

Summer Readiness: Grade 11

Goal: Build momentum and confidence for the upcoming school year. Choose your challenge level for each subject. Students in Extended sections are encouraged to complete "The Push".

Subject	Focus Skills & Standards	The Resources	The Core Challenge	The Push (Extension)
Mathematics	Skill(s): - Find missing side lengths using the Pythagorean Theorem. - Use the Converse of the Pythagorean Theorem to prove whether a triangle is acute, obtuse, or right. - Find unknown side lengths and angle measures using trigonometric ratios for acute angles. Standard(s): HSG.SRT.4 Prove theorems about triangles HSG.SRT.7 Explain and use relationship between the sine and cosine of complementary angles HSG.SRT.8 Use trigonometric ratios & Pythagorean Theorem to solve right triangles in applied problems	Scientific Calculator EdPuzzle 1 - Finding Distance in the Coordinate Plane EdPuzzle 2 - Converse of the Pythagorean Theorem Angles of Elevation & Depression	1) Multi-Step Pythagorean Theorem Problems 2) SOH-CAH-TOA Mixed Practice (Level 7 or 8) 3) The Clinometer Checkpoint	The Double-Angle Dilemma
Language & Literature	Skills & Standards - Media literacy - Visual rhetoric analysis - Persuasive technique analysis	Time Magazine archives Influence & Persuasion: Crash Course Media Literacy	ELA 11 Summer packet Morocco in 1938 Through George Orwell's Eyes	

	- Audience and purpose evaluation - Comparative thinking - Analytical writing preparation Priority Standards 1. CCSS.ELA-LITERACY.RI.11-12.1 Cite strong and thorough textual evidence. 2. CCSS.ELA-LITERACY.RI.11-12.6 Determine an author's point of view or purpose. 3. CCSS.ELA-LITERACY.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media. 4. CCSS.ELA-LITERACY.W.11-12.1 Write arguments supported by valid reasoning and evidence.			
Science: Advanced Biology	Skill(s): - Developing and using models - Analyzing and interpreting data - Applying cause and effect relationships - Analyzing systems and system models Standard(s): HS-LS1-7 – Model how cellular respiration releases energy from food to produce ATP	Advanced Bio resources	Packets advanced Biology	Extension task

	HS-LS3-1 – Explain how DNA and chromosomes carry and transfer genetic information.			
Science: Advanced Physics	Priority standard: HS-PS2-1: Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on an object, its mass, and its acceleration. Skills: - I can distinguish between scalar and vector quantities and understand that vectors have both magnitude and direction. - I can use basic trigonometry (sine, cosine) to resolve a vector into components. - I can add vectors graphically (head-to-tail) and use their components to determine the resultant vector. - Determining the net force by combining multiple forces vectors acting in different directions.	- Refresher presentation on Trigonometry - Edpuzzle on Vectors vs Scalars - Nearpod on vector components using trigonometry - Summary on Vectors	Physics - Core task	Physics – Extended task
Science: Advanced Chemistry	Skill(s): - Differentiate between ionic and covalent bonding - Differentiate between ionic and molecular compounds - Draw Lewis structure of molecular	Topic 1 Reading Material.docx Covalent Bonding, Molecular Structure, and Molecular Geometries https://edpuzzle.com/assignments/6a0b33	Core Assignment.docx	Extended Assignment.docx

	compounds and polyatomic ions - Identify molecular geometries using Lewis structures - Identify and classify types of chemical reactions - Write balanced chemical equations - Calculate the number of moles using mass, concentration and gas volume - Convert between moles, mass, number of particles Priority Standard(s): HS-PS1-2 Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms. HS-PS1-7 Use mathematical representation to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.	796c3b43db6e078829/watch https://edpuzzle.com/assignments/6a0bd8967dcc09d0844012bd/watch Build a Molecule - Molecules Molecular Formula Isomers - PhET Interactive Simulations Molecule Shapes - VSEPR Lone Pairs Bonds - PhET Interactive Simulations Molecule Shapes: Basics - Bonds Molecules VSEPR - PhET Interactive Simulations Topic 2 Reading Material.docx Chemical Reactions: Balancing chemical equations and types of chemical reaction https://edpuzzle.com/assignments/6a0b43135aaa082d5c384b40/watch Topic 3 - Reading Material.docx The moles https://edpuzzle.com/assignments/6a0c3fc0c8312daea9f98f6f/watch		
20 th Century Global History	Skill(s): Videos: Each video teaches core vocabulary you will need throughout the year as your literacy skill.	The Rise of the West and Historical Methodology • The Rise of the West and Historical Methodology.docx Capitalism and Socialism	20CWH Summer Pack.docx	20CWH Summer Pack.docx

