

IB CHEMISTRY YEAR 2 - Unit 1

Teacher(s)	IB Chemistry PLC	Subject Group and Course	Group 4 - Chemistry		
Course Part and Topic	Internal Assessment IB Chemistry SL subtopics 11.1 and 11.2	SL or HL / Year 1 or 2	SL Year 2	Dates	August to December 2022 (ongoing)
Unit Description and Texts		DP Assessment(s) for Unit			
<ul style="list-style-type: none"> Murphy et al. <i>Oxford IB Diploma Programme: Chemistry Course Companion</i>, 2014 edition. Brown and Ford. <i>Pearson Baccalaureate Standard Level Chemistry</i>, 2nd edition. Talbot. <i>Internal Assessment for Chemistry - Skills for Success</i>, 2018 edition. 		<ul style="list-style-type: none"> Internal Assessment (<i>final draft will be marked by Teacher and submitted to IB for moderation</i>) 			

INQUIRY: establishing the purpose of the unit

Transfer Goals
<i>List here one to three big, overarching, long-term goals for this unit. Transfer goals are the major goals that ask students to “transfer” or apply their knowledge, skills, and concepts at the end of the unit under new/different circumstances, and on their own without scaffolding from the teacher.</i>
<ol style="list-style-type: none"> Students can design an experiment based on a topic of their choice that includes a proper research question, hypothesis, variables, and procedure. Students can analyze the data collected in their experiment to the appropriate level of precision. Students can evaluate the data collected in their experiment, including evaluation of experimental error and suggestions for improvement. Students can complete a fully focused and properly detailed lab report based on their experiment for their Internal Assessment.

ACTION: teaching and learning through inquiry

Content / Skills / Concepts - Essential Understandings	Learning Process <i>Check the boxes for any pedagogical approaches used during the unit. Aim for a variety of approaches to help facilitate learning.</i>
<ul style="list-style-type: none"> • Development and completion of the IB Chemistry Internal Assessment 	Learning experiences and strategies/planning for self-supporting learning: <ul style="list-style-type: none"> <input type="checkbox"/> Lecture <input type="checkbox"/> Socratic seminar <input type="checkbox"/> Small group/pair work <input type="checkbox"/> PowerPoint lecture/notes <input checked="" type="checkbox"/> Individual presentations <input type="checkbox"/> Group presentations <input type="checkbox"/> Student lecture/leading <input type="checkbox"/> Interdisciplinary learning Details: <i>Students will complete their Internal Assessment independently, with feedback from teacher and peers.</i>

	<input checked="" type="checkbox"/> Other(s): <i>lab work</i>
	<p>Formative assessment(s):</p> <p><i>Checkpoints include IA Proposal and IA Rough Draft</i></p> <hr/> <p>Summative assessments:</p> <p><i>Final draft of Internal Assessment</i></p> <hr/> <p>Differentiation:</p> <p><input checked="" type="checkbox"/> Affirm identity - build self-esteem</p> <p><input checked="" type="checkbox"/> Value prior knowledge</p> <p><input checked="" type="checkbox"/> Scaffold learning</p> <p><input checked="" type="checkbox"/> Extend learning</p> <p>Details:</p> <ul style="list-style-type: none"> ● <i>SWD/504 – Accommodations Provided</i> ● <i>ELL – Reading & Vocabulary Support</i> ● <i>Intervention Support</i> ● <i>Extensions – Enrichment Tasks and Project</i>
<p>Approaches to Learning (ATL)</p> <p><i>Check the boxes for any explicit approaches to learning connections made during the unit. For more information on ATL, please see the guide.</i></p>	
<p><input checked="" type="checkbox"/> Thinking</p> <p><input type="checkbox"/> Social</p>	

<input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Self-management <input checked="" type="checkbox"/> Research Details: <i>Students will be continuously challenged to develop higher-order thinking skills as they take prior knowledge, combine it with new content, and synthesize a lab report.</i> <i>Students will communicate their findings to their peers in the form of small-group presentations.</i> <i>Students must use self-management skills to complete the project in a timely and accurate manner.</i> <i>Students will complete background research for their lab report.</i>
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Language and Learning	TOK Connections	CAS Connections
<i>Check the boxes for any explicit language and learning connections made during the unit. For more information on the IB's approach to language and learning, please see the guide.</i>	<i>Check the boxes for any explicit TOK connections made during the unit</i>	<i>Check the boxes for any explicit CAS connections. If you check any of the boxes, provide a brief note in the "details" section explaining how students engaged in CAS for this unit.</i>
<input checked="" type="checkbox"/> Activating background knowledge <input type="checkbox"/> Scaffolding for new learning <input type="checkbox"/> Acquisition of new learning through practice <input checked="" type="checkbox"/> Demonstrating proficiency Details: <i>Content and vocabulary introduced in previous</i>	<input checked="" type="checkbox"/> Personal and shared knowledge <input type="checkbox"/> Ways of knowing <input type="checkbox"/> Areas of knowledge <input type="checkbox"/> The knowledge framework Details: <i>Students will share knowledge in their IA.</i>	<input checked="" type="checkbox"/> Creativity <input checked="" type="checkbox"/> Activity <input checked="" type="checkbox"/> Service Details: <i>Students may apply creativity in their lab work.</i> <i>The application of their lab work may be used</i>

