Study list **المادة الدراسية للاختبارات**

الصف العاشر Grade 10	**نهاية الفصل الدراسي الأول** 2026/2025 Semester 1- End-of-Term

المادة Subject		الوحدات/الدروس Units/ Lessons	الصفحات في الكتاب Pages in the book
Computer Science	**Theory النظري**	**Module 2:** 2.1.2 Print() function 2.1.3 Function Arguments 2.1.9 Using multiple arguments 2.1.10 Positional arguments 2.2.1 Literals 2.2.1-5 Datatypes: Integer, Floats, Strings, Boolean values 2.3.1 Python as a calculator 2.3.2 Basic operators 2.3.3 Operators and their priorities 2.4.1 Variables – data-shaped boxes 2.4.3 How to create a variable 2.4.4 How to use a variable 2.4.5 How to assign a new value to an already existing variable 2.4.6 Solving simple mathematical problems 2.4.8 Shortcut operators 2.5.1 Comments – why, when, and how? 2.5.2 Marking fragments of code **Module 3:** 3.1.2 Comparison: equality operator 3.1.4 Operators 3.1.7 Conditions and conditional execution 3.1.8 Analyzing code samples 3.2.5 Looping your code with for 3.2.6 More about the for loop and the range() function with three arguments 3.2.8 The break and continue statements 3.4.1 Why do we need lists?	All the resources including Lesson Presentations, assessments & worksheets on the LMS

	3.4.2 Indexing lists 3.4.3 Accessing list content The len() function 3.4.4 Removing elements from a list 3.4.5 Negative indices are legal 3.4.6 LAB The basics of lists 3.4.8 Adding elements to a list: append() and insert() 3.4.9 Making use of lists 3.4.10 Lists in action 3.6.1 The inner life of lists 3.6.2 Powerful slices 3.6.3 Slices – negative indices 3.6.4 The in and not in operators 3.6.5 Lists – some simple programs		
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Chapter 18 **462-473** **Chapter 19** **476-483**	Chapter 18 Differentiate between autotrophs and heterotrophs Understand how ATP is used in coupled reactions Explain the effect of a catalyst in chemical reactions Describe how enzymes regulate chemical reactions Recognize factors that affect enzyme activity Chapter 19 Describe the structure of both the chloroplast and the mitochondria Explain the differences between the light-dependent and light-independent reactions in photosynthesis	**STEM Biology**	

Student workbook: Page 13	**Unit 2: Elements, Compounds & Mixtures** **Formation of Ions** • **Cations (positive ions):** formed by *losing* electrons. → Example: Na → $Na^+ + e^-$ • **Anions (negative ions):** formed by *gaining* electrons. → Example: $Cl + e^- → Cl^-$ • **Charge:** equals number of electrons lost or gained. → Example: Mg → Mg^{2+} • **Common Ions:** ○ Cations: Na^+, K^+, Mg^{2+}, Ca^{2+}, Al^{3+} ○ Anions: Cl^-, O^{2-}, N^{3-}, SO_4^{2-}, NO_3^-, CO_3^{2-}	
Pages 19-21	**Unit 3: Trends and Patterns in the Periodic Table** **Group I – Alkali Metals (Li, Na, K)** • Soft, shiny metals; stored under oil to stop reactions. • **Trends down the group:** ○ Melting point ↓ ○ Density ↑ ○ Reactivity ↑ • **Reactions:** ○ With water → forms alkali + hydrogen gas → $2Na + 2H_2O → 2NaOH + H_2$	**STEM Chemistry**
Pages 23-24		

Pages 25-28	○ With oxygen → forms oxides → $4Li + O_2 \rightarrow 2Li_2O$ • Lower elements (Rb, Cs) are *softer, more reactive, lower melting*. **Group VII – The Halogens (Cl_2, Br_2, I_2)** • Diatomic non-metals (X_2). • **Trends down the group:** ○ Density ↑ ○ Reactivity ↓ • **Appearance at r.t.p.:** ○ Cl_2 – pale green gas ○ Br_2 – red-brown liquid ○ I_2 – grey-black solid • **Displacement reactions:** ○ More reactive halogen displaces less reactive one. → $Cl_2 + 2KBr \rightarrow 2KCl + Br_2$ • **Prediction:** further down = darker, denser, less reactive. **Periodicity** • **Definition:** repeating pattern of element properties across a period. • **Across a period (→):** ○ Atomic radius ↓ ○ Ionisation energy ↑ ○ Electronegativity ↑ ○ Metallic character ↓ • **Down a group (↓):** ○ Atomic radius ↑	

