



## THE AMERICAN SCHOOL OF MARRAKESH

**Integrity - Responsibility - Respect - Excellence**

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Dear ASM Students and Parents,

Welcome to the **June 2026** Summer Work Assignment overview for the American School of Marrakesh **Science Department**.


As our students prepare to step into the rigorous and rewarding world of the International Baccalaureate (IB) Diploma Programme, proactive preparation is a vital component of academic success. The IB Science curriculum moves at an accelerated pace. To optimize our valuable classroom environment for hands-on laboratories, advanced data analysis, and targeted examination strategies, our department utilizes proactive learning models.

The assignments outlined below are designed as "pre-season conditioning." They will assist students in developing independent research skills, mastering foundational content, and establishing structured workflows that prevent last-minute stress.

### **Essential Guidelines & Deadlines**

- **Due Date:** All completed summer assignments must be submitted on **September 1, 2026** (the first day of school).
- **Grading & Accountability:** These assignments carry weight. Across all subjects, completed work will be collected and graded as your very first official assessment of the new school year.
- **First-Week Expectations:** Class time will not be spent lecturing on this foundational material. Instead, teachers will immediately build upon this coursework through interactive application, specialized data tasks, and review sessions.
- **Early Assessments:** Students should prepare for low-stakes diagnostic quizzes and formal Summative Unit Examinations within the opening days of the semester.

Please review the specific coursework requirements below for your respective upcoming grade level and selected science pathways. All relevant digital text references, syllabus guidelines, and instructional hyperlinks are embedded directly into each course section for your convenience.

 **Questions Over the Summer?** If you or your parents have any questions regarding these assignments, curriculum tracks, or required resources over the summer break, please feel free to reach out directly to me at [sklahmamsi@asm.ac.ma](mailto:sklahmamsi@asm.ac.ma). Please note that responses may be slightly delayed during school holiday periods, but I will get back to you as soon as possible.





We wish all of our families a wonderful, restful, and rejuvenating summer break. Look for science in the world around you, and come ready to conquer your IB goals this September!






Sincerely,

**The ASM Science Department**

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**Incoming Grade 11**

<p><b>DP1 Biology</b></p>	<p><b>Welcome to IB Biology!</b></p> <p>IB Biology moves at a rigorous pace, covering roughly one topic per week. To maximize our limited class time, we utilize a <b>flipped classroom model</b>. Instead of spending lectures on basic definitions, you will preview and process core information at home. This ensures that when you walk into class, we can immediately dive into hands-on labs, data analysis, and exam strategies.</p> <p>This summer assignment serves as your "pre-season conditioning." It is designed to help you decode learning objectives, independently source information, and set up your portfolio structure for the next two years. We will kick things off with a familiar concept: <b>Topic A1.1 (Water)</b>.</p> <p> <b>Important Details:</b></p> <ul style="list-style-type: none"> <li>• <b>Due Date:</b> September 1st</li> <li>• <b>Grading:</b> This assignment counts as a Formative Assessment grade and will be followed by a quiz during the first week of school.</li> </ul> <p>Please read and follow all instructions carefully. Welcome aboard!</p> <p><b>Resources:</b></p> <p> DP1_IB Biology Summer Assignment.pdf</p> <p> IB Biology Textbooks</p> <p> CO2028 - 2-Year Outline Biology .pdf</p>
<p><b>DP1 Chemistry</b></p>	<p><a href="#">Summer Assignment</a></p> <p><b>Topic: Introduction to the Particulate Nature of Matter</b></p> <p><b>Purpose:</b> To help you understand key concepts, practice all IB command terms, and prepare for Year 1.</p> <p><b>Part 1: Summarize</b></p> <ul style="list-style-type: none"> <li>• Elements, compounds, and mixtures</li> <li>• Three separation techniques and the properties they use</li> <li>• Particle model of solids, liquids, gases, and changes of state</li> <li>• Temperature and average kinetic energy of particles</li> </ul> <p><b>Part 2: IB Command Terms Practice</b></p> <p>For <b>all IB command terms</b> (e.g., Define, Describe, Explain, Compare, etc.)</p> <ul style="list-style-type: none"> <li>• Write each term's meaning in your own words</li> <li>• Write one sample question about the particulate nature of matter using that term</li> <li>• Answer your question briefly</li> </ul> <p><b>Part 3: Notes</b></p> <p>Make organized notes on the topics above using headings and bullet points.</p> <p><b>Part 4: Syllabus Review &amp; Reflection</b></p> <ul style="list-style-type: none"> <li>• Review the list of IB Chemistry syllabus topics (found in the Subject Guide or textbook).</li> <li>• Identify 1–2 topics that seem most challenging and briefly explain why.</li> <li>• Mention any topic you feel confident or excited about.</li> </ul> <p>Write a short paragraph with your reflections.</p>

