MATHEMATICS	IT
Topics: **FUNCTIONS AND TRANSFORMATIONS** **Learning Objectives:** • Understand the terms; function, domain, range, one-one function, inverse function and composition of functions. • Understand how two functions can be combined to form a new composite function. • Identify the range of a given function in simple cases, and find the composition of two given functions • Understand the concept of an inverse function and be able to find an expression for it. • determine whether or not a given function is one-one, and find the inverse of a one-one function in simple cases • understand and use the transformations of graph **Resources needed:** **"C:\Users\aboma\OneDrive\Desktop\TRANSFER\New folder\AS\2022-2023 AY\P1 PPTs\2. FUNCTIONS AND TRANSFORMATIONS.pptx"** **Homework/Assignments:** CambridgePapers	Search Results CambridgePapers	Search Results CambridgePapers	Search Results	**Topics:** Data processing and information. Database and file concepts. **Learning Objectives:** Differentiate between data processing and information. Describe Direct and indirect data sources. Analyze the advantages and disadvantages of direct and indirect data. Analyze the factors that affect the quality of information. Deswcribe three relationships: one-to-one, one-to-many and many-to-many. Create and interpret an entity relationship diagram. **Resources needed:** Text book, Activity sheet, Past papers. www.teach-ict.com/as_a2_ict_new/ocr/AS_G061/311_data_info_knowledge/static_dynamic_data/miniweb/index.htm **Homework/Assignments:** Past paper questions.

ADVANCED ARABIC	GENERAL ARABIC
Topics: قصة حادثة ـ نجيب محفوظ **Learning Objectives:** • أن يحدد الفكرة الرئيسة والتفاصيل المساندة التي تساهم في توضيح الفكرة الرئيسة • أن يتتبع تقنية الوصف باستخدام الكاتب للتقنيات البلاغية لإبراز ما يصفه من شخصيات وأحداث وحالات شعورية • أن يفسر المفردات الجديدة من خلال سياقاتها المختلفة • أن يحلل رؤية الكاتب ويذكر رأيه فيها **Resources needed:** الكتاب المدرسي ـ منصة ألف ـ بوربوينت ـ أوراق عمل **Homework/Assignments:** • حل أسئلة الكتاب • حل أسئلة منصة ألف • اختبار الكتروني	**Topics:** ابن بطوطة **Learning Objectives:** يتعرف المفردات الجديدة بالنص أن يوظف المفردات الجديدة في جمل من انشائه يكتب فقرة عن ابن بطوطة **Resources needed:** الكتاب المدرسي ـ العرض التقديمي ـ أوراق العمل **Homework/Assignments:** حل اسئلة الكتاب حل أوراق العمل

PHYSICS	BIOLOGY
Physcs physical quntities and units Errors and uncertainties Scalors and vectors Learning Objectives: Errors and Uncertainties 1.understand and explain the effects of systematic errors (including zero errors) and random errors in measurements. 2. understand the distinction between precision and accuracy 3. assess the uncertainty in a derived quantity by simple addition of absolute or percentage uncertainties Scalars and Vectors 1 understand the difference between scalar and vector quantities and give examples of scalar and vector quantities included in the syllabus 2 add and subtract coplanar vectors 3 represent a vector as two perpendicular components Resources needed: Bull's-eye analogy of precision and accuracy:	**Topics:** Biological Molecules Carbohydrates & Lipids Structure and function **Learning Objectives:** describe the formation of a glycosidic bond by condensation, with reference to disaccharides, including sucrose, and polysaccharides describe the molecular structure of the polysaccharide cellulose and outline how the arrangement of cellulose molecules contributes to the function of plant cell walls **Resources needed:** www.cellsalive.com/index.htm www.vcbio.science.ru.nl/en/virtuallessons/#fesemsimulatie www.biotopics.co.uk/as/lipidcondensation.html **Homework/Assignments:** 1.Describe the molecular structure of the polysaccharide cellulose and outline how the arrangement of cellulose molecules

www.mathsisfun.com/accuracy-precision.html
Absolute and percentage uncertainty notes and examples:
https://sciencing.com/how-to-calculate-uncertainty-13710219.html
www.bellevuecollege.edu/physics/resources/measure-sigfigsintro/f-uncert-percent/

