

## Cornerstone International Academy - Weekly Outlook November 10 - November 14

### 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>
<b>Unit Title:</b> Artist as Explorers  <b>Topic:</b> · Observational drawing foundations  <b>Factual:</b> What is contour drawing?  What is the purpose of blind contour drawing?  How does shading help create the illusion of depth in a drawing?  <b>Conceptual:</b> · How does observing carefully help artists see and represent the world	Observation Contour Proportion Shading Technique	Criterion A Criterion B Criterion C Criterion D	What did you notice about your subject when you focused only on its edges and shapes?  How did blind contour drawing change the way you think about “mistakes” in art?  Do you think realistic drawing or expressive drawing better shows how you see the world?	<a href="https://youtu.be/4qNMzOb-DY8?si=PS78jG3TLPkjiMwq">https://youtu.be/4qNMzOb-DY8?si=PS78jG3TLPkjiMwq</a>

differently?  <b>Debatable:</b> Is accurate observation more important than personal expression in drawing?				
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## French

<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>
<b>Unité:</b> 2 Qu'est-ce qu'il y a autour de moi ?  <b>Factuelles :</b> Qu'est-ce qu'il y a autour de moi ? Comment est-ce que le monde autour de moi est organisé ?  <b>Conceptuelles :</b> Comment peut-on communiquer efficacement avec	<b>le quartier</b> – the neighborhood  <b>la rue</b> – the street  <b>la maison</b> – the house  <b>les voisins</b> – the neighbors  <b>le parc</b> – the park  <b>le magasin</b> – the shop/store	Criterion A  Criterion C  Criterion B	Décris ton quartier  <b>1. La description générale</b> Tu peux dire où se trouve ton quartier, s'il est grand ou petit, moderne ou ancien. <i>Exemple</i> : Mon quartier se trouve près du centre-ville. C'est un quartier calme et agréable.  <b>2. Les lieux importants</b> Mentionne les endroits qu'on peut trouver : parcs, magasins, écoles, cafés,	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 Guide: For Use from

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<p>autrui ?</p> <p><b>Invitant au débat :</b> Peut-on influencer le monde autour de nous ?</p> <p><b>Maintenant partage et compare</b> tes réponses à ces questions avec ton voisin de classe.</p>	<p><b>l'école</b> – the school</p> <p><b>le café</b> – the café</p> <p><b>tranquille</b> – quiet/peaceful</p> <p><b>animé(e)</b> – lively/bustling</p>		<p>etc.  <i>Exemple</i> : Il y a un grand parc où les enfants jouent, un supermarché et plusieurs cafés sympas.</p> <p><b>3. Les habitants</b>  Parler des gens : sont-ils sympathiques, bruyants, polis, jeunes ?  <i>Exemple</i> : Les voisins sont très gentils et tout le monde se connaît.</p> <p><b>4. Les transports</b>  Explique comment on peut se déplacer : bus, métro, vélo, voiture.  <i>Exemple</i> : Il y a une station de métro à cinq minutes de chez moi, donc c'est pratique pour aller en ville.</p> <p><b>5. Les avantages et les inconvénients</b>  Dis ce que tu aimes ou n'aimes pas dans ton quartier.  <i>Exemple</i> : J'aime la tranquillité, mais il y a trop de circulation le</p>	September 2020/January 2021. International Baccalaureate Organization, 2020

<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>matin.</p> <p><b>6. Ton opinion personnelle</b>      Exprime ton sentiment ou ton avis sur ton quartier.  <i>Exemple :</i> J'aime beaucoup mon quartier parce qu'il est vivant et il y a toujours que</p>	

