

Cornerstone International Academy - Weekly Outlook November 3 - November 7

Visual Arts Weekly Outlook

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary / Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets</u>	<u>Resources</u>
<p>Unit Title: Artist as Explorers</p> <p>Topic: Exploring global context & materials</p> <p>Factual: What is collage in visual art?</p> <p>What materials can be combined to create a collage?</p> <p>Which artists are known for using collage to express personal or cultural identity?</p> <p>Conceptual: · How can layering images and symbols help artists communicate their personal or cultural stories?</p>	<p>Keywords</p> <ul style="list-style-type: none">1. Collage2. Layering3. Symbol4. Identity5. Expression	<p>Criterion A</p> <p>Criterion B</p> <p>Criterion C</p> <p>Criterion D</p>	<p>What images or symbols represent parts of your identity or culture?</p> <p>How does layering different materials change the meaning of your artwork?</p> <p>Do you think art can show who you are better than words can? Why or why not?</p>	

Debatable: Can a single image or symbol truly represent a person's full identity?				
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French

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Unité: 2 Qu'est-ce qu'il y a autour de moi ? Factuelles : Qu'est-ce qu'il y a autour de moi ? Comment est-ce que le monde autour de moi est organisé ? Conceptuelles : Comment peut-on communiquer	une villa un magasin une pharmacie un hôpital une piscine un parc un marché	Criterion A Criterion C Criterion B	Décris ton quartier. Comment est ton quartier? Qu'est-ce qu'il y a dans ton quartier? Est-ce qu'il y a un marché dans ton quartier?	Jouffrey, Catherine, and Rémy Lamon. MYP by Concept 4-5: French Language Acquisition. Hodder Education, an Hachette UK Company, 2017. International Baccalaureate Organization. Language Acquisition

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<p>efficacement avec autrui ?</p> <p>Invitant au débat : Peut-on influencer le monde autour de nous ?</p> <p>Maintenant partage et compare tes réponses à ces questions avec ton voisin de classe.</p>	<p>un cinéma une école une bibliothèque</p>			Guide: For Use from September 2020/January 2021. International Baccalaureate Organization, 2020

Individuals and Societies

<u>Content / Context, / concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Unit 3 Title: HOW DO EMPIRES WORK?</p> <p>Factual: What systems keep empires in place? What are the effects of an empire's global interaction?</p> <p>Conceptual: How can empires successfully defend themselves from challenges and threats? What factors might be important for maintaining a successful empire?</p> <p>Debatable: To what extent is leadership important in the maintenance of empires? To what extent are empires and modern supra-national organizations and superpowers similar? Can empires successfully accommodate the expression of personal and cultural difference?</p>	alliances infrastructure military military infrastructure Silk Road standing armies tax	Criterion A: Knowing and Understanding ◆ Criterion B: Investigating ◆ Criterion C: Communicating ◆ Criterion D: Thinking critically	<p>Source analysis</p> <p>Students will Consider the questions on Page 50:</p> <ul style="list-style-type: none"> •What factual information can we determine from this source? •Why did The Augustus discuss those specific events in his funeral inscription? •Who is the intended audience? •What image of himself did The Augustus want to portray to the citizens of the empire? 	Paul, Grace. Individual and Societies for the IB MYP 4&5. Edited by Andy Dailey, et al, Hodder Education, 2017. Page 46 to 51

Performing Arts

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives /</u>	<u>Sample Questions and Worksheets</u>	<u>Resources</u>
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		Assessment Criteria	(Formatives)	
Characters and Themes OBJECTIVE: Students will be able to delve deeper into the characters and themes presented in the script.	Characters Themes Script	Criterion A	Students will be given short excerpts from a well-known movie "The Lion King". Each team will identify the key components (character, setting, plot, etc. and present their analysis to the class.	Lion King 1 & An inspector calls (sent on managebac)

