



LEARNING TRAILS AY 2024-25

GRADE: 11

TERM 2_WEEK 2 (13th January to 17th January 2025)

IT	MATHEMATICS
<p><u>Topics:</u> ESecurity: Malware Entity relationship daigram.</p> <p><u>Learning Objectives:</u> Describe different types of malwares.</p> <p>Analyze the consequences of malware for organizations and individuals.</p> <p>Discuss malware prevention software and physical malware prevention methods.</p> <p>Design entity relationship diagram for a database.</p> <p>Differentiate between Conceptual entity relationship diagram and Physical entity relationship diagram.</p> <p><u>Resources needed:</u> Computer system, activity sheet, ppt, video</p> <p><u>Homework/Assignments:</u> Solve past paper questions.</p>	<p><u>Topics:</u> Differentiation</p> <p><u>Learning Objectives:</u></p> <ul style="list-style-type: none"> • apply differentiation to gradients, tangents and Normals, increasing and decreasing functions and rates of change including connected rates of change, e.g. given the rate of increase of the radius of a circle, find the rate of increase of the area for a specific value of one of the variables. • Locate stationary points and determine their nature and use information about stationary points in sketching graphs. Including use of the second derivative for identifying maxima and minima <p><u>Resources needed:</u> Smartboards, whiteboards, PPTs, Topic wise past paper, Textbook, application-based videos</p> <p><u>Homework/Assignments:</u> Search Results Search Results</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: <u>تابع قصيدة أراك عصي الدمع</u></p> <p>Learning Objectives: <u>أن يحلل النص وفق سياقه التاريخي والاجتماعي مستخلصاً السمات الفنية</u> <u>أن يوضح علاقة الفكر بعضها ببعض مفسراً مفرداتها من خلال السياق والقرائن باستخدام مصادر ورقية ورقمية</u> <u>أن يحفظ عشرة أبيات من القصيدة</u></p> <p>Resources needed: <u>الكتاب المدرسي - العرض التقديمي - أنشطة تعليمية</u></p> <p>Homework/Assignments: حل أسئلة الكتاب المدرسي - حفظ أبيات القصيدة</p>	<p>Topics: <u>تابع التجارة الالكترونية + جمع المؤنث السالم</u></p> <p>Learning Objectives: <u>أن يتحدث عن التجارة الألكترونية مبيناً فوائدها وعيوبها</u> <u>أن يتدرب على كيفية إعراب جمع المؤنث السالم</u> <u>أن يحول بعض الكلمات المفردة إلى جمع مؤنث سالم</u></p> <p>Resources needed: <u>الكتاب - العرض -</u></p> <p>Homework/Assignments: <u>حول الكلمات التالية إلى جمع مؤنث سالم</u> <u>درجة - الواجب - الصلاة - الطائفة - الكاتبة)</u></p>
PHYSICS	BIOLOGY
<p>Topics: waves</p> <p>Phase difference, intensity, polarisation</p> <p>Learning Objectives:</p> <p>recall and use $intensity = power/area$ and $intensity \propto (amplitude)^2$ for a progressive wave</p> <p>state that all electromagnetic waves are transverse waves that travel with the same speed c in freespace</p>	<p>Topics: 6 Nucleic acids and protein synthesis</p> <p>Learning Objectives:</p> <p>6.1 Structure of nucleic acids and replication of DNA describe the semi-conservative replication of DNA during the S phase of the cell cycle</p>



<p>recall the approximate range of wavelengths in free space of the principal regions of the electromagnetic spectrum from radio waves to γ-rays recall that wavelengths in the range 400–700nm in free space are visible to the human eye</p> <p>understand that polarisation is a phenomenon associated with transverse waves recall and use Malus's law ($I = I_0 \cos^2\theta$) to calculate the intensity of a plane-polarised electromagnetic wave after transmission through a polarising filter or a series of polarising filters</p> <p><u>Resources needed:</u> Past papers, Activity sheet, simulation Copy book <u>Homework/Assignments:</u> Activity sheet, past paper</p>	<p>state that a polypeptide is coded for by a gene and that a gene is a sequence of nucleotides that forms part of a DNA molecule 2 describe the principle of the universal genetic code in which different triplets of DNA bases either code for specific amino acids or correspond to start and stop codons</p> <p><u>Resources needed:</u> Videos on replication and protein synthesis <u>Homework/Assignments:</u> Solve the past papers</p>
CHEMISTRY	ACCOUNTING
<p><u>Topics:</u> Periodicity in Chemical properties</p> <p><u>Learning Objectives:</u></p> <ul style="list-style-type: none"> • Periodicity of physical properties of the elements in Period 3 • Periodicity of chemical properties of the elements in Period 3 • Chemical periodicity of other elements <p><u>Resources needed:</u> Textbook, Save My Exams, Khan Academy <u>Homework/Assignments:</u> Textual Questions</p>	<p><u>Topics:</u> Absorption Costing <u>Learning Objectives:</u> To calculate overhead under/over absorbed To calculate the selling price, by applying mark up <u>Resources needed:</u> Text book, Task sheets <u>Homework/Assignments:</u> Topical questions</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><u>Topics:</u> سورة الأحزاب (28–35): نصائح وتوجيهات أخلاقية</p> <p><u>Learning Objectives:</u></p>	<p><u>Topics:</u> Surah al Ahzab (28-35) Ethical Advice and Instructions <u>Learning Objectives:</u> Context & Background: Identify the historical context of Surah al-Ahzab (28–35), particularly the address to</p>

- **السياق والخلفية:**
- تعرّف على السياق التاريخي لسورة الأحزاب (28–35)، وخاصة ما يتعلق بخطاب النبي صلى الله عليه وسلم لزوجاته، وفهم التوجيهات الأخلاقية العامة التي تقدّمها الآيات للمسلمين.
- **التعاليم الأخلاقية:**
- دراسة التعليمات الأخلاقية الأساسية في هذه الآيات، مثل الحياء وطاعة الله وأهمية التحلي بالخلق الحسن، وكيفية تطبيقها في الحياة اليومية.

Resources needed:

المصادر الموصى بها:

- تفسير ابن كثير أو أي تفسير معاصر موثوق به، لتوضيح سياق الآيات وأهميتها.

Homework/Assignments:

اكتب صفحة واحدة توضح فيها كيفية تطبيق أحد المبادئ الأخلاقية الواردة في سورة الأحزاب (28–35) (مثل الحياء، أو طاعة الله، أو احترام الأسرة) في حياتك اليومية. اذكر أي تحديات قد تواجهها في الالتزام بهذا المبدأ، وكيف تخطّط للتغلب عليها.

the Prophet’s wives, and understand the broader ethical guidance it provides for Muslims. Ethical Teachings: Examine the key moral instructions—such as modesty, obedience to Allah, and the importance of good character—and how they apply to everyday life.

Resources needed:

Recommended sources: Tafsir Ibn Kathir or a reputable contemporary commentary to clarify the verses’ context and importance.

Homework/Assignments:

Reflective Journal Entry: Write a one-page reflection on how one of the ethical principles from Surah al-Ahzab (28–35) (e.g., modesty, obedience to Allah, respect for family) can be practically applied in your daily life. Include any challenges you might face in practicing it and how you plan to overcome them.

ECONOMICS

Topics:

Macroeconomic policy
International trade and protectionism

Learning Objectives:

To discuss the supply side policy
To describe the labour market flexibility
To discuss the reasons for international trade
To evaluate the difference between absolute and comparative advantage
To analyze the significance of free trade

Resources needed:

Text book

Topical case studies and structured part questions

BUSINESS

Topics:

Cash flow forecast

Learning Objectives:

- Analyse the importance of cash to business
- explain the difference between cash flow and profit
- analyze the purpose of cash flow forecasts
- interpret and amend simple cash flow forecasts
- analyze the different causes of cash flow problems
- evaluate different methods of improving cash flow.

Resources needed:

Text Book

Topical case studies with mark scheme- uploaded in teams

Homework/Assignments:



Homework/Assignments:

Solving past paper

Practicing Past papers