### Individuals and Societies

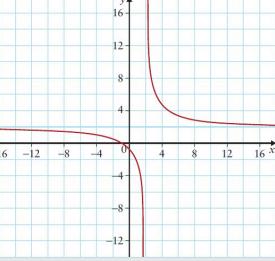
<u>Content / Context, / concepts</u>	<u>Key Vocabulary and Blooms Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
<p><b>Unit 3 Title: HOW DO EMPIRES WORK?</b></p> <p><b>Factual:</b> What systems keep empires in place? What are the effects of an empire's global interaction?</p> <p><b>Conceptual:</b> How can empires successfully defend themselves from challenges and threats? What factors might be important for maintaining a successful empire?</p> <p><b>Debatable:</b> 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>	constitution. propaganda. Law code Legal systems Juries Precedent Supra-national organization	<p>◆ <b>Criterion B:</b> Investigating</p> <p>◆ <b>Criterion C:</b> Communicating</p>	<p><b>Explore</b> two of the following constitutions or forms of constitutions:</p> <ul style="list-style-type: none"> <li>• The Twelve Tables</li> <li>• The Hittite Constitution</li> <li>• The Ur-Nammu law code</li> <li>• The Solonian Constitution of Athens</li> <li>• The Edicts of Ashoka</li> </ul> <p><b>Use</b> this knowledge to create your own constitution for a city-state or empire.</p> <p><b>List</b>, in writing, the rights of your citizens, and the responsibilities of your government towards its citizens. Indicate the type of government and its representative bodies, if there are any.</p>	Paul, Grace. Individual and Societies for the IB MYP 4&5. Edited by Andy Dailey, et al, Hodder Education, 2017.  Page 51 to 59

## Performing Arts

<u>Content / Context, / Concepts</u>	<u>Key Vocabulary and Bloom's Taxonomy</u>	<u>Assessment Objectives / Assessment Criteria</u>	<u>Sample Questions and Worksheets (Formatives)</u>	<u>Resources</u>
Analysing Themes  Identify central themes and how they are conveyed.	Analyse	Criterion B	Students write, "How does the theme connect to real life?"	Circle of life - The Lion King.

## 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>						
<ul style="list-style-type: none"> <li><b>Content:</b> Domain and range of rational functions; vertical and horizontal</li> </ul>	<b>Key vocabulary:</b> rational function, numerator, denominator, domain, range, vertical asymptote, horizontal asymptote, removable	Criterion A, B and C	<p>1.</p> <p>For each of the functions in questions 1–6:</p> <ol style="list-style-type: none"> <li>State the value of <math>x</math> that should be excluded from the domain.</li> <li>State the value of <math>f(x)</math> that cannot be included in the range.</li> <li>Write down the equation of the two asymptotes for the graph of <math>y = f(x)</math>.</li> <li>Sketch the graph and compare your result with one given by technology, such as a GDC.</li> </ol> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">           1. <math>f(x) = \frac{x-2}{x-3}</math> </td> <td style="width: 50%;">           2. <math>f(x) = \frac{2x-1}{x+1}</math> </td> </tr> <tr> <td>3. <math>f(x) = \frac{x}{x+3}</math></td> <td>4. <math>f(x) = \frac{x+1}{2x-4}</math></td> </tr> <tr> <td>5. <math>f(x) = \frac{3}{x-2}</math></td> <td>6. <math>f(x) = \frac{3}{2-x}</math></td> </tr> </table>	1. $f(x) = \frac{x-2}{x-3}$	2. $f(x) = \frac{2x-1}{x+1}$	3. $f(x) = \frac{x}{x+3}$	4. $f(x) = \frac{x+1}{2x-4}$	5. $f(x) = \frac{3}{x-2}$	6. $f(x) = \frac{3}{2-x}$	<ul style="list-style-type: none"> <li>Textbook: Chapter on rational functions <a href="#">(Page 564-568)</a></li> <li>Online graphs: Graphing calculator or classroom</li> </ul>
1. $f(x) = \frac{x-2}{x-3}$	2. $f(x) = \frac{2x-1}{x+1}$									
3. $f(x) = \frac{x}{x+3}$	4. $f(x) = \frac{x+1}{2x-4}$									
5. $f(x) = \frac{3}{x-2}$	6. $f(x) = \frac{3}{2-x}$									

