الأكاديمية الدولية - عمان

THE INTERNATIONAL ACADEMY - AMMAN

REVISION BOOKLET

FOR

End of Year Exams

May - June 2023

Grade: 10

VERSION 2

WHAT IS THIS BOOKLET FOR?

In this booklet you will find tips on how to study and plan your work, as well as how to deal with stress. However, it is important to know that the main purpose of the assessment week is to work on your Approaches To Learning skills.

The results for the end of year exams are *not* going to determine whether or not you will pass the year. Nevertheless, these exams are your last opportunity to improve on the criteria assessed; hence improve your overall grade for the subject.

Another aim for this assessment week is to give you experience in preparing for, and sitting formal assessments as this is what you will have to do in the Diploma Programme.

REVISING

Planning

Find out what topics will be on the assessment. Your revision topics are listed in this booklet!

Organize Your Study Space

Make sure you have enough space to spread your textbooks and notes. Get rid of all distractions, and make sure you feel as comfortable and able to focus as possible.

Make a Revision Calendar

Plan your revision carefully so you have enough time to cover each topic. Work backwards from the assessment and divide up your time. Use a large planner to write in times of your assessments (one is provided in the back of this booklet). Divide up your time, making sure you spend more time on the weaker subjects. Leave some slots blank so you can use them for extra revision. Leave some time for yourself especially just before the assessments.

Make Your Revision Active

Give your revision session a focus. Don't just re-read your notes in hope you will learn them. Learn about a particular part, then test yourself by drawing a diagram or flowchart, make pictures, cartoons, put boxes around words, talk to yourself. Explain an answer to a question to those around you. That will help you to get it clear in your head and can highlight any areas where you need more work.

Take Regular Breaks

Studies have shown that for long-term retention of knowledge, taking regular breaks really helps.

Snack On 'Brain Food'

Keep away from junk food, caffeine, energy drinks and carbonated drinks! Keep your body and brain well-fuelled by choosing nutritious foods that have been proven to aid concentration and memory, such as fruits, vegetables, whole-grain cereal, nuts and yogurt. Drink lots of water.

SIX WAYS OF COPING WITH STRESS

Stress is the body's normal response to a challenge, threat or excitement. Some people cannot perform due to stress and others are motivated by it to do well. You need to find out what level of stress motivates you and what amount paralyzes you. When you know this, you make sure that you keep your stress levels in the motivational zone. See 'six ways of coping with stress' below.

1. **Get Organised**

Draw up an action plan to improve your time management. Plan ahead and set yourself goals. Identify busy periods if necessary.

2. **Think Positively**

Recognise what you have achieved so far. Make a list of tasks and tick them off as you finish them. Take action! Don't put off those tasks you don't want to deal with. Make a plan and stick to it. Keep problems in perspective. Remember to think about what you are doing well.

3. **Keep Fit and Healthy**

Take regular exercise. When you are under stress your body produces adrenalin. Exercise helps to get rid of the biochemical effects of stress, so making you less tense. Eat a balanced diet and eat regularly. If you're hungry and stressed, you're less likely to be able to concentrate properly. Get plenty of sleep. If you're too tired, you can't study efficiently. Remember to give yourself time to unwind before going to sleep.

4. **Learn to Relax**

Allow time for relaxation. Find the balance between time spent working and leisure. Learn relaxation techniques (eg. Breathing quietly for 5minutes). This will help you to control your stress.

5. **Stay in Control**

Take responsibility for dealing with your stress. Don't blame your circumstances. Have realistic targets. Don't try to change everything at once. Identify what is causing your stress and take steps to change it gradually.

If your stress is caused by parental pressure, avoid getting into unproductive arguments. Try to keep calm, listen to what your parents say. Try to understand their point of view. Then put forward your ideas assertively rather than aggressively.

6. **Talk it Over**

Find someone to talk to. Find an adult who you feel would listen to you and tell them why you are feeling anxious. Ask for advice. Discuss ways of dealing with your stress. Then make up your own mind what you are going to do about it.

COMMAND TERMS

The command terms listed are used to define the thinking skills that MYP students are expected to demonstrate. The definitions may vary when used in other contexts.

