



LEARNING TRAILS AY 2024-25

GRADE: 11

TERM 1_WEEK 3 (9th to 13th September 2024)

IT	MATHEMATICS
<p>Topics: Creating relational database. Validate and verify data entry. Data processing and information.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Use validation rules in database. • Test validation applied to a database. • Use static and dynamic parameters in database query. • Create a summary query. • Generate pivot table in relational database. • Describe the difference between data and information with examples. • Differentiate between direct data source and indirect data source. • Describe the advantages and disadvantages of direct and indirect data. <p>Resources needed: Computer systems, task sheet, smart board, past papers.</p> <p>Homework/Assignments: Solve past paper questions from the topic.</p>	<p>Topics: Functions and Transformations</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • understand the terms function, domain, range, one-one function, inverse function and composition of functions • identify the range of a given function in simple cases, and find the composition of two given functions • determine whether or not a given function is one-one, and find the inverse of a one-one function in simple cases • illustrate in graphical terms the relation between a one-one function and its inverse • 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. <p>Resources needed: MS PPT, Textbook, Smartboards Search Results (cambridgepapers.net) Search Results (cambridgepapers.net) Search Results (cambridgepapers.net)</p> <p>Homework/Assignments: Search Results (cambridgepapers.net) Search Results (cambridgepapers.net)</p>



ADVANCED ARABIC	GENERAL ARABIC
<p>Topics: قصيدة المثقب العبدى</p> <p>Learning Objectives: أن يبين المعنى الإجمالي للنص موضحا علاقة الفكر بعضها ببعض مفسرا مفرداتها أن يحلل النص في سياقه التاريخي والاجتماعي مستخلصا السمات الفنية أن يفسر الكلمات مستخدما المعجم الورقي والرقمي</p> <p>Resources needed: الكتاب المدرسي - بوربوينت - أنشطة تعليمية</p> <p>Homework/Assignments: حل أسئلة الكتاب - كتابة موضوع تعبير عن الإنترنت وأثره في حياة الفرد</p>	<p>Topics: ابن بطوطة</p> <p>Learning Objectives: أن يستخرج الكلمات الجديدة أن يكتب أمثلة علي الجملة الاسمية يتعرف أنواع الخبر يستطيع كتابة سيرة غيرية عن ابن بطوطة</p> <p>Resources needed: الكتاب العرض التقديمي الانترنت</p> <p>Homework/Assignments: اكتب فقرة عن ابن بطوطة+ حل ورقة العمل</p>
PHYSICS	BIOLOGY
<p>Topics: physical Quantities and Units Scalars and vectors Class Assessment</p> <p>Learning Objectives: Explain scalar and vector quantities with egs Classify scalar and vector quantities Add and subtract coplanar vectors Explain the method of resolving vectors Solve qns related with the c</p> <p>Resources needed: Course Book, ppt, Activity sheet, Board, marker Simulations</p> <p>Homework/Assignments: Past papers, Activity sheets</p>	<p>Topics: Biological Molecules - 2.2 Carbohydrates and lipids</p> <p>Learning Objectives: describe and draw the ring forms of α-glucose and β-glucose define the terms monomer, polymer, macromolecule, monosaccharide, disaccharide and polysaccharide state the role of covalent bonds in joining smaller molecules together to form polymers</p> <p>Resources needed: Text Book, Past Papers to solve http://www.rsc.org/Education/Teachers/Resources/cfb/carbohydrates.htm</p> <p>Homework/Assignments:</p>



	Research on unfamiliar monosaccharides such as cellobiose, or polysaccharides such as chitin, and showing that the same general rules apply to condensation and hydrolysis reactions.
CHEMISTRY	ACCOUNTING
<p>Topics: Mole Concept</p> <p>Learning Objectives:</p> <ul style="list-style-type: none">• Understand the concept of a mole and Avogadro's number.• Calculate the molar mass of compounds.• Perform conversions between moles, mass, and number of particles.• Apply the mole concept to solve chemical equations. <p>Resources needed:</p> <ul style="list-style-type: none">• Periodic Table• Whiteboard/Markers• Calculators• Worksheets for exercises• Visual aids <p>Homework/Assignments:</p> <p><i>Calculation Problems</i></p> <p>1. Mole and Mass Conversions:</p> <ul style="list-style-type: none">○ Calculate the number of moles in 50 grams of NaOH (Molar mass of NaOH = 40 g/mol).○ How many grams are there in 0.25 moles of H₂SO₄ (Molar mass of H₂SO₄ = 98 g/mol)? <p>2. Particles and Moles:</p> <ul style="list-style-type: none">○ How many molecules are present in 3 moles of CO₂?	<p>Topics:</p> <p>Trial balance and correction of errors</p> <p>Learning Objectives:</p> <p>To pass rectification entries To formulate suspense account</p> <p>Resources needed:</p> <p>Text book PPT</p> <p>Homework/Assignments:</p> <p>Text book questions 1-5</p>



- If you have 1.5×10^{24} atoms of carbon, how many moles of carbon do you have?

3. Complex Conversions:

- Find the mass of 5.0 moles of aluminum oxide (Al_2O_3). (Molar mass of $\text{Al}_2\text{O}_3 = 102 \text{ g/mol}$)
- Determine the number of atoms in 2 grams of helium (He). (Molar mass of He = 4 g/mol)

ISLAMIC ARABIC

Topics:

سورة الأحزاب
الثبات على الحق

Learning Objectives: -

أن يبين دلالة عظمة الله في خلقه.
أن يذكر الميثاق الذي أخذه الله على الأنبياء
أن يحرص على القيم التي تضمنتها الآيات الكريمة

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Resources needed:

الكتاب المدرسي
بوربوينت
أنشطة تعليمية

Homework/Assignments:

حفظ الآيات الكريمة مراعيًا أحكام التجويد
حل أنشطة الطالب
مراجعة البوربوينت

ISLAMIC EDUCATION

Topics:

Surah al ahzab story of the trench

Learning Objectives:

Explain the meaning of the holy verses with hadith.
Describe the story of the believer in light of the Quran and Hadith

Resources needed:

Textbook, PPT, Activities from the textbook

Homework/Assignments:

Solve the student's activities in the textbook.

ECONOMICS

Topics:

1.3 Factors of production 1.4 Resource allocation in different economic systems 1.5 Production possibility curves 1.6 Classification of goods and services

Learning Objectives:

BUSINESS

Topics:

Motivation

Learning Objectives:

To analyze the contributions of motivational theorists and their relevance to modern industry.



Define and explain the four factors of production: land, labor, capital, and entrepreneurship, resource allocation, PPC
Evaluate classification of goods
Analyze the role each factor plays in the production process.

Success Criteria:

Students can list and describe the four factors of production and other key words
Students can provide real-life examples of each factor.

Resources needed:

https://www.youtube.com/watch?v=ctE0b_KZCdo

UAE Vision 2021

The Role of Government in Economic Systems

Homework/Assignments:

How do the different factors of production contribute to economic growth?

To Evaluate the appropriateness of different payment systems and evaluate their impact on business.

Resources needed:

Text book- E book uploaded in teams

Case studies with mark schemes [uploaded in teams]

Homework/Assignments:

Case study: Business expansion needs workforce support.