<p>asymptotes</p> <ul style="list-style-type: none"> <li>• <b>Context:</b> Builds on factoring, solving equations, and graphing polynomials.</li> <li>• <b>Concepts:</b></li> </ul> <p>Rational function: <math>f(x) = p(x) \div q(x)</math> with <math>q(x) = 0</math>.</p> <p>Domain: all real <math>x</math> where denominator <math>q(x) \neq 0</math>. (and other algebraic restrictions).</p> <p>Holes vs vertical</p>	<p>discontinuity (hole), factorization, polynomial long division, irrational number.</p> <p><b>Bloom's alignment:</b></p> <p>Remember: define rational function and list asymptote types.</p> <p>Understand: explain why denominator zeros restrict domain and difference between hole vs asymptote.</p> <p>Apply: find domain, asymptotes, and holes</p>		 <p>Which number should be excluded from the domain of <math>f</math>?      Which number cannot be found in the range of <math>f</math>?      What are the equations of the asymptotes of the graph?      If <math>x</math> is limited to be an integer, what is the largest possible value of <math>f(x)</math>?</p>	<p>graphing tool for showing behavior near asymptotes.</p> <ul style="list-style-type: none"> <li>• <a href="#">How To Find...</a></li> <li>• <a href="#">Graphing R...</a></li> </ul>
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<p>asymptotes: cancelable factor → hole (removable); uncancelled zero in denominator → vertical asymptote.</p> <p>Horizontal/oblique asymptotes: compare degrees of numerator and denominator; use polynomial division for slant asymptotes.</p> <p>Range: solve <math>y=f(x)</math> for <math>x</math> to find excluded output values; horizontal asymptotes often indicate end-behavior but do not necessarily</p>	<p>for given functions.</p> <p>Analyze: solve <math>y=f(x)</math> for <math>x</math> to infer range; analyze behavior near asymptotes.</p> <p>Evaluate: decide if a proposed value is in the range; justify.</p> <p>Create: design a rational function with specified asymptotes/holes.</p>			
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exclude that $y$ value.				
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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>
<ul style="list-style-type: none"> <li><b>Content:</b> Angle of elevation and angle of depression; bearing notation and use; solving right-triangle problems using trigonometry to find distances and heights; converting between bearings and standard</li> </ul>	<ul style="list-style-type: none"> <li><b>Key vocabulary:</b> angle of elevation, angle of depression, bearing, azimuth, compass rose, three-figure bearing, N/S—E/W bearing notation, line of sight, horizontal line of sight, opposite/adjacent/</li> </ul>	Criterion A, B,C and D	<p>1.</p> <p>1. The angle of elevation from a boat to the top of a lighthouse 10m above sea level is <math>23^\circ</math>. Calculate the horizontal distance from the boat to the lighthouse.</p> <p>2. From a vertical cliff 60m above sea level, a coast guard observes a shark at an angle of depression of <math>37^\circ</math>. Find the diagonal distance from the coast guard to the shark.</p> <p>3. A cable car goes up the slope of a mountain with an angle of inclination of <math>63^\circ</math>. It starts at an altitude of 600m and travels 900m along the slope. What altitude does it reach?</p> <p>4. A tree casts a shadow 3 m long. The angle of elevation from the tip of the shadow to the top of the tree is <math>52^\circ</math>. Find the height of the tree.</p> <p>2.</p> <p><b>Worked example 12.15</b></p> <p>Starting from point A, a ship travels 12 km east to B and then 4 km north to C.</p> <p>a) Find the bearing of C from A, correct to the nearest degree.  b) Find the distance travelled by the ship from A to C, correct to two decimal places.</p>	<ul style="list-style-type: none"> <li>Recommended textbook sections on right-triangle trigonometry and navigation/bearing problems(Page 565 - 568) .</li> <li>Teacher aids: 1-page diagram sheet showing angle of elevation/depression templates and bearing</li> </ul>