	<p><b>Submit</b></p> <ul style="list-style-type: none"> <li>• Your summaries</li> <li>• Your IB command term definitions, questions, and answers</li> <li>• Your notes</li> </ul> <p><b>Note:</b> This builds your foundation and gets you ready for IB Chemistry Year 1.</p> <p><b>Due Date:</b>September 1st</p> <p><b>Resources:</b></p> <p> <a href="#">Chemistry Guide 2025.pdf</a></p> <p> <a href="#">Pearson IB Chemistry Textbook.pdf</a></p> <p> <a href="#">Chemistry Course Outline - Chemistry.pdf</a></p>
<p><b>DP1 Physics</b></p>	<p>IB Physics is a challenging course that will help you develop your problem-solving, analytical, and scientific thinking skills. In our class, new concepts will be explained and explored during lessons, and you will reinforce your understanding through practice exercises and assignments completed at home.</p> <p>This summer assignment is designed to give you a strong start by introducing the first topic of the course:</p> <p><b>A1 – Kinematics</b></p> <p>Important Details:</p> <ul style="list-style-type: none"> <li>• <b>Due Date:</b> September 1st</li> <li>• <b>Grading:</b> This assignment counts as a formative assessment and will be followed by a quiz during the first week of school.</li> </ul> <p>Please complete all tasks carefully and come ready to start an exciting year of physics.</p> <p><b>Resources:</b></p> <p> <a href="#">Physics - Course Companion - Homer, Piętko and Heathcote - Fifth Edition - ...</a></p> <p> <a href="#">Physics - Allum and Morris - Hodder 2023.pdf</a></p>

## Incoming Grade 12

<p><b>DP2 Biology</b></p>	<p><b>Welcome to your final year of IB Biology!</b> To maximize our classroom laboratory time and intensive exam preparation this autumn, all rising Grade 12 Biology students are required to complete a targeted summer learning portfolio. This assignment focuses on our upcoming units in <b>Ecology and Evolution</b>. Rather than just passively reading, students will use a highly structured checklist to build their own condensed, one-page master guides for 9 core concepts. Additionally, students will jumpstart their required Internal Assessment (IA) by brainstorming three potential research questions. This proactive step ensures our seniors hit the ground running with advanced data analysis, IA refinement, and past-paper exam strategies right from the start.</p> <ul style="list-style-type: none"> <li>• <b>Submission Deadline:</b> The completed 9-page portfolio and the IA brainstorming matrix must be uploaded to ManageBac no later than <b>Tuesday, September 1st</b>.</li> <li>• <b>Back-to-School Expectations:</b> Because class meets every day (Monday</li> </ul>
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	<p>through Friday), we will immediately hit the ground running on Tuesday, September 1st. We will spend exactly 8 days applying your summer notes to complex data-analysis tasks, utilizing the GenBank database, mapping ecosystem stability indices, and refining IB exam strategies.</p> <ul style="list-style-type: none"> <li>● <b>Grading &amp; Assessment:</b> Your gradebook will be updated rapidly during the first two weeks of school. Your summer notebook will receive a formative checklist grade for thoroughness, compliance with the one-page rule, and precision regarding IB command terms. This will be paired with short, low-stakes entry quizzes throughout the week, culminating in a <b>Summative Unit Exam on Thursday, September 10th.</b></li> </ul> <p><b>Where to find details:</b> The complete syllabus objective checklist, resource links, and formatting instructions are fully updated and accessible on <b>ManageBac.</b> Enjoy the summer break, look for biology in the world around you, and come ready to conquer DP2 starting September 1st!</p> <p><b>Resources:</b></p> <ul style="list-style-type: none"> <li> Copy of DP2 Biology Summer Assignment.pdf</li> <li> IB Biology Textbooks</li> <li> DP2 Biology Course Outline</li> </ul>
<p><b>DP2 Chemistry</b></p>	<p>This summer assignment is designed to prepare you for success in both your Internal Assessment (IA) and core IB Chemistry content on reactivity.</p> <ol style="list-style-type: none"> <li>1. Internal Assessment (IA) – Draft Write-Up You are required to develop your IA write-up up to the Methodology section only. This is a draft submission, which will be shared with your teacher for feedback and refinement before you begin experimental work and complete your final IA.</li> <li>2. Reactivity (R2) – Core Content Review You are required to study and summarise the IB Chemistry topic: <ul style="list-style-type: none"> <li>● R2: Reactivity – How much, how fast and how far? (Assigned on Kognity and ManageBac)</li> <li>● R2.1 – How much? -- The amount of chemical change</li> </ul> </li> </ol> <p>Due: September 1st These assignments will count as your first Formative Assessment grades.</p> <p><b>Resources:</b></p> <ul style="list-style-type: none"> <li> DP2 Chemistry Summer Assignment.pdf</li> <li> <b>Chemistry Guide 2025.pdf</b></li> <li> <b>Pearson IB Chemistry Textbook.pdf</b></li> </ul>
<p><b>DP2 ESS</b></p>	<p>As our rising seniors prepare to balance a demanding and rewarding final year in the IB Diploma Programme, proactive preparation is key. To maximize hands-on lab time and critical data collection in the fall, our incoming Grade 12 ESS students have a targeted summer assignment.</p> <p>Students will be independently previewing <b>Unit 5: Land Systems (Soil &amp; Agriculture)</b> using their custom class slide and workbook packets. This preparation includes a brief, home-based "soil texture jar test" to observe how soil systems behave in their local environments.</p> <p> <b>Deadline &amp; Submission</b></p> <ul style="list-style-type: none"> <li>● <b>Due Date:</b> All completed work must be submitted on <b>September 1st</b> (the first day of class).</li> </ul>