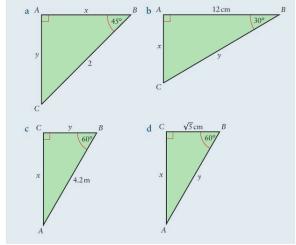
Standard Math

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>				
Topics: <ul style="list-style-type: none"> • Simplification of Rational Expressions • Domain and Range of Rational Functions 	Key Vocabulary <ul style="list-style-type: none"> • Rational expression, numerator, denominator, factorization, simplify, domain, range, undefined values, function 	Criterion A and D	<p>Worked example 16.2</p> <p>Simplify:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>a $\frac{1}{x+1} + \frac{2}{x+1}$</td> <td>b $\frac{1}{x+1} + \frac{1}{x-1}$</td> </tr> <tr> <td>c $\frac{3}{x(x-2)} - \frac{2}{x-2}$</td> <td>d $\frac{5}{(x-3)^2} - \frac{5}{x^2-9}$</td> </tr> </table> <p>Worked example 16.3</p> <p>a Use technology to plot the graph of $y = f(x)$, where $f(x) = \frac{1}{x-3}$ b Which number should be excluded from the domain of f? c Which number cannot be found in the range of f? d What are the equations of the asymptotes of the graph? e If x is limited to be an integer, what is the largest possible value of $f(x)$?</p>	a $\frac{1}{x+1} + \frac{2}{x+1}$	b $\frac{1}{x+1} + \frac{1}{x-1}$	c $\frac{3}{x(x-2)} - \frac{2}{x-2}$	d $\frac{5}{(x-3)^2} - \frac{5}{x^2-9}$	<ul style="list-style-type: none"> • Textbook sections on rational expressions and functions.(Page 558-Worked example 16.2 and Page 565 Worked example 16.3) • Practice
a $\frac{1}{x+1} + \frac{2}{x+1}$	b $\frac{1}{x+1} + \frac{1}{x-1}$							
c $\frac{3}{x(x-2)} - \frac{2}{x-2}$	d $\frac{5}{(x-3)^2} - \frac{5}{x^2-9}$							

<p>Concepts:</p> <ul style="list-style-type: none"> Understand how to simplify rational expressions by factoring and canceling common factors. Explore the concept of domain and range for rational functions, identifying restrictions such as excluded values from denominators. Analyze how domain restrictions affect the behavior of rational functions. 	<p>notation.</p> <p>Bloom's Taxonomy:</p> <ul style="list-style-type: none"> Remember: Define rational expressions and domain/range. Understand: Explain simplification steps and domain restrictions. Apply: Simplify expressions and find domain/range for given functions. Analyze: Identify excluded values and their impact on the function graph. Evaluate: Judge the validity of simplification steps and domain conclusions. 	<p>2. Write as a single fraction:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">a $1 - \frac{1}{x}$</td><td style="width: 50%;">b $\frac{2}{3x} - \frac{1}{2x}$</td></tr> <tr> <td>c $x + \frac{3}{x}$</td><td>d $\frac{x}{4} + \frac{4}{x}$</td></tr> <tr> <td>e $\frac{2}{1-x} - \frac{1}{x}$</td><td>f $\frac{x}{x-2} + \frac{x}{x+2}$</td></tr> <tr> <td>g $\frac{1}{x-1} - \frac{x}{x^2-1}$</td><td>h $\frac{1}{x-1} - \frac{2}{x} + \frac{1}{x+1}$</td></tr> <tr> <td>i $\frac{1}{x^2+2x} - \frac{1}{x^2-4}$</td><td></td></tr> </table>	a $1 - \frac{1}{x}$	b $\frac{2}{3x} - \frac{1}{2x}$	c $x + \frac{3}{x}$	d $\frac{x}{4} + \frac{4}{x}$	e $\frac{2}{1-x} - \frac{1}{x}$	f $\frac{x}{x-2} + \frac{x}{x+2}$	g $\frac{1}{x-1} - \frac{x}{x^2-1}$	h $\frac{1}{x-1} - \frac{2}{x} + \frac{1}{x+1}$	i $\frac{1}{x^2+2x} - \frac{1}{x^2-4}$		<p>worksheets on simplification and domain/range. (7. 3: Adding and Subtracting Rational Expressions - Mathematics LibreTexts)</p> <ul style="list-style-type: none"> Video tutorials on rational functions ▶ 17 - Adding...
a $1 - \frac{1}{x}$	b $\frac{2}{3x} - \frac{1}{2x}$												
c $x + \frac{3}{x}$	d $\frac{x}{4} + \frac{4}{x}$												
e $\frac{2}{1-x} - \frac{1}{x}$	f $\frac{x}{x-2} + \frac{x}{x+2}$												
g $\frac{1}{x-1} - \frac{x}{x^2-1}$	h $\frac{1}{x-1} - \frac{2}{x} + \frac{1}{x+1}$												
i $\frac{1}{x^2+2x} - \frac{1}{x^2-4}$													