<p>angle measures.</p> <ul style="list-style-type: none"> <li><b>Context:</b> Builds on right-triangle trig (sine, cosine, tangent), angle measurement (degrees), and basic coordinate/compass directions.</li> </ul> <p>Useful in navigation, surveying, and applied problems in geometry and trigonometry.</p> <ul style="list-style-type: none"> <li><b>Concepts:</b></li> </ul> <p>Angle of elevation: the angle formed by the horizontal line of sight and the line of sight up</p>	<p>hypotenuse, right triangle, inverse trig.</p> <ul style="list-style-type: none"> <li><b>Bloom's alignment:</b></li> </ul> <p>Remember: define angle of elevation/depression and bearing formats.</p> <p>Understand: explain why elevation/depression use the horizontal as reference; interpret bearings on a compass.</p> <p>Apply: solve applied problems to find heights, distances, or bearings using trig.</p> <p>Analyze: set up</p>			<p>conversion chart (three-figure ↔ N/S—E/W).</p> <ul style="list-style-type: none"> <li>▶ Angle of Ele...</li> <li>▶ Bearings   D...</li> </ul>
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<p>to an object.</p> <p>Angle of depression: the angle formed by the horizontal line of sight and the line of sight down to an object.</p> <p>Bearings: compass directions expressed as three-figure bearings (e.g., <math>045^\circ</math>, <math>180^\circ</math>) or as N/S—angle—E/W notation (e.g., N <math>30^\circ</math> E). Bearings measure clockwise from north (when using three-figure convention).</p> <p>Solving problems: identify right triangles, label opposite/adjacent/hypotenuse.</p>	<p>multi-step problems that require building right triangles from a word description or map.</p> <p>Evaluate: choose the correct trig ratio and check reasonableness of answers (units, magnitude, direction).</p> <p>Create: design a real-world problem (surveying/navigation) using bearings and elevation/depression and solve it.</p>			
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nuse relative to angle,				
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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><b>Unit:</b> Threads of Culture</p> <p><b>Factual:</b> What tools and techniques are used in sewing garments?</p> <p><b>Conceptual:</b> How does garment construction communicate identity and craftsmanship?</p>	<ul style="list-style-type: none"> <li>• Stitching</li> <li>• Seam allowance</li> <li>• Finishing</li> <li>• Grainline</li> <li>• Backstitch</li> <li>• Pressing</li> <li>• Hem</li> <li>• Sewing</li> </ul>	<p><b>Criterion C: Creating the Solution</b></p> <p><b>ii.</b> Demonstrate excellent technical skills when making the solution.</p> <p><b>iii.</b> Follow the plan to create the garment, making justified changes where necessary.</p> <p><b>iv.</b> Ensure the garment functions as intended and meets design specifications.</p>	<p>Assemble your garment using the cut fabric pieces and your design plan.</p> <ul style="list-style-type: none"> <li>• Use proper alignment, stitching, and finishing techniques.</li> <li>• Press your seams after sewing.</li> <li>• Attach any required features (elastic waistband, pockets, or hems).</li> </ul> <p>When completed, take evidence of your sewing process and write a short reflection (3–5 sentences)</p>	Nyarko, E. K. Basic Design and Technology for Junior High Schools (Core Skills). Town & Country Books Services, 2018, p 34 - 55.

			<p>on:</p> <ul style="list-style-type: none"> <li>● What steps you completed today.</li> <li>● What challenges you faced.</li> <li>● What you plan to improve in the next class.</li> </ul>	
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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><b>Unit title:</b> What's The Drama?</p> <p><b>Page 34-39</b></p> <p><b>Factual:</b> What are the different ways in which people communicate with each other?  What different conventions are associated with the ways people communicate?</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"> <li>● How were the ideas and information presented in the video connected to what you already knew about good communication skills?</li> <li>● What new ideas did</li> </ul>	<p><b>MYP 4&amp;5</b></p> <p>Watch the video 'Good communication skills for teens':</p> <p> <a href="#">Good Communica...</a></p> <p>Literary Work:</p> <ol style="list-style-type: none"> <li>1. <b>Fences</b> By August Wilson</li> <li>2. <b>The Miracle Worker</b> By: William Gibson</li> </ol>

<p><b>Conceptual:</b> How can ways in which we communicate affect our relationships with other people?</p> <p><b>Debatable:</b> Is non-verbal communication more powerful than verbal communication?</p>			<p>you get that extended or pushed your thinking about communication skills in new directions?</p> <ul style="list-style-type: none"> <li>• What is still challenging or confusing for you to get your mind around about the topic of communication, and what you saw and heard in the video?</li> </ul>	
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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><b>Theme (Week 2):</b> <i>Ciudadanía y vida en la ciudad / Citizenship and City Life.</i></p> <p><b>Factual:</b> ¿Qué lugares y actividades son comunes en una ciudad</p>	<p><b>Remembering:</b> Recall vocabulary for city locations and civic terms.</p> <p><b>Understanding:</b> Interpret authentic information about urban life and citizenship.</p> <p><b>Applying:</b> Use prepositions of place to give and follow directions.</p> <p><b>Analyzing:</b> Compare different attitudes toward</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><b>Formative Sequence 2 – <i>Ciudadanía y vida en la ciudad</i></b></p> <p>Students submit their best work from the week: <b>Criterion A:</b> Comprehension of <i>Cultura Ciudadana</i> video. <b>Criterion C:</b> Oral description of their “ideal city” and class debate contribution. <b>Criterion D (supportive):</b> Short written captions for city map project.</p>	<p>Spanish Emergent Phase 1&amp;2, Hodder Education. Pg 42-50.</p>

