



LEARNING TRAILS AY 2026-27

YEAR: 13

TERM 1_WEEK 8(Oct 26th -30th , 2026)

IT	MATHEMATICS
<p><u>Topics:</u> System life cycle: Evaluation, Methods of software development.</p> <p><u>Learning Objectives:</u> Describe the stages and processes of each method, including:</p> <ul style="list-style-type: none">• agile• iterative• incremental• rapid application development (RAD)• Waterfall <p>Discuss the advantages and disadvantages of each method.</p> <p>Design vector graphics in Adobe illustrator.</p> <p><u>Resources needed:</u> Textbook, Computer System, Task Sheets.</p> <p><u>Homework/Assignments:</u> Solve past paper questions.</p>	<p><u>Topics:</u> <u>Trigonometry</u> <u>Learning Objectives:</u> Students shall be able to:</p> <ul style="list-style-type: none">• understand the relationship of the secant, cosecant and cotangent functions to cosine, sine and tangent, and use properties and graphs of all six trigonometric functions for angles of any magnitude• use trigonometrical identities for the simplification and exact evaluation of expressions, and in the course of solving equations, and select an identity or identities appropriate to the context• showing familiarity in particular with the use of – <p><u>Resources needed:</u> Textbook, smartboard, MS PPT, Topical past paper questions Trigonometry Proving Identities P3 A Level Maths 9709</p> <p><u>Homework/Assignments:</u> Trigonometry Double Angle P3 A Level Maths 9709 Trigonometry Compound Angle Pure Mathematics 3 9709 Trigonometry Harmonic Form Pure Mathematics 3 9709</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: قصيدة البركة</p> <p>Learning Objectives: <u>أن يعرف المتعلم عن الشاعر البحتري</u> أن يستنتج المتعلم الفكرة العامة للأبيات أن يفسر المتعلم المفردات الجديدة ثم يوظفها في جمل مفيدة أن يستخرج المتعلم الصور الخيالية والبيانية من الأبيات أن يحلل المتعلم الأبيات تحليلًا أدبيًا أن يقارن المتعلم بين وصف الطبيعة الصامتة والطبيعة الحية</p> <p>Resources needed: <u>الكتاب المدرسي البوربوينت - السبورة دفتر الطالب صور عن البركة</u></p> <p>Homework/Assignments: <u>كتابة نص وصفي عن بركة البحتري</u></p>	<p>Topics: درس طائر النعام</p> <p>Learning Objectives: أن يفسر المتعلم معاني المفردات الجديدة أن يوظف المفردات الجديدة في جمل مفيدة أن يستنتج المتعلم الفكرة الرئيسة والفكر الفرعية من الدرس أن يتحدث المتعلم عن طائر النعام أن يكتب فقرة عن مواصفات طائر النعام</p> <p>Resources needed: كتاب الطالب - السبورة الذكية - العرض التقديمي</p> <p>Homework/Assignments: كتابة فقرة عن أشهر الطيور في دولة الإمارات العربية المتحدة</p>
PHYSICS	BIOLOGY
<p>Topics: Simple harmonic motion</p> <p>Learning Objectives: Should be able to Define SHM and provide examples Apply SHM equations to solve problems Sketch and describe SHM graphs Explain damping, forced oscillations and resonance</p> <p>Resources needed: Copy book, calculator, sample questions</p> <p>Homework/Assignments: Topical questions – Ideal gas</p>	<p>Topics: Muscle contraction, Coordination and control in plants, Passage of information from parents to offspring.</p> <p>Learning Objectives: 1. Explain the sliding filament model of muscular contraction including the roles of troponin, tropomyosin, calcium ions and ATP. 2. 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 3. Explain the role of auxin in elongation growth by stimulating proton pumping to acidify cell walls. 4. Describe the role of gibberellin in the germination of barley. 5. Explain the meanings of the terms- haploid (n), diploid (2n), homologous pairs of chromosomes. 6. Explain the need for a reduction division during meiosis in the production of gametes.</p> <p>Resources needed: Textbook, Powerpoint presentation, Past papers,</p>



	Homework/Assignments: Solve topical questions 9700/42
CHEMISTRY	ACCOUNTING
Topics: Topic 27 Group 2 Learning Objectives: 1 describe and explain qualitatively the trend in the thermal stability of the nitrates and carbonates including the effect of ionic radius on the polarization of the large anion 2 describe and explain qualitatively the variation in solubility and of enthalpy change of solution, $\Delta H^\ominus_{\text{sol}}$, of the hydroxides and sulfates in terms of relative magnitudes of the enthalpy change of hydration and the lattice energy Resources needed: Cambridge A Level Chemistry 9701 textbook, PowerPoint presentations, periodic table, solubility data tables, worksheets and past-paper questions. Homework/Assignments: Complete worksheet and CIE past-paper questions explaining the thermal stability trends of Group 2 nitrates and carbonates and the solubility trends of hydroxides and sulfates using lattice energy and hydration enthalpy.	Topics: Accounts of manufacturing business Learning Objectives: 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 Resources needed: Text book PPT Task sheet Homework/Assignments: Topical questions
ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: حديث الإفك Learning Objectives: <ul style="list-style-type: none"> أن يقرأ الآيات الكريمة قراءة صحيحة ملتزمًا بأحكام التجويد. أن يوضح معاني المفردات الواردة في الآيات الكريمة. أن يستخلص الأحكام الشرعية المستفادة من الآيات الكريمة. 	Topics: Surah An-Nur — The Incident of Slander (Al-Ifk) Learning Objectives: <ul style="list-style-type: none"> Recite the verses correctly, applying the rules of Tajweed. Explain the meanings of key vocabulary in the verses. Identify the Islamic rulings derived from the verses.



- أن يبين الدلالات والمعاني التي تضمنتها الآيات الكريمة
- أن يستنبط العبر والدروس المستفادة من حادثة الإفك
- أن يطبق قيم حسن الظن والتثبت من الأخبار وحفظ اللسان في حياته اليومية

Resources needed:

الكتاب المدرسي، المصحف الشريف، السبورة الذكية، وعرض تقديمي يوضح أحداث حادثة الإفك والدروس المستفادة منها

Homework/Assignments:

- حل أسئلة الدرس في الكتاب المدرسي
- تلخيص أهم الدروس المستفادة من حادثة الإفك
- كتابة أمثلة توضح كيفية التعامل الصحيح مع الأخبار والشائعات

- Explain the meanings and messages conveyed in the verses.
- Draw lessons from the Incident of Slander (Al-Ifk).
- Practise thinking well of others, verifying information and guarding one's speech in daily life.

Resources needed:

- Textbook and the Holy Qur'an.
- Interactive whiteboard.
- A presentation explaining the Incident of Slander and its lessons.

Homework/Assignments:

Complete the lesson questions in the textbook.

- Summarise the main lessons learned from the Incident of Slander.
- Write examples showing how to respond responsibly to news and rumours.

BUSINESS

Topics:

Organisational structure

Learning Objectives:

- evaluate the conflict between trust and control in delegation
- Evaluate the difference between authority, accountability and responsibility
- examine the appropriateness of centralized and decentralized structures

Resources needed:

E book

Case studies

Homework/Assignments:

Practice end of chapter questions

ECONOMICS

Topics:

Market structure ,Growth and survival of firms

Learning Objectives:

To discuss the natural monopoly with the help of a diagram
To explain reasons for the different size of firms
To explain the difference between internal and external growth of firms
To analyse the conditions and consequences for an effective cartel

Resources needed:

PPT

Text book

Past paper questions

Homework/Assignments:

Past paper questions , topical questions