	<ul style="list-style-type: none"> • Create: Formulate rational functions with specific domain restrictions. 			
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Extended Math

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Topics:</p> <ul style="list-style-type: none"> • Trigonometric Ratios • Applications: Angle of Elevation and Depression 	<p>Key Vocabulary</p> <ul style="list-style-type: none"> • Hypotenuse, opposite, adjacent, sine, cosine, tangent, angle of elevation, angle of depression. 	Criterion A,B and D	<p> Practice questions 12.4</p> <p>1 Find the value of the unknowns in each of the triangles. Give your answer in simplified exact form.</p> 	<ul style="list-style-type: none"> • Geometry textbooks on trigonometry.(Page 397 Practice questions 12.4 and Page 400 Practice questions 12.5) • Videos explaining

<p>Concepts:</p> <ul style="list-style-type: none"> Define sine, cosine, and tangent ratios in right-angled triangles. Use trigonometric ratios to calculate unknown sides and angles. Apply angles of elevation and depression to real-world problems involving heights and distances. 	<p>Bloom's Taxonomy:</p> <ul style="list-style-type: none"> Remember: State trig ratios and angle definitions. Understand: Explain how to identify sides relative to angles. Apply: Solve right triangle problems using trig ratios. Analyze: Interpret problems involving angles of elevation/depression. Evaluate: Assess solutions for real-world applications. Create: Design problems involving trig ratios and elevation/depression. 		<p> Practice questions 12.5</p> <ol style="list-style-type: none"> The angle of elevation from a boat to the top of a lighthouse 10m above sea level is 23°. Calculate the horizontal distance from the boat to the lighthouse. From a vertical cliff 60m above sea level, a coast guard observes a shark at an angle of depression of 37°. Find the diagonal distance from the coast guard to the shark. A cable car goes up the slope of a mountain with an angle of inclination of 63°. It starts at an altitude of 600m and travels 900m along the slope. What altitude does it reach? A tree casts a shadow 3m long. The angle of elevation from the tip of the shadow to the top of the tree is 52°. Find the height of the tree. A kite is on the end of a taut cord 13m long. The hand of the person holding the kite is at a height of 2m. If the vertical height of the kite is 12m, find the angle of elevation of the kite from the hand. 	<p>elevation and depression angles. (</p> <p> Angle of El...</p> <ul style="list-style-type: none"> Worksheets with real-life trig problems. (Trigonometric Ratios Worksheets - Math Monks and Angles of Elevation and Depression Worksheet)
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	ion.			
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Design

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Unit: Threads of Culture</p> <p>Factual: What materials and processes are used in garment construction?</p> <p>Conceptual: How can garments communicate identity or purpose?</p>	<ul style="list-style-type: none"> • Fabric • Pattern • Garment features • Measurement. 	<p>Criterion C: Creating the Solution</p> <p>ii. Demonstrate excellent technical skills when making the solution</p>	<p>Using your drafted pattern and selected fabric, carefully cut out all the parts needed to create your garment. Ensure that:</p> <ul style="list-style-type: none"> • Your fabric is laid flat and aligned correctly with the grain. • You pin your pattern pieces securely before cutting. • You label each cut piece clearly (e.g., front, back, sleeve). <p>This task prepares you for the sewing stage, where</p>	<p>NOTE: List of materials written for your garment making should be brought to class.</p> <p>Nyarko, E. K. Basic Design and Technology for Junior High Schools (Core Skills). Town & Country Books Services, 2018, p 34 - 55.</p>

			you will assemble the garment following your design plan.	
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English Language and Literature

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Unit title: What's The Drama?</p> <p>Page 34-39</p> <p>Factual: What are the different ways in which people communicate with each other? What different conventions are associated with the ways people communicate?</p> <p>Conceptual: How can ways in which we communicate affect our relationships with other people?</p> <p>Debatable:</p>	Body language Communication Conventional Convey Juxtapose	Criterion A: Analysing Criterion B: Organizing Criterion C: Producing text Criterion D: Using language	<p>Watch the video 'Good communication skills for teens':</p> <p><i>Think about the following:</i></p> <ul style="list-style-type: none"> • How were the ideas and information presented in the video connected to what you already knew about good communication skills? • What new ideas did you get that extended or pushed your thinking about communication skills in new directions? • What is still challenging or confusing for you to get your mind around about the topic of 	<p>MYP 4&5 Watch the video 'Good communication skills for teens':</p> <p> Good Communica...</p> <p>Literary Work:</p> <ol style="list-style-type: none"> 1. Fences By <i>August Wilson</i> 2. The Miracle Worker By: <i>William Gibson</i>

