ROCHAMBEAU
THE FRENCH INTERNATIONAL SCHOOL

# SUMMER RECOMMENDATIONS
## 2nde to 1ère

**Summer is for disconnecting and recharging. With a few targeted practices, students can, however, prevent loss of learning, develop their memory retrieval capacity, enhance their curiosity, and start the new school year both refreshed and prepared.**

**For most subjects of the French Program, the website Lumni offers great resources to support the transition from 2nde to 1ère.**

**For the IB program, Study IB is a go-to website with a trove of resources to be introduced to various DP subjects (some pages are free of access; other resources require a subscription).**

## FRANÇAIS

We always recommend reading as much French as possible. Please see these reading suggestions prepared by the French Department for all 2nde students entering 1ère in the fall.

**IB MYP to French Program & Vice-Versa**
Students should also practice the methodology of the French "*commentaire composé*" and "*dissertation*" with this workbook and/or this website.
–Workbook: Cahier de Français 2nde. Cahier d'exercices, Bordas.
–Website: L'écrit du Bac de Français, Lumni.

## ENGLISH

We also recommend reading in English as much as possible over the summer. Students should select at least two novels from the reading suggestions list prepared by the English Department.

Practicing with Sadlier and IXL is also a good way to strengthen grammar and spelling.

**Entering 1ère IB**
Your summer reading assignment is to read and annotate the novel ***In Cold Blood*** **by Truman Capote** and the play ***A Doll's House*** **by Henrik Ibsen**.

The editions you should use are included in the 2025-2026 book list.

In your annotations, you should focus on and be prepared to discuss and/or write about the following:

*In Cold Blood*

- What is the author's opinion about the death penalty based on your reading of the novel?
- What is the rhetorical structure of the narrative, and how does it contribute to literary elements like characterization, setting, suspense, etc.?

*A Doll's House*

- What are the feminist themes in the play, and how does the author use them to develop plot and character?
- What comparisons can you make between *A Doll's House* and *The Awakening* by Kate Chopin?

## THIRD LANGUAGE

Looking to practice your Arabic, German, or Spanish? Just like for French and English, read as much as possible in the language, listen to podcasts, and watch movies.

Reviewing grammar in your textbook will also help memory retrieval and guarantee a smooth transition back into the school year.

## HUMANITIES

We recommend reading the news daily and selecting some of the suggested resources on this reading list and Padlet prepared by the History/Geography Department (the list includes useful resources and suggestions for students who will study Economics).

**IB MYP to French Program & Vice-Versa**
The MYP World Geography curriculum was designed to include all the topics studied in 2nde Géographie in the French Program. Students have been introduced to core concepts and approaches

that prepare them well for Histoire-Géographie (including essay writing for the BFI section) and the Spécialité HGGSP.

If you enter the IB from 2nde in the French Program, remember that both Global Politics and Economics are taught in English and entail extensive writing in the English language.

## SCIENCES

A great way to stay curious and develop one's scientific knowledge and vocabulary is to listen to science podcasts:

- *Chemistry for Your Life podcast*
- *Chemistry in its element*
- *Orbitals podcast by the American Chemical Society*
- *Houston, we have a podcast (more space-based but it is good to branch out!)*
- *Kinematics (Website by Chris Hamper & Emma Mitchell)*
- *Forces (Website by Chris Hamper & Emma Mitchell)*
- *Cell Biology (Website by Chris Hamper & Emma Mitchell)*
- *Ecology (Website by Chris Hamper & Emma Mitchell)*

**IB MYP to French Program & Vice-Versa**
In the sciences, the MYP curriculum was designed with both the DP and the French Program preparation in mind.

As such, students coming from 2nde MYP have studied most of the topics covered in the French Program, with the addition, or exception, of the following:

| | Topics studied in 2nde MYP that are not covered in 2nde French Program | Topics not studied in 2nde MYP |
|---|---|---|
| **BIOLOGY** | - Expliquer comment les résultats des croisements génétiques peuvent être utilisés pour définir les génotypes parentaux.<br>- Décrire comment les gènes codent pour les protéines.<br>- La spéciation.<br>- Le système nerveux : Les stimuli et les réflexes. | La géologie (Les élèves qui changent de programme peuvent cliquer sur le lien suivant : https://www.vivelessvt.com/lycee/le-programme-de-2nde/ et travailler le thème 2 "Les enjeux contemporains de la planète"). |