Absolute and percentage uncertainty video explanation:
https://studynova.com/lecture/physics/measurement-and-uncertainty/absolute-fractional-percentage-uncertainty/
Head to tail and parallelogram methods to calculate a resultant vector:
www.mathwarehouse.com/vectors/resultant-
www.mathsisfun.com/algebra/vectors.html
vectors:
https://spark.iop.org/episode-201-scalars-and-vectors

https://phet.colorado.edu/en/simulation/vector-addition
www.physicsclassroom.com/Physics-Interactives/Vectors-and-Projectiles/Vector-Addition/Vector-Addition-Interactive
Homework/Assignments:
   Cambridge papers – Past paper Booklet qns both MCQ and SQ from years 2016=2020

contributes to the function of plant cell walls
2. Relate the molecular structure of triglycerides to their functions in living organisms.
3. Solve Past paper Questions –Topic wise

ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: الثبات على الحق **Learning Objectives:** • أن يتلو الطالب الآيات الكريمة تلاوة صحيحة مجودة • ويفسر الآيات تفسيرا إجماليا مع معانيها ويستنتج بعض دلالات الايات واوضح المواقف الوارده **Resources needed:**	**Topics:** Surah Al-Ahzab Steadfastness **Learning Objectives:** Explain the meaning of the Quranic Ayah. Explain the story of battle of trench. **Resources needed:** Book, PPT, online sites,

الكتاب المدرسي البوربوينت منصة ألف **Homework/Assignments:** حل انشطة الطالب بالكتاب المدرسى حفظ الآيات الكريمة ومعاني الكلما	**Homework/Assignments:** Solve student's activities in the book

CHEMISTRY	**ACCOUNTING**
Topics: Atomic Structure **Learning Objectives:** 1 understand the terms: • shells, sub-shells and orbitals • principal quantum number (n) • ground state, limited to electronic configuration 2 describe the number of orbitals making up s, p and d sub-shells, and the number of electrons that can fill s, p and d sub-shells 3 describe the order of increasing energy of the sub-shells within the first three shells and the 4s and 4p sub-shells 4 describe the electronic configurations to include the number of electrons in each shell, sub-shell and orbital **Resources needed:** 1) Save my exams topical Questions 2) Cambridge International AS& A Level Chemistry, Student's Book **Homework/Assignments:** Topical questions on Moles, posted on Microsoft Teams	**Topics:** Bank Reconciliation Statement **Learning Objectives:** Understand the use and purpose of a bank statement • Update the cash book for bank charges, bank interest paid and received, correction of errors, credit transfers, direct debits, dividends, and standing orders • Understand the purpose of and prepare a bank reconciliation statement to include bank errors, uncredited deposits and unpresented cheques **Resources needed:** IGCSE Accounting by Catherine Coucom Formats Task Sheet https://www.youtube.com/watch?v=gD1noSuX8VQ www.igcseaccounts.com **Homework/Assignments:** Text book exercise questions

BUSINESS

Topics:
1.1 Enterprise
1.1.1 The nature of business activity

Learning Objectives:
To Understand the qualities entrepreneurs and intrapreneurs need for success
To Understand the role of entrepreneurship in creating and starting up a business
To Understand the role of intrapreneurship in the ongoing success of a business

Resources needed:
ISBN:9781108921220
www.tutor2u.net/blog/index.php/business-studies/comments/adding-value-creative-uses-of-a-aluminium-tray
www.unomaha.edu/college-of-business-administration/center-for-economic-education/teacher-resources/k-5/popcorn-economics.pdf.
https://keydifferences.com/difference-between-risk-and-uncertainty.html
www.forbes.com/sites/ellevate/2019/10/24/eight-common-reasons-small-businesses-fail/?sh=55a2b3944fbb
www.young-enterprise.org.uk/

Homework/Assignments:
Explain the growth of MNCs in UAE.
https://gulfbusiness.com/positive-power-multinational-cooperation/