<p>hispanohablante? / What places and activities are common in a Spanish-speaking city?</p> <p><b>Conceptual:</b> ¿Cómo usamos el lenguaje para describir nuestro entorno urbano y expresar nuestra responsabilidad como ciudadanos? / How do we use language to describe our urban environment and express responsibility as citizens?</p> <p><b>Debatable:</b> ¿Qué hace que una persona sea un buen ciudadano? / What makes someone a good citizen?</p>	<p>citizenship across cultures.</p> <p><b>Creating:</b> Design an “ideal city” using Spanish to describe spaces and civic values.</p> <p><b>Evaluating:</b> Debate what defines good citizenship in local and global contexts.</p> <p><b>Vocabulary</b></p> <p><b>Lugares:</b> <i>la plaza, el parque, el museo, el cine, la estación, el banco, el hospital, el restaurante</i></p> <p><b>Preposiciones:</b> <i>cerca de, enfrente de, al lado de, entre, detrás de, a la derecha/izquierda de</i></p> <p><b>Frases clave:</b> <i>¿Dónde está...? / Está en... / Gira a la derecha / Cruza la calle / Sigue recto.</i></p> <p><b>Ciudadanía:</b> <i>respetuoso, solidario, responsable, educado, generoso, ciudadano, comunidad</i></p> <p><b>Acciones cívicas:</b> <i>ayudar, cuidar, respetar, participar, compartir</i></p> <p><b>Frases clave:</b> <i>Un buen ciudadano... / En mi ciudad ideal... / Es importante que... / Todos debemos...</i></p>		<p><b>Output:</b> Digital blog/map with recorded narration or embedded voice notes.</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><b>Content:</b></p> <p>The process of photosynthesis: how plants make food using sunlight, carbon dioxide, and water.</p> <p>The role of chlorophyll and chloroplasts in capturing light energy.</p> <p>The word and symbol equations for photosynthesis.</p> <p>Essential plant nutrients (e.g., nitrogen, phosphorus, potassium, magnesium, and iron) and their roles in plant growth.</p> <p>Deficiency symptoms in plants are due to a lack of specific nutrients.</p> <p>Factors affecting the rate of photosynthesis (light intensity, carbon dioxide concentration,</p>	<p><b>Key Vocabulary:</b></p> <ul style="list-style-type: none"> <li>Photosynthesis, Chlorophyll, Chloroplast, Carbon dioxide, Water, Glucose, Oxygen, Stomata, Nutrients, Deficiency, Nitrogen, Phosphorus, Potassium, Magnesium, Sunlight, Energy transformation.</li> </ul> <p><b>Bloom's Taxonomy:</b></p> <ul style="list-style-type: none"> <li><b>Remember:</b> State the raw materials and products of photosynthesis.</li> </ul>	<p><b>Criterion A (Knowing and Understanding):</b></p> <ul style="list-style-type: none"> <li>Describe the process of photosynthesis and the role of key plant nutrients.</li> <li>Explain how environmental factors influence photosynthesis.</li> </ul> <p><b>Criterion B (Inquiring and Designing):</b></p> <ul style="list-style-type: none"> <li>Plan an experiment to investigate one</li> </ul>	<p>Write the word equation for photosynthesis.</p> <p>What is the role of chlorophyll in photosynthesis?</p> <p>List three factors that affect the rate of photosynthesis.</p> <p>Name two essential plant nutrients and state their functions.</p> <p>How can farmers correct nutrient deficiencies in crops?</p> <p>Explain how photosynthesis benefits other living organisms.</p>	<p><u><a href="#">MYP 4 Biology by Concept (Hodder Education).</a></u></p> <ul style="list-style-type: none"> <li><u><a href="#">Diagrams/models of leaves and chloroplasts.</a></u></li> <li><u><a href="#">Materials for experiments: aquatic plant (Elodea), light source, beaker, ruler, and stopwatch.</a></u></li> <li><u><a href="#">Videos: BBC Bitesize – Photosynthesis Explained, Amoeba Sisters – Plant Nutrition and Photosynthesis</a></u></li> <li><u><a href="#">Interactive</a></u></li> </ul>