### Grading & First-Week Expectations

- **Accountability & Grading:** Your completed 5.1 and 5.2 workbooks will be collected and graded for completeness and accuracy on Day 1. This will form your first official formative grade of the senior year.
- **The First Week Back:** We will not be spending class time lecturing on this foundational material. Instead, our first week of school will be highly interactive: we will analyze the community results of your local soil jar tests, troubleshoot the most complex system concepts together, and review your ESS vocabulary dictionaries.
- **Unit 5 Test:** To wrap up this module cleanly, you will take your official **Unit 5 Summative Examination at the end of the first week of school.**

By grounding themselves in these topics over the break, students will hit the ground running—saving precious time as they simultaneously launch their Extended Essays (EE) and ESS Internal Assessments (IA) in September. All interactive workbooks, digital slide packets, and step-by-step instructions are available for download on the school portal.

Have a wonderful, restful summer break, and we look forward to a fantastic senior year!

#### Resources:

-  Entering Grade 12 - ESS Summer Work Assignment (1).pdf
-  ESS\_Oxford\_Textbook\_2024.pdf
-  ESS\_Pearson\_Textbook\_2024.pdf
-  subtopic\_5.1\_soils\_workbook\_\_1\_(1).pdf
-  subtopic\_5.1\_soils\_\_1\_(1)
-  subtopic\_5.2\_agriculture\_and\_food\_workbook(1).pdf
-  subtopic\_5.2\_agriculture\_and\_food(1)

### DP2 Physics

Dear Students,



To ensure a strong start to Year 2, please use the summer break to thoroughly revise all the Physics concepts covered in Year 1. A solid understanding of these topics will provide an excellent foundation for the advanced concepts you will study next year.

As part of your summer assignment, complete all the problems from **Unit A** and **Unit C** in the Physics coursebook (The hardcopy of the book). Make sure your work is neat, well-organized, and shows all necessary steps and calculations.

**Please note that this assignment will be graded.** Submit your completed work on the first day of school (September 2026). Completing the assignment on time will help you avoid last-minute stress and allow us to begin Year 2 smoothly and effectively.

Wishing you a productive and enjoyable summer!

#### Resources:

-  Physics - Allum and Morris - Hodder 2023.pdf
-  Physics - Course Companion - Homer, Piętko and Heathcote - Fifth Edition - ...