Is non-verbal communication more powerful than verbal communication?			communication, and what you saw and heard in the video?	
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Spanish

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Unit Title: Conectados con nuestro entorno / Connected with Our Surroundings</p> <p>Theme (Week 2): <i>Ciudadanía y vida en la ciudad / Citizenship and City Life.</i></p> <p>Factual: ¿Qué lugares y actividades son comunes en una ciudad hispanohablante? / What places and activities are common in a Spanish-speaking city?</p> <p>Conceptual: ¿Cómo usamos el lenguaje para describir nuestro entorno urbano y expresar nuestra responsabilidad como ciudadanos? / How do we</p>	<p>Remembering: Recall vocabulary for city locations and civic terms.</p> <p>Understanding: Interpret authentic information about urban life and citizenship.</p> <p>Applying: Use prepositions of place to give and follow directions.</p> <p>Analyzing: Compare different attitudes toward citizenship across cultures.</p> <p>Creating: Design an “ideal city” using Spanish to describe spaces and civic values.</p> <p>Evaluating: Debate what defines good citizenship in local and global contexts.</p> <p>Vocabulary</p> <p>Lugares: <i>la plaza, el parque, el museo, el cine, la estación, el banco, el hospital, el restaurante</i></p> <p>Preposiciones: <i>cerca de, enfrente de, al lado de, entre, detrás de, a la derecha/izquierda de</i></p> <p>Frases clave: <i>¿Dónde está...? / Está en... / Gira a la derecha / Cruza la calle / Sigue recto.</i></p> <p>Ciudadanía: <i>respetuoso, solidario, responsable,</i></p>	<p>Observation of pair interactions (Criterion C). Oral map directions accuracy. Exit ticket sentence.</p> <p>Video comprehension responses (Criterion A). Oral debate participation (Criterion C). Group digital “Ideal City” project (Criterion C).</p>	<p>Formative Sequence 2 — <i>Ciudadanía y vida en la ciudad</i> Students submit their best work from the week: Criterion A: Comprehension of <i>Cultura Ciudadana</i> video. Criterion C: Oral description of their “ideal city” and class debate contribution. Criterion D (supportive): Short written captions for city map project. Output: Digital blog/map with recorded narration or embedded voice notes.</p>	<p>Spanish Emergent Phase 1&2, Hodder Education. Pg 42-50.</p>

<p>use language to describe our urban environment and express responsibility as citizens?</p> <p>Debatable: ¿Qué hace que una persona sea un buen ciudadano? / What makes someone a good citizen?</p>	<p><i>educado, generoso, ciudadano, comunidad</i></p> <p>Acciones cívicas: ayudar, cuidar, respetar, participar, compartir</p> <p>Frases clave: <i>Un buen ciudadano... / En mi ciudad ideal... / Es importante que... / Todos debemos...</i></p>			
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Biology

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>Topic: Aerobic and Anaerobic Cellular Respiration</p> <p>Content:</p> <p>Cellular respiration is a process that releases</p>	<p>Key Vocabulary:</p> <ul style="list-style-type: none"> • Respiration, Aerobic, Anaerobic, Glucose, Oxygen, Carbon dioxide, Water, 	<p>Criterion A (Knowing and Understanding):</p> <ul style="list-style-type: none"> • Describe the process of aerobic and anaerobic respiration. 	<p>Short Answer / Structured Questions</p> <ol style="list-style-type: none"> 1. Define aerobic and anaerobic respiration. 2. Write the word equation for 	<p>Resources</p> <p>MYP 4 & 5 Biology by Concept (Hodder Education).</p> <p>Diagram of mitochondrion and cytoplasm.</p>