<p><i>science courses will be used in this unit.</i></p> <p><i>Students will demonstrate their proficiency with scientific language in their IA.</i></p>		<p><i>for Activity and Service. A connection to the “real world” and possible extensions are expected in the lab report.</i></p>
<p>Resources</p> <p><i>List and attach (if applicable) any resources used in this unit</i></p>		
<ul style="list-style-type: none"> ● Exemplar IA reports on Schoology ● Textbooks (Oxford and Pearson - see page 1) ● Laboratory resources ● Online notes and videos (Schoology) 		

REFLECTION: considering the planning, process, and impact of the inquiry

<p>What worked well</p> <p><i>List the portions of the unit (content, assessment, planning) that were successful</i></p>	<p>What didn't work well</p> <p><i>List the portions of the unit (content, assessment, planning) that were not as successful as hoped</i></p>	<p>Notes / Changes / Suggestions</p> <p><i>List any notes, suggestions, or considerations for the future teaching of this unit</i></p>
<ul style="list-style-type: none"> ● 	<ul style="list-style-type: none"> ● 	<ul style="list-style-type: none"> ●

Curriculum Unit Approval Statement

Every team member is expected to read and review the unit planner and contents contained in the unit planner.

This unit meets the rigorous review and approval process of Marietta City Schools. All components of the unit have been reviewed and approved including learning experiences, materials, resources, texts, and assessments. This unit's components:

- Are aligned to Georgia Standards of Excellence and MYP/DP subject area guide (if applicable)
- Are aligned to the pacing of the approved Subject Group Overview
- Provide resources that are appropriate for students' grade level, subject/course level, etc.

- Provide learning experiences that prepare students for course assessments

PLCs review each learning experience using three criteria and collaborate to provide explicit and specific information.

<p>Criteria I: Standards Alignment:</p> <p><i>Learning experiences should provide alignment to the standards and the MYP subject area guide (if applicable).</i></p>	<p>Criteria II: Materials, Resources, and Text Complexity and Controversial Topics and Issues:</p> <p><i>Materials, resources, and texts are grade level and content appropriate.</i></p>	<p>Criteria III: Assessment Alignment:</p> <p><i>Since assessment drives instruction, learning experiences must align to and prepare students for regular common formative and summative assessments used to determine whether students are mastering standards-based content and ATL skills.</i></p>
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Common Formative and Summative Assessments		
Assessment Title	Criteria I: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding the <u>alignment of learning experiences, materials, and resources to:</u> <ol style="list-style-type: none"> 1. State Standards 2. MYP/DP (if applicable) components 3. Aligned to learning experiences Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution.	Criteria II: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding <ol style="list-style-type: none"> 1. Complexity of resources including text and vocabulary 2. Controversial topics and issues in learning experiences, materials or resources Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution. Include the specific quote(s) and reference page numbers or location (ex: time in video).
Formative Assessment(s):	N/A	N/A
Summative(s) Assessment:	N/A	N/A
Plan to address issues or concerns noted:		

Learning Experiences Add additional rows below as needed.			
Learning Experience Title	Criteria I: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding the <u>alignment of learning experiences, materials, and resources</u> to: <ol style="list-style-type: none"> 1. State Standards 2. MYP/DP (if applicable) components Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution.	Criteria II: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding <ol style="list-style-type: none"> 1. Complexity of resources including text and vocabulary 2. Controversial topics and issues in learning experiences, materials or resources Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution. Include the specific quote(s) and reference page numbers or location (ex: time in video).	Criteria III: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding <ol style="list-style-type: none"> 1. Common Assessment alignment to instruction and/or standards Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution.
LE 1:	N/A	N/A	N/A
LE 2:	N/A	N/A	N/A
LE 3:	N/A	N/A	N/A
Plan to address issues or concerns noted:			

Resources listed on unit planner			
Add additional rows below as needed.			
Resources	Criteria I: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding the <u>alignment of learning experiences, materials, and resources</u> to: <ol style="list-style-type: none"> State Standards MYP/DP (if applicable) components Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution.	Criteria II: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding <ol style="list-style-type: none"> Complexity of resources including text and vocabulary Controversial topics and issues in learning experiences, materials or resources Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution. Include the specific quote(s) and reference page numbers or location (ex: time in video).	Criteria III: Does the PLC have any <u>concerns</u> or <u>issues</u> regarding <ol style="list-style-type: none"> Common Assessment alignment to instruction and/or standards Respond below with a N/A if you have no concerns or provide explicit comments related to concerns including method of resolution.
Resource:	N/A	N/A	N/A
Plan to address issues or concerns noted:			

By typing my name below I am acknowledging that I have fully read, reviewed, listed concerns with resolutions, and approved of all contents included in the unit planner including learning experiences, materials, resources, texts, and assessments referenced on it. All other content and materials not included on the unit planner are the local school's responsibility (BOE IKB).

Curriculum Team Signatures:
 Cody Morelock, PhD