Command terms	MYP definitions
Analyse	Break down in order to bring out the essential elements or structure. To identify parts and relationships, and to interpret information to reach conclusions.
Annotate	Add brief notes to a diagram or graph.
Apply	Use knowledge and understanding in response to a given situation or real circumstances.
Appraise	Evaluate, judge or consider text or a piece of work.
Argue	Challenge or debate an issue or idea with the purpose of persuading or committing someone else to a particular stance or action.
Calculate	Obtain a numerical answer showing the relevant stages in the working.
Classify	Arrange or order by class or category.
Comment	Give a judgment based on a given statement or result of a calculation.
Compare	Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.
Compare and contrast	Give an account of the similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
Construct	Develop information in a diagrammatic or logical form.
Contrast	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
Deduce	Reach a conclusion from the information given.
Define	Give the precise meaning of a word, phrase, concept or physical quantity.
Demonstrate	Prove or make clear by reasoning or evidence, illustrating with examples or practical application.

Derive	Manipulate a mathematical relationship to give a new equation or relationship.
Describe	Give a detailed account or picture of a situation, event, pattern or process.
Design	Produce a plan, simulation or model.
Determine	Obtain the only possible answer.
Discuss	Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.
Distinguish	Make clear the differences between two or more concepts or items.
Document	Credit sources of information used by referencing (or citing) following one recognized referencing system. References should be included in the text and also at the end of the piece of work in a reference list or bibliography.
Estimate	Find an approximate value for an unknown quantity.
Evaluate	Assess the implications and limitations; make judgments about the ideas, works, solutions or methods in relation to selected criteria.
Examine	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
Exemplify	Represent with an example.
Explain	Give a detailed account including reasons or causes.
Explore	Undertake a systematic process of discovery.

Command terms	MYP definitions
Formulate	Express precisely and systematically the relevant concept(s) or argument(s).
Identify	Provide an answer from a number of possibilities. Recognize and state briefly a distinguishing fact or feature.
Infer	Deduce; reason from premises to a conclusion. Listen or read beyond what has been literally expressed.
Interpret	Use knowledge and understanding to recognize trends and draw conclusions from given information.
Investigate	Observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions.
Justify	Give valid reasons or evidence to support an answer or conclusion.
Label	Add title, labels or brief explanation(s) to a diagram or graph.
List	Give a sequence of brief answers with no explanation.
Measure	Find the value for a quantity.
Outline	Give a brief account.
Predict	Give an expected result of an upcoming action or event.
Present	Offer for display, observation, examination or consideration.
Prove	Use a sequence of logical steps to obtain the required result in a formal way.
Recall	Remember or recognize from prior learning experiences.
Reflect	Think about deeply; consider.
Recognize	Identify through patterns or features.
Show	Give the steps in a calculation or derivation.
Sketch	Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.
Solve	Obtain the answer(s) using appropriate methods.
State	Give a specific name, value or other brief answer without explanation or calculation.
Suggest	Propose a solution, hypothesis or other possible answer.
Summarize	Abstract a general theme or major point(s).
Synthesize	Combine different ideas in order to create new understanding.
Use	Apply knowledge or rules to put theory into practice.

مصطلحات الإرشاد والتّوجيه:

المصطلح	التعريف
يحلّل	يقُسِّم إلى أجزاء أصغر لإبراز العناصر أو التراكيب الأساسيّة. لتحديد الأجزاء والعلاقات، ولتفسير المعلومات للتوصل إلى الاستنتاجات.
يذيّل	يضيف ملحوظات موجزة إلى مُخطّط أو رسم بياني.
يطبّق	يستخدم المعرفة والفهم استجابة لموقف ما أو ظروف حقيقيّة. يستخدم الأفكار أو المعادلة أو المبدأ أو النظريةً أو القانون فيما يتعلّق بمشكلة أو قضية مُعطاة. انظر أيضاً مصطلح : يستخدم.
يحسب	يحصل على إجابة عدديةً تعرض المراحل ذات الصلة في العمليّة.
يصنّف	يرُتبِ حسب الطبقة أو الفئة.
يعلّق	يحكم على أساس بيان/جملة مُعيّنة أو نتيجة حسابات مُعيّنة.
يقارن	يسرد أوجه الشبه بين شيئين أو موقفين أو أكثر، مع الإشارة إليهما /إليها جميعاً، بشكل كامل.
يقارن ويقابل	يسرد أوجه الشبه والاختلاف بين شيئين أو موقفين أو أكثر، مع الإشارة إليهما /إليها جميعاً بشكل كامل.
يضع/ينشئ	يعرض المعلومات في شكل بياني أو منطقي.
يقابل	يسرد أوجه الاختلاف بين شيئين أو موقفين أو أكثر، مع الإشارة إليهما /إليها جميعاً، بشكل كامل.
يبُدع/يعمل/يض ع*	ينشأ من تفكير الفرد أو خياله كعمل أو اختراع.
*ينقد	يقُدِّم استعراضاً أو تعليقاً ناقداً، وخاصة عند التعامل مع الأعمال الفنيّة أو الأدبيّة. انظر أيضاً مصطلح "يقُيّم"
يستدل	يصل إلى نتيجة من المعلومات المعطاة.
يعرّف	يعطي المعنى الدقيق لكلمة، أو عبارة، أو مفهوم، أو كميّة مادية.