<p>energy in cells.</p> <p>The difference between aerobic and anaerobic respiration.</p> <p>The role of glucose and oxygen in producing ATP.</p> <p>Products of each process (CO₂ and water vs. lactic acid or ethanol and CO₂).</p> <p>The importance of respiration in maintaining life processes, such as movement, growth, and repair.</p> <p>Relationship between respiration and photosynthesis.</p> <p>Context:</p> <p>Exploring how cells obtain and use energy to sustain life.</p> <p>Comparing energy yield and efficiency of aerobic and anaerobic pathways in different organisms (e.g., humans, yeast, and plants).</p> <p>Investigating respiration through experiments such as yeast fermentation or</p>	<p>ATP (Adenosine Triphosphate), Lactic acid, Fermentation, Energy, Mitochondria, Cytoplasm.</p> <p>Bloom's Taxonomy:</p> <ul style="list-style-type: none"> ● Remember: Define respiration and identify its types. ● Understand: Explain the differences between aerobic and anaerobic respiration. ● Apply: Illustrate respiration equations and apply to real-life examples (e.g., exercise and fermentation). ● Analyze: Compare energy outputs of aerobic and 	<p>respiration.</p> <ul style="list-style-type: none"> ● Explain the role of oxygen and glucose in energy production. <p>Criterion B (Inquiring and Designing):</p> <ul style="list-style-type: none"> ● Formulate a hypothesis and design an experiment to investigate respiration (e.g., CO₂ production in yeast). <p>Criterion C (Processing and</p>	<p>aerobic respiration.</p> <ol style="list-style-type: none"> 3. Compare the energy yield in aerobic and anaerobic respiration. 4. Explain why athletes breathe heavily after intense exercise. 5. Describe an experiment that demonstrates anaerobic respiration in yeast. 6. Identify where in the cell each type of respiration occurs. 	<p>Yeast, glucose solution, limewater, test tubes (for practical).</p> <p>Video: <i>BBC Bitesize – Respiration Explained</i>.</p> <p>Interactive simulation: <i>PhET Cellular Respiration</i>.</p> <p>PowerPoint/Google Slides presentation on respiration.</p> <p>Lab notebook for recording results and reflections.</p>
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<p>measuring breathing rate after exercise.</p> <p>Concepts</p> <p>Key Concept: Systems</p> <p>Related Concepts: Transformation, Energy</p> <p>Global Context: <i>Scientific and Technical Innovation</i> <i>Understanding how knowledge of cellular processes leads to innovation in health, sports, and technology.</i></p>	<p>anaerobic respiration.</p> <ul style="list-style-type: none"> ● Evaluate: Discuss the advantages and disadvantages of each type of respiration for organisms. ● Create: Design an investigation to demonstrate anaerobic respiration in yeast. 	<p>Evaluating):</p> <ul style="list-style-type: none"> ● Collect and analyze data on respiration rates. ● Evaluate experimental results and suggest improvements. <p>Criterion D (Reflecting on the Impacts of Science):</p> <ul style="list-style-type: none"> ● Discuss how understanding respiration impacts health, sports, and biotechnology 		
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		(e.g., energy drinks, muscle fatigue, fermentation industries).		
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Chemistry

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
Unit 2 Separation of Mixtures - Chromatography - Molecular Gastronomy Inquiry Questions Factual: Can mixtures consist of matter in more than one state? Can all mixtures be separated? Conceptual: How do separation techniques rely on physical properties? Which conditions result	Keywords filter fuse gel solution Refractive index	Criterion A: Knowing and Understanding Criterion B: inquiring and Designing Criterion D: Reflecting on the impact of Science	1. Explain why the Rf values for any set of specific conditions used in chromatography are constant. Illustrate your understanding with examples 2. Describe how a separating funnel can be used to differentiate between liquids of different densities. 3. When clothes are washed, a. suggest why it is difficult to remove	MYP 4 Hodder Education: Chemistry

<p>in the most effective separation process?</p> <p>Debatable:</p> <p>Does understanding of the nature of mixtures improve our ability to express ourselves?</p>			<p>grease spots from clothing using pure water</p> <p>b. if the clothing soiled with grease spots is treated with a spray-on stain remover, washing becomes more effective. Suggest the chemical a stain remover might be, and describe how it works.</p>	
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Physics

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p>UNIT 2: HOW DO FORCES AND MATTER INTERACT?</p> <p>Topics</p> <p>Analyzing gravitational fields</p> <p>Measuring gravitational field strength</p>	Variables Transpose Displacement Time Acceleration Velocity	Criteria A, B and C	ATL activities on page 32 - 34	Kindly refer to the "files" section on managebac.

PHE

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
Unit title: Mind over muscle Understanding stress response; growth mindset; coping mechanisms; mindfulness and focus.	Stress, coping mechanism, mindfulness, focus.	Criterion A Criterion C	During a timed physical challenge or competition, how does your body react? Describe what you notice in your breathing, heart rate, and focus.	