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| | - La biotechnologie. | |
| **CHEMISTRY** | ● Electronegativity<br>● Intermolecular forces (overview)<br>● Predicting the products of an acid-base reaction<br>● Measuring the initial rate of a reaction<br>● Investigating factors that affect the rate of a reaction - collision theory<br>● Calculating the molar concentrations of a solution<br>● Calculating the number of moles from concentration and volume<br>● Calculating the number of moles from mass and molar mass<br>● Spectrophotometric determination of a concentration | ● Masse volumique (we mention density but do not do as much work with it)<br>● Synthèse d'une substance avec le chauffage à reflux<br>● Significant figures review (mentioned but not explicitly taught until 1ère in IB)<br>● Fusion temperature<br>● Nuclear reactions<br>● Glassware names in French (we learn them in English!) |
| **PHYSICS** | **1. How big is everything?**<br>1 Find out how the Universe is structured, from the very smallest observable sizes to the very largest.<br>2 Explore the various ideas that humanity has held at different times about the nature of the 'stuff' in the Universe, and how different patterns at the smallest of scales can make the biggest differences.<br>3 Take action to research how new materials might be able to help those in less economically developed parts of the world.<br><br>**4. How far, how fast, how much faster?**<br>1 Find out how motion can be measured, and how it can be changed.<br>2 Explore:<br>- how humans first circumnavigated the world, and how much more quickly we could do it now<br>- whether athletes can outrun sports cars and how it is possible to accelerate even when speed does not change | **14. Réfraction et réflexion de la lumière**<br>1 Réfraction de la lumière<br>2 À la recherche d'un indice<br>3 Réflexion de la lumière<br>4 L'expérience des couleurs<br><br>**15. Lentilles minces convergentes**<br>1 Le foyer d'une lentille mince convergente<br>2 Image d'un objet sur un écran<br>3 L'œil |

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| | - how ideas about motion have changed, and what we can learn from the way they have changed.<br>3 Take action to raise awareness about the dangers of speeding traffic and evaluate the adequacy of speed controls where you live.<br><br>**8. How is our climate changing?**<br>1 Find out how the Earth's atmosphere helps maintain the conditions that make life possible.<br>2 Explore the physics behind the processes that keep the Earth's climate in balance and the factors that are affecting that balance.<br>3 Take action locally to reduce our own impact on the global climate balance. | |

The sciences pages of Lumni offer great resources for reviewing the 2nde curriculum.

If you did not study chemistry in 2de MYP last year but plan to take it in DP1, you will need to review the topics covered in MYP chemistry during the summer. Please see the syllabus for details on these topics. Khan Academy, CK-12, and Crashcourse Chemistry on YouTube are all valuable resources you can use to help you.

## MATHEMATICS

| | Topics studied in 2nde MYP that are not covered in 2nde French Program | Topics not studied in 2nde MYP |
|---|---|---|
| **MATH** | ● **Square roots and Rational exponents**<br>○ all computations<br>● **Trigonometry**<br>○ cosine and sine rule<br>● **Quadratic equations**<br>○ discriminant<br>● **Quadratic functions**<br>○ x and y intercepts, vertex, axis of symmetry<br>○ Graph | ● **Colinéarité de vecteurs** :<br>○ méthode du déterminant<br>● **Arithmétique**<br>○ multiples et diviseurs<br>○ PGCD<br>○ Nombres premiers<br>● **Algorithmique**<br>● **Probabilites**<br>○ loi des grand nombres |

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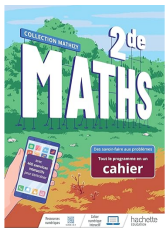
| | ● **Functions**<br>○ exponential function<br>● **Vectors**<br>○ Scalar product<br>● **Statistics**<br>○ Line of best fit<br>○ correlation | Pour réviser le programme de Mathématiques de 2nde enseignement français, les élèves peuvent s'appuyer sur un cahier d'exercices de ce type<br>  |

**IB Prep**

These websites can help you review and prep for IB DP Math:
--AA (Analysis & Approaches): Khan Academy virtual class (use code PMDKWZFG to join the class) and Revision Village.
--AI (Applications & Interpretations): Study IB AI

**Here is the list of topics you need to review before starting IB DP so you are ready for the pre-assessment we will conduct at the very start of the school year:**

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| **Numbers and Algebra**<br>Scientific notation<br>Laws of exponents<br>Solving equations<br>Simplifying radicals and operations on radicals<br>Factoring<br><br>**Functions**:<br>Graphing linear equations<br>Solving systems of equations<br>Domain and range of functions<br>x and y-intercepts of functions<br>Variations of a function<br>Quadratic functions<br>Exponential functions<br>Linear, square, cubic, reciprocal functions | **Geometry:**<br>Midpoint and distance formulae<br>Trigonometry of right triangles<br>Sine, cosine rules, area of a triangle<br>Surface area and volume of right three-dimensional solids<br>Pythagorean theorem<br>Vectors: component form, dot product<br><br>**Statistics and probability:**<br>Basic probability<br>Dependent and independent events<br>Venn diagrams<br>Mean, median, mode, range, quartiles of data sets<br>Box and whisker plots |

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| | Outliers<br>Histograms<br>Correlation (pearson coefficient) and line of best fit |

## IB DP EXTENDED ESSAY & CAS

Students in IB DP submit the full draft of their EE at the end of 1ère. A good summer preparation is to start thinking about which of your 6 subjects you will choose for your EE. Most students decide to write their EE in one of their higher-level subjects and/or a subject related to what they wish to study in college.

You can also start thinking about more specific topics you would like to investigate within this subject and gather resources in a sort of pre-bibliography on your topic.

For more information about the IB DP Extended Essay, see this page.