يعرض	.يوُضِّح بالحجة أو المنطق أو الشواهد، موضحاً بالأمثلة أو التطبيق العملي
يستذكر	.يتذكرّ أو يمُيِّز من خبرات التعلّم المسبقة
يشتق	.يعالج علاقة رياضيّة لإعطاء معادلة أو علاقة جديدة
يصف	.يسرد تفاصيل أو صورة موقف أو حدث أو نمط أو عمليّة ما
يصُمِّم	.ًيضع خطة أو محاكاة أو نموذجا
يقُرِّر	.يحصل على الإجابة الوحيدة المُمكنة
*يطوِّر	يحُسِّن تحسيناً مُتزايداً، أو يسهب أو يتوسّع تفصيلاً. يرتقي إلى حالة أكثر .تقدماً أو فعاليّة
يفُاضل	.يحصل على مُشتق لإحدى الدّوال
يناقش	يقدّم نظرة عامة متدبرة ومتوازنة تشمل عدة حُجج أو عوامل أو فرضيّات. يجب .عرض الآراء أو الاستنتاجات بوضوح ودعمها بشواهد مناسبة
يفُرِّق	.يوُضِّح الفرق بين مفهومين أو شيئين أو أكثر
*يوثِّق	يثُبت جميع مصادر المعلومات المستخدمة بواسطة ثبت مراجعها ،أو الاستشهاد بها، باستخدام نظام توثيق معترف به. يجب تضمين الإشارة إلى المراجع في متن .النص ونهاية العمل المكتوب في قائمة المراجع أو قائمة المؤلفات المستخدمة
يرسم	يعرض بواسطة مُخطّط أو رسم بياني دقيق ومُعنون، باستخدام القلم الرصاص. (يجب استخدام مسطرة)حافة مُستقيمة، مع الخطوط المُستقيمة. يجب رسم المُخطّطات حسب مقياس الرسم. يجب رسم نقاط المُخطّط رسماً صحيحاً ،إذا كان .ذلك ملائما وربطها بخط مُستقيم أو منحنى انسيابي
يقُدِّر	.الحصول على قيمة تقريبيّة لكميّة غير معروفة
يقيِّم	"يقيّم الشيء بوزن مكامن قوته وحدوده. انظر أيضاً مصطلح "ينقد
يختبر/يفحص	ينظر في حُجة أو مفهوم ما بطريقة تكشف الافتراضات والعلاقات المتبادلة .للقضية
يشرح	يقدّم بياناً مُفصّلاً مع ذكر المبررات أو الأسباب. انظر أيضاً مصطلح .""يبُررّ/يعُلل
يستكشف	.يشرع في عمليّة منهجيّة للاكتشاف
يجد	يحصل على إجابة تعرض المراحل ذات الصلة في العمليّة.
يصوغ	يعُبرّ عن المفهوم/المفاهيم أو الحُجة/الحُجج ذات الصلة بدقة ونظام.
من ثمَّ	يستخدم الطالب العمل السابق للحصول على النتيجة المطلوبة.
من ثمَّ، أو باستخدام طريقة أخرى	.ًيقُترح أن يستخدم الطالب العمل السابق، ولكن الطرق الأخرى تقُبل أيضا
يحُدِّد	يقُدِّم إجابة من عدد من الاحتمالات. يتعرف على حقيقة أو خاصيّة مُميزَّة ويذكرها .بإيجاز

يفسّر	يستخدم المعرفة والفهم للتعرف على التوجهات واستخلاص النتائج من المعلومات المعطاة.