	○ Ionisation energy ↓ ○ Electronegativity ↓ **Ionisation Energies** • **Definition:** energy needed to remove one electron from an atom (gaseous). → $Na(g) \rightarrow Na^+(g) + e^-$ • **Trends:** ○ Across a period → increases (stronger nuclear attraction). ○ Down a group → decreases (more shielding). • **Successive ionisation:** ○ Each electron removed requires more energy. ○ Big jump → new inner shell → shows group number.	
All resources are on LMS. First main source is STEM PASCO TEXTBOOK Chapter 8 Pages 204-227 Review questions 8.1 p210 q1-9 8.2 p216 q1-7 8.3 p222 q1-4	**Chapter 8** **8.1 - Magnetic Fields** • Identify examples of magnetic forces. • Describe the difference between diamagnetic, paramagnetic, and ferromagnetic materials. • Draw and interpret magnetic field diagrams. • Draw magnetic field diagrams around bar magnets. • Describe basic properties of Earth's magnetic field, including its direction. **8.2 - Electric Force**	**STEM Physics**

8.4 p228 q1-4 Chapter review p231-233 q1-68	• Identify the two types of electric charge and how they interact. • Identify examples of electric forces in everyday life. • Describe and calculate the magnitude and direction of the electric force between two charged objects using Coulomb's law. • Describe the relationship between force, distance, and charge using Coulomb's Law. **8.3 - Electric Fields** • Interpret electric field diagrams. • Describe and calculate the relationship between electric force and electric field for a point charge. • Identify examples of electric fields in everyday life. • Calculate the electric field strength. • Draw electric field diagrams around point charges and charged plates. • Identify radial and uniform field lines. **8.4 - Electric Potential and Capacitors** • Calculate electric potential and electric potential energy. • Describe and label how a capacitor works.	

	• Calculate the stored charge and energy in a capacitor. • Calculate number of electrons stored in a capacitor. • Calculate capacitance for capacitors in series and parallel.	
136 133 127 95 136 85-119 87 102 121 143 106	**الحفظ:** الأبيات 1-8 الغبطة فكرة. **القضايا الأدبية:** عناصر العمل الأدبي. **الاستماع:** حكاية الأرض. **القراءة:** النار سر الطاقة- الغبطة فكرة- الشخصية السعيدة. **ملحوظة)** يأتي في (القراءة نص داخلي- نص خارجي. **البلاغة:** الاستعارة(المكنية- التصريحية) **الكلمة والجملة:** إسناد الفعل الماضي الصحيح إلى ضمائر الرفع المتصلة. إسناد الفعل الماضي المعتل إلى ضمائر الرفع المتصلة. أسلو ب القسم. كم الاستفهامية وكم الخبرية. **الكتابة:** كتابة مقال تفسيري	**اللغة العربية**
100-108 112-121 124-130	توحيد الله وبر الوالدين رُقي الإسلام في التعامل مع الخادم الكفر (معناه وأنواعه وصوره)	**التربية الاسلامية**

132-140 142-150	المحرمات من النساء في الزواج الحوار في السيرة النبوية	
Integrated Revel Math Book 2 and ALEKS	Module 8 8-5 Graphing Linear Functions and Inequalities 8-6 Special Functions 8-7 Transformations of Functions Module 5 5-1 Circles and Circumference 5-2 Measuring Angles and Arcs 5-3 Arcs and Chords 5-4 Inscribed Angles 5-5 Tangents 5-6 Tangents, Secants, and Angle Measures 5-7 Equations of Circles 5-8 Equations of Parabolas Module 9 9-1 Solving Linear Equations and Inequalities 9-2 Solving Absolute Value Equations and Inequalities, 9-3 Equations of Linear Functions 9-4 Solving Systems of Equations Graphically 9-5 Solving Systems of Equations Algebraically 9-6 Solving Systems of Inequalities 9-7 Optimization with Linear Programming	**Mathematics**

Pathways Chapter 3 Pages 49-72	-Vocabulary -Critical Thinking: analyzing quotes -Reading comprehension: main ideas, details, sequence/ordering, inferences, identify evidence, cause-effect, pro/con, problem-solution, compare/contrast -Language Skills: simple past, present perfect -Writing Skills: introductory & concluding paragraphs -Writing (general): -introductions (hooks, thesis), -body paragraphs (topic sentences, supporting ideas, transitions, details, concluding sentence) -conclusion (summary statements, final though)	**English**

مع تمنياتنا لأبنائنا الطلبة بالتوفيق والنجاح