<p>temperature).</p> <p>The importance of photosynthesis in ecosystems and the global carbon cycle.</p> <p><b>Context:</b></p> <p>Exploring how plants sustain life on Earth by producing food and oxygen.</p> <p>Investigating how nutrient deficiencies impact plant health and agriculture.</p> <p>Connecting photosynthesis to global issues such as food security and climate change.</p> <p><b>Concepts:</b></p> <p>Key Concept: Relationships</p> <p>Related Concepts: Energy, Environment</p> <p>Global Context: Globalization and sustainability – focusing on how plant nutrition and photosynthesis influence sustainable agriculture</p>	<ul style="list-style-type: none"> <li>● <b>Understand:</b> Explain how plants make food using light energy.</li> <li>● <b>Apply:</b> Describe how the lack of nutrients affects plant growth.</li> <li>● <b>Analyze:</b> Investigate how different factors affect the rate of photosynthesis.</li> <li>● <b>Evaluate:</b> Discuss the importance of photosynthesis in sustaining life.</li> <li>● <b>Create:</b> Design an experiment to test the effect of light on the rate of photosynthesis.</li> </ul>	<p>factor affecting the rate of photosynthesis (e.g., light or CO<sub>2</sub> concentration).</p> <ul style="list-style-type: none"> <li>● Identify variables and write a hypothesis.</li> </ul> <p><b>Criterion C (Processing and Evaluating):</b></p> <ul style="list-style-type: none"> <li>● Record and interpret data from a photosynthesis investigation.</li> <li>● Draw conclusions supported by evidence and suggest</li> </ul>	<p><b>simulation:</b></p> <p><u><a href="#">PhET Photosynthesis</a></u></p> <p>-</p> <ul style="list-style-type: none"> <li>● <u><a href="#">Worksheets and a PowerPoint presentation on plant nutrition and photosynthesis</a></u></li> <li>-</li> <li>● <u><a href="#">Plant nutrient chart (for visual reference)</a></u>.</li> </ul>
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and ecological balance.		<p>improvements.</p> <p><b>Criterion D (Reflecting on the Impacts of Science):</b></p> <ul style="list-style-type: none"> <li>Discuss how understanding photosynthesis and plant nutrition supports sustainable farming and food production.</li> </ul>		
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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>
<b>UNIT 3:</b> How do we map matter  <b>Topics</b>	<b>Keywords:</b> alkaline group metal	Criterion A: Knowing and Understanding	Sample Questions: 1. How are metals, non-metals and semi-metals	MYP 4 Hodder Education: Chemistry

<p>Metals, Non-metals and Semi-metals Groups and Periods Alkali metals Alkaline Earth Metals Halogens The modern periodic table</p> <p><b>Inquiry Questions:</b></p> <p><b>Factual:</b> What are some of the chemical characteristics of broad groups of elements?</p> <p><b>Conceptual:</b> How does recognizing patterns contribute to a deeper understanding of the nature of elements? How can the relationships between chemical elements be represented?</p> <p><b>Debatable:</b> How should names of newly discovered elements be determined?</p>	<p>neutral period</p>	<p>Criterion D: Reflecting on the impact of Science</p>	<p>classified on the periodic table based on their charges?</p> <ol style="list-style-type: none"> <li>2. Differentiate between groups and periods on the periodic table</li> <li>3. How many groups and how many periods are there on the periodic table?</li> <li>4. Under what conditions are we able to classify the elements on the periodic table based into groups and periods?</li> </ol>	
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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>
<b>UNIT 2: HOW DO FORCES AND MATTER INTERACT?</b>  <b>TOPICS</b> Total Force Force-mass, Force-distance graphs	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>
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<p>Unit title: Mind Over Muscle</p> <p><b>Performance Strategies.</b> (Breathing, visualization, pre-performance routines, goal setting.)</p>	<p>Breathing, visualization, exercising, goal setting.</p>	<p>Criterion C</p>	<p>Students will perform a number of breathing exercises and visualization techniques before playing football, volleyball or basketball.</p>	<p> <a href="#">Box breathing rela...</a>  <a href="#">Pregame Visualiz...</a></p>
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