	Maps: Your skill here is to be able to read maps and reference the countries that will be referred to throughout the year. Standard(s): D1.5.9-12. D2.His.2.9-12. D2.His.4.9-12. D2.His.11.9-12.	The Rise of the West and Historical Methodology.docx Samurai, Daimyo, Matthew Perry, and Nationalism Nationalism.docx Migration Migration.docx Imperialism Imperialism.docx Asian Responses to Imperialism: Crash Course World History Asian Responses to Imperialism.docx		
Electives (Art/PE/Design)	Skill(s): Standard(s): Art: Skill(s): Art Analysis Standard(s): Core Challenge: VA:Re8.1.HSI The Push: VA:Re8.1.HSIII		Art: Art- Summer Museum Guide.docx	Art: Art- Summer Museum Guide.docx
Islamic	Skill(s): إتقان أحكام التجويد وتلاوة القرآن الكريم حفظ الآيات غيباً فهم معاني الآيات وما ترشد إليه معرفة أحكام الزواج وأسس إختيار الزوجة والزواج Standard(s): قراءة - كتابة - تحليل - استيعاب وفهم - تحليل - استنتاج	التربية الإسلامية - الأنشطة الصفية - الصف الحادي عشر.pptx Islamic Summer Packet Grade 10.pptx	التربية الإسلامية - الأنشطة الصفية - الصف الحادي عشر.pptx	Islamic Summer Packet Grade 10.pptx
Arabic A	Skill(s): - القراءة - الكتابة - والتحدث - المجدد والمزيد والمعتل والصحيح - الفهم والاستيعاب Standard(s): - التحليل - التنظيم - إنتاج النص - استخدام اللغة	امتحان المستوى.pdf	من سيربح المليون؟ (لغز وحل).pptx	
Arabic B	Skill(s): - Analyzing authentic literary & media texts - Structuring argumentative essays	- Core DP Themes Guides (<i>Identities, Experiences, Human Ingenuity, Social</i>		Past Papers

	- Defending perspectives on global themes - Enhancing advanced syntax & vocabulary Standard(s): - DP Language B: Receptive (Comprehending complex texts) - DP Language B: Productive (Writing cohesive arguments) - DP Language B: Interactive (Conceptual fluidity)	<i>Organization, Sharing the Planet)</i> - Text Type Templates (المدونة، الرسالة الرسمية، المقال) - Advanced Transition Words & Connectors Chart • Analytical Tools: - Authentic Arabic opinion pieces and literary excerpts		
French	Skill(s): - Comprehending authentic audio and written texts - Writing structured responses for specific text types - Expressing personal opinions on global themes - Applying solid grammatical foundations Standard(s): - DP Language B: Receptive (Identifying main ideas & context) - DP Language B: Productive (Organizing ideas with text conventions) - DP Language B: Interactive	Apprendre le français - Core DP Themes Guides (<i>Identités, Expériences, Ingéniosité humaine, Organisation sociale, Partage de la planète</i>) - Text Type Checklists (<i>Le blog, La lettre, Le courriel</i>) - Logical Connectors & Transitions Reference Sheet	Summer Packet French B HL French B SL Summer Packet French Ab initio DP1	Languages Online 1jour un actu



	(Coherence in communication)			
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Readiness Reflection

After finishing your chosen challenges, consider:

- Which tier did you reach?
- What is one moment where things "clicked" for you?
- On a scale of 1–5, how ready do you feel for August?

Family Guidance

- Encourage students to complete the packet over time instead of in one sitting.
- Ask students to explain what they notice, how they know, and which resource helped them most.
- Families may support organization and time management, but the final work should reflect the student's own thinking.