يتقصّى	يلاحظ، أو يدرس، أو يختبر بشكل مُفصَّل أو بطريقة منهجيّة بهدف إثبات الحقائق والتوصل إلى استنتاجات جديدة.
ِيبرّر/يعلّل	يعطي أسباباً وجيهة أو شواهد لدعم إجابة أو استنتاج ما. انظر أيضاً مصطلح "يشرح"
يوسم	يضيف عنواناً أو أسماءً أو تفسيراً/تفسيرات موجزة إلى مُخطّط أو رسم بياني.
يسرد	يقدّم سلسلة من الإجابات المُوجزة دون تفسير.
يقيس	يحصل على قيمة لكميّة ما.
*ينظّم	يضع الأفكار والمعلومات في ترتيب مناسب أو منهجي.
يوجز	يقدّم سرداً موجزاً أو مُلخصا.
يخطّط/يرسم	يعلّم موضع النقاط على المُخطّط.
يتنبّأ	يعطي النتيجة المُتوقعة لعمل أو مناسبة قادمة.
يقدّم/يعرض	يقدّم شيئاً للعرض أو الملاحظة أو الاختبار أو الدراسة.
يضع *الأولويات	يولي أهمية نسبيّة أو يضع في ترتيب حسب الأفضليّة.
يبرهن	يستخدم سلسلة من الخطوات المنطقيّة للحصول على النتيجة المطلوبة بطريقة رسميّة.
*يختار	يختار من قائمة أو مجموعة.
يوضّح	يعطي الخطوات في عمليّة حسابيّة أو استنتاجيّة.
يوضّح أن	يحصل على النتيجة المطلوبة ، ربما باستخدام المعلومات المُعطاة دون الطبيعة الرسميّة للبرهان. لا تتطلّب أسئلة "وضّح أنّ" بشكل عام باستخدام الآلة الحاسبة.
يرسم مُخطّطا	يعرض باستخدام مُخطّط أو رسم بياني موسوم كما هو مناسب. يجب أن يعطي الرسم التخطيطي فكرة عامة عن الشكل أو العلاقة المطلوبة ويجب أن يشمل المزايا ذات الصلة.
يحل	يحصل على الإجابة/الإجابات باستخدام الطرق الجبريةّ و/أو العدديةّ و/أو الطرق الرسوميّة.
يذكر	يعطي اسماً مُعيّناً أو قيمة أو إجابة موجزة أخرى دون تفسير أو إجراء حسابات.
يقترح	يقدّم حلاً أو فرضيّة أو إجابة أخرى مُمكنة.
*يلخّص	يجمل موضوعاً عاماً أو نقطة/نقاطاً رئيسة.
*ِيركّب	يجمع الأفكار المُختلفة من أجل إنشاء فهم جديد.

إلى أي مدى	ينظر في ميّزات أو أي خصائص أخرى لحُجة أو مفهوم ما. يجب عرض الآراء أو الاستنتاجات بوضوح ودعمها بشواهد مناسبة وحُجج سليمة.
يتتبع	يتبع ويسُجل عمل إحدى اللوغاريتمات.
يستخدم	يطُبقِ المعرفة أو الأحكام لتطبيق النظرية". انظر أيضاً مصطلح "يطُبَق.
يتحقق	يقُدمِ الشواهد التي تثُبت صِحَّة النتيجة.
يِّيدُون	يحصل على الإجابة/الإجابات، عادة باستخراج المعلومات. دون الحاجة للحساب أو مع القليل منه. ليس ضرورياً عرض طريقة العمل.

TIPS FOR END OF YEAR EXAMS

1. Read the INSTRUCTIONS before the exam carefully.

   How many questions do you have to answer?

   Are there questions on both sides of the paper?

   Do your answers have to be on separate pieces of paper?

2. For each exam, you will be given 5 minutes reading time. During that time, read ALL of the questions. You are not allowed to write during that time.

3. Keep an eye on the command terms. These terms inform you on the amount of detail required in your answers.

4. Decide on AN ORDER of answering – do your BEST questions FIRST.

5. Stay in motion. If you do get stuck on a question, think about it for a minute or two. If nothing comes to you, move on to another problem. You may later have time to return to it.

6. When answering questions, try not to repeat yourself. Keep your language and expression straightforward.

7. If you have time, check your answers for SPELLING, GRAMMAR and EXPRESSION.

CODE OF CONDUCT DURING ASSESSMENTS

1. Students must enter and leave the examination in a quiet and orderly manner. They are to sit in their assigned seats.

2. No talking or communicating with any student either at the beginning whilst exams are distributed; during the exam; or at the end when materials are being collected. This includes eye contact and gestures. **Breaking this rule may result in the test paper being cancelled**.

3. Exam stationary must be brought in clear plastic bags. Students are not allowed to borrow materials from other students during an exam.

4. The instructions of the invigilator must be obeyed. The invigilator has the right (at any time) to