



LEARNING TRAILS AY 2026-27

YEAR: 13

TERM 1_WEEK 2(Sep 7th -11th , 2026)

IT	MATHEMATICS
Topics: System life cycle: The stages in the system life cycle, Analysis, Learning Objectives: Describe the different stages of developing a system. Describe the relationship between the different stages of the system life cycle. Discuss the methods of researching a given situation. Differentiate different types of specifications. Describe advantages and disadvantages of the different methods of researching a given situation. Resources needed: Textbook, past paper, PPT, Computer system Homework/Assignments: Solve questions from past papers.	Topics: Algebra (Modulus Function) Learning Objectives: Students should be able to: - understand the meaning of x, sketch the graph of $y = ax + b$ and use relations such as $a = b \Leftrightarrow a^2 = b^2$ and $x - a < b \Leftrightarrow a - b < x < a + b$ when solving equations and inequalities - divide a polynomial, of degree not exceeding 4, by a linear or quadratic polynomial, and identify the quotient and remainder (which may be zero) Resources needed: Textbook, topical past paper questions, Smartboard Homework/Assignments: Equations and Inequalities Pure Mathematics 3 9709 Remainder and Factor Theorem Pure Mathematics 3 9709
ADVANCED ARABIC	GENERAL ARABIC
Topics: قرآن كريم : الله ولي الذين آمنوا Learning Objectives: أن يفسر المتعلم معاني المفردات الجديدة الواردة في الآيات <u>أن يستنتج المتعلم الفكرة العامة للآيات</u> <u>أن يميز المتعلم بين طريق الإيمان وطريق الكفر في ضوء الآيات الكريمة</u> <u>أن يوضح الدروس والقيم المستفادة من الآيات الكريمة</u> Resources needed: <u>العرض التقديمي الكتاب المدرسي دفتر الطالب</u> Homework/Assignments: <u>اكتب فقرة توضح فيها أثر الإيمان في حياة الإنسان</u>	Topics: نص معلوماتي : خليفة سات Learning Objectives: أن يفسر المتعلم معاني المفردات الواردة في النص أن يحلل المتعلم النص تحليلًا لغويًا صحيحًا أن يحدد المتعلم الفكرة الرئيسة والأفكار الفرعية للنص أن يكتب المتعلم فقرة عن أهمية الأقمار الصناعية في حياة البشرية Resources needed: كتاب الطالب - العرض التقديمي - السبورة الذكية - أوراق عمل Homework/Assignments: كتابة فقرة عن مركز محمد بن راشد للفضاء



PHYSICS	BIOLOGY
<u>Topics:</u> Circular Motion, Gravitational field <u>Learning Objectives:</u> Should be able to Define one radian, angular displacement and angular speed. Understand what centripetal force is and apply to solve problems. State and apply Newton's law of gravitation Define gravitational field strength and apply to solve problems <u>Resources needed:</u> Copy book, calculator, sample questions <u>Homework/Assignments:</u> Topical past paper questions	<u>Topics:</u> Chapter 12:Energy and Respiration <u>Learning Objectives:</u> .Describe the relationship between the structure and function of mitochondria using diagrams and electron micrographs. State where each of the four stages in aerobic respiration occurs in eukaryotic cells. outline glycolysis as phosphorylation of glucose. describe the link reaction, including the role of coenzyme A. outline the Krebs cycle. describe the role of NAD and FAD.Explain oxidative phosphorylation. outline respiration in anaerobic conditions in mammals (lactate fermentation) and in yeast cells (ethanol fermentation). explain how rice is adapted to grow with its roots submerged in water <u>Resources needed:</u>Text book ,note book ,activity sheet /worksheet ,Images of the process PPT, Respirometer . <u>Homework/Assignments:</u>Solve the given end of chapter questions/topical questions
CHEMISTRY	ACCOUNTING
<u>Topics:</u> 23 Energetics <u>Learning Objectives:</u> <u>1 define the term entropy, S, as the number of possible arrangements of the particles and their energy in a given system</u> <u>2 predict and explain the sign of the entropy changes that occur:</u> <u>(a) during a change in state, e.g. melting, boiling and dissolving (and their reverse)</u> <u>(b) during a temperature change</u>	<u>Topics:</u> Cash Budget <u>Learning Objectives:</u> To formulate cash budget to calculate surplus/deficit <u>Resources needed:</u> Task sheet Scenario based questions <u>Homework/Assignments:</u> Topical questions



(c) during a reaction in which there is a change in the number of gaseous molecules
3 calculate the entropy change for a reaction, ΔS , given the standard entropies, $S^\ominus$, of the reactants and products, $\Delta S^\ominus = \sum S^\ominus (\text{products}) - \sum S^\ominus (\text{reactants})$

Resources needed:

Textbook

Case studies

Topical questions with mark scheme

Homework/Assignments:

Topical past paper questions

ISLAMIC ARABIC

Topics:

وقاية المجتمع من الجرائم (سورة النور) 1-10

Learning Objectives:

أن يتلو الآيات تلاوة صحيحة مجودة
أن يفسر الآيات تفسيراً إجمالياً
أن يتعرف تشديد الإسلام على عقوبة الزنى أن يبين الآثار المترتبة عليها

Resources needed:

- القرآن الكريم.
- الكتاب المدرسي.
- السبورة الذكية وجهاز العرض.
- بطاقات تدريب على أحكام التجويد.
- أوراق عمل للتدريب على التلاوة.

Homework/Assignments:

التدرب على تلاوة الآيات في المنزل تلاوة صحيحة
حفظ الآيات الكريمة محل الدرس

ISLAMIC EDUCATION

Topic:

Protecting Society from Moral Crimes – Surah An-Nur (Verses 1–10)

Learning Objectives

By the end of the lesson, students will be able to:

- Recite **Surah An-Nur (Verses 1–10)** correctly with proper **Tajweed**.
- Explain the general meaning of the Qur'anic verses.
- Recognize Islam's strict prohibition of **zina (unlawful sexual relations)** and the seriousness of its prescribed punishment.
- Explain the harmful effects of moral crimes on individuals, families, and society.



	- Appreciate the importance of chastity, modesty, and safeguarding the moral values of the community. <u>Resources Needed</u> - The Holy Qur'an - Student Textbook - Interactive Whiteboard and Projector - Tajweed Rule Flashcards - Recitation Practice Worksheets <u>Homework / Assignments</u> - Practise reciting Surah An-Nur (Verses 1–10) at home with correct pronunciation and proper Tajweed. - Memorize Surah An-Nur (Verses 1–10) covered in today's lesson.
BUSINESS	ECONOMICS
<u>Topics:</u> 6.1 External influences on business activity <u>Learning Objectives:</u> To analyze How a government might use the law to seek to control: employment practices, conditions of work (including health and safety), wage levels, marketing behavior, competition, location decisions, particular goods and services <u>Resources needed:</u> Textbook Case studies Topical questions with mark scheme	<u>Topics:</u> Indifference curves and budget lines <u>Learning Objectives:</u> To define the meaning of an indifference curve and a budget line To explain the causes of a shift in the budget line To analyze the income, substitution and price effects for normal, inferior and Giffen goods To evaluate the limitations of the model of indifference curves <u>Resources needed:</u> Textbook Past paper Task sheet



Homework/Assignments:

Practice topical case studies

Homework/Assignments:

Topical questions