final conditions are the same.• Apply Hess’s Law to calculate enthalpy changes using enthalpy cycles or enthalpy diagrams.• Use standard enthalpy changes of formation and combustion to solve related Hess’s Law problems.• Analyze energy changes in chemical reactions and apply them to both theoretical and practical scenarios. <p><u>Resources needed:</u></p> <p>Lab Equipment (for practical applications, if applicable):</p> <ul style="list-style-type: none">• Calorimeter• Thermometer• Chemicals for simple enthalpy experiments (such as the combustion of alcohol or neutralization reactions). <p><u>Homework/Assignments:</u></p> <ul style="list-style-type: none">• Problem Set (Theory)• Use Hess’s Law to calculate the enthalpy change for the following reactions:	<p><u>Topics:</u> Accounts of limited company</p> <p><u>Learning Objectives:</u> To formulate statement of changes in equity To calculate the closing balance of capital and reserves</p> <p><u>Resources needed:</u> Text book Formats Task sheets PPT</p> <p><u>Homework/Assignments:</u> Topical questions</p>



<ul style="list-style-type: none">○ Reaction 1: $\text{H}_2(\text{g}) + \frac{1}{2} \text{O}_2(\text{g}) \rightarrow \text{H}_2\text{O}(\text{l})$ (given ΔH_f values).○ Reaction 2: $\text{CH}_4(\text{g}) + 2 \text{O}_2(\text{g}) \rightarrow \text{CO}_2(\text{g}) + 2 \text{H}_2\text{O}(\text{l})$ (using $\Delta H_{\text{combustion}}$ values).● Worksheet (Diagram-Based)● Provide enthalpy cycle diagrams for several reactions. Have students fill in missing data and calculate the overall enthalpy change.● Extension Task (Research/Essay)● Investigate and write a short essay on the applications of Hess's Law in industrial processes (e.g., the Haber process for ammonia synthesis or energy production in combustion engines).	
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p>Topics: غزوة الأحزاب</p> <p>Learning Objectives: أن يبين الطلاب الدلالات الواردة في الآيات الكريمة أن يستنتج الطلاب بعض أحكام الآيات الكريمة</p> <p>Resources needed: الكتاب المدرسي البوربوينت أنشطة صفية</p> <p>Homework/Assignments: حل أنشطة الطالب بالكتاب المدرسي مراجعة البوربوينت للدرس</p>	<p>Topics: Battle of the Confederates (Ahzab)</p> <p>Learning Objectives: Understand the historical context of the Battle of the Confederates (Ahzab), including the key events and the alliances formed against the Muslims. 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>Resources needed: Islamic history textbook covering the events of the Battle of the Confederates Video/documentary on the historical significance of the battle Whiteboard or digital projector for visual aids and diagrams illustrating the battle strategies</p> <p>Homework/Assignments: Discuss how the Muslims dealt with fear and uncertainty and how that can be applied today.</p>



ECONOMICS	BUSINESS
<p><u>Topics:</u> The government in the micro economy National income</p> <p><u>Learning Objectives:</u> To understand the policies to redistribute income and wealth To understand the national income statistics To evaluate the circular flow of income</p> <p><u>Resources needed:</u> Smart board Case study questions Topical based questions</p> <p><u>Homework/Assignments:</u> Topical questions</p>	<p><u>Topics:</u> The marketing mix – product and price</p> <p><u>Learning Objectives:</u> To evaluate the importance of product decisions to a marketing mix To use and apply product portfolio analysis To analyze the stages of the product life cycle and evaluate its usefulness for marketing decisions To apply the Boston Matrix analysis and evaluate the usefulness of it for marketing decisions</p> <p><u>Resources needed:</u> E- Book- Uploaded in teams Topical case studies with mark scheme</p> <p><u>Homework/Assignments:</u> Practice Topical past paper questions</p>