



ASLEARNING TRAILS AY 2024-25

GRADE: 11

TERM 1_WEEK 4 (16th to 20th September 2024)

IT	MATHEMATICS
<p>Topics: Data processing and information: Encryption. Database.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none">• Describe Encryption and its' purpose.• Differentiate between symmetric encryption and asymmetric encryption.• Explain different encryption protocols.• Describe purpose of Transport Layer Security (TLS)/Secure Socket Layer (SSL) and Internet Protocol Security (IPsec).• Advantages and disadvantages of different protocols and methods of encryption.• Create summary report in database• Create crosstab query /pivot table in database. <p>Resources needed: Computer systems. Smartboard. Past papers.</p> <p>Homework/Assignments: Solve past paper questions. Assignments.</p>	<p>Topics: Transformations and Quadratics</p> <p>Learning Objectives:</p> <ul style="list-style-type: none">• understand and use the transformations of the graph of $y = f(x)$ given by $y = f(x) + a$, $y = f(x + a)$, $y = af(x)$, $y = f(ax)$ and simple combinations of these• To find the discriminant of a quadratic polynomial $ax^2 + bx + c$ and use the discriminant to find whether the roots are real or imaginary• To be able to find the unknown constants using discriminant rules <p>Resources needed: MS PPT, Past Paper questions, Textbook questions</p> <p>Homework/Assignments: Search Results (cambridgepapers.net), Past Paper questions</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: قصة حادثة - نجيب محفوظ</p> <p>Learning Objectives: أن يحدد الحكمة في القصة أن يتتبع السرد والوصف والحوار في القصة أن يستنتج الدلالات التعبيرية والإيحائية في القصة</p> <p>Resources needed: الكتاب المدرسي - بوربوينت - أنشطة تعليمية</p> <p>Homework/Assignments: - حل أسئلة الكتاب المدرسي كتابة موضوع تعبير ذكري من أيام الطفولة</p>	<p>Topics: هواية والدي</p> <p>Learning Objectives: أن يستطيع الطالب التحدث عن هوايته المفضلة أن يتعرف كيف ينمي هوايته أن يكتب الطالب فقرة عن أهمية القطارات</p> <p>Resources needed: الكتاب - العرض التقديمي الانترنت</p> <p>Homework/Assignments: كيف تنمي هوايتك؟</p>
PHYSICS	BIOLOGY
<p>Topics: Kinematics</p> <p>Learning Objectives: define and use distance, displacement, speed, velocity and acceleration 2 use graphical methods to represent distance, displacement, speed, velocity and acceleration 3 determine displacement from the area under a velocity–time graph 4 determine velocity using the gradient of a displacement–time graph 5 determine acceleration using the gradient of a velocity–time graph derive, from the definitions of velocity and acceleration, equations that represent uniformly accelerated motion in a straight line</p> <p>Resources needed:Textbook, ppt, link for simulation, smart board. Pictures, graph</p>	<p>Topics: 2 Biological Molecules</p> <p>Learning Objectives: describe the molecular structure of the polysaccharides starch (amylose and amylopectin) and glycogen and relate their structures to their functions in living organisms</p> <p>Resources needed: www.biotopics.co.uk/as/lipidcondensation.html Save my exams</p> <p>Homework/Assignments: Research the diversity of phospholipids and the reason for this diversity, such as addition of other water-soluble groups to the phosphate group.</p>



Homework/Assignments: Activity sheets, past papers [2016-2021]	
CHEMISTRY	ACCOUNTING
Topics: Chemical Bonding Learning Objectives: <ul style="list-style-type: none">Define dative (coordinate) bonding.Explain the difference between dative bonds and other types of covalent bonds.Identify examples of molecules that exhibit dative bonding.Illustrate dative bonds in Lewis structures. Resources needed: <ul style="list-style-type: none">Whiteboard and markersProjector and slides (optional)Molecular model kits (optional)Handouts with practice problems and diagrams Homework/Assignments: Assign practice problems from the textbook or a worksheet focusing on identifying and drawing dative bonds in different molecules.	Topics: Correction of errors Bank reconciliation statement Learning Objectives: To formulate suspense account To update cash book balance Resources needed: Text book Task Sheets BRS reading material Video Homework/Assignments: Text book exercises
ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: الاستعفاف Learning Objectives: أن يبين المقصود بالاستعفاف . أن يبين أثر الاستعفاف على الفرد والمجتمع . أن يوضح مجالات الاستعفاف . Resources needed: الكتاب المدرسي البوربوينت	Topics: Reason and Revelation Learning Objectives: <ul style="list-style-type: none">Understand the Islamic perspective on the relationship between reason and revelation.Explore how reason complements revelation in Islamic thought.Analyze examples from the Qur'an and Hadith where reason is encouraged.



<p>أنشطة صفية</p> <p>Homework/Assignments: حل أنشطة الطالب بالكتاب المدرسي مراجعة البوربوينت للدرس</p>	<p>Resources needed:</p> <ul style="list-style-type: none">• Qur'an with translation (specific verses related to reason and revelation)• Hadith collection (specific examples encouraging reasoning)• Whiteboard and markers <p>Homework/Assignments: Research and present one example from Islamic history where scholars used reason in interpreting revelation.</p>
ECONOMICS	BUSINESS
<p>Topics: Price theory</p> <p>Learning Objectives:</p> <ul style="list-style-type: none">• Define effective demand, individual and market demand and supply, identify determinants, and analyze causes of shifts• Define and calculate elasticity, understand values and significance, analyze factors, explore implications for decisions• Define and calculate PES, understand values and significance, analyze factors, explore implications for market reactions <p>Resources needed: AS level Economics Text Book Interactive Practice Supply and Demand Interactive Practice by MRU</p> <p>Homework/Assignments: Read the lesson and write summary for it</p>	<p>Topics: Motivation</p> <p>Learning Objectives:</p> <ul style="list-style-type: none">• evaluate the appropriateness of different payment systems and evaluate their impact on motivation• analyse the role of non-financial methods of motivation and evaluate their impact. <p>Resources needed: Text book Case studies, Mark scheme of case studies</p> <p>Homework/Assignments: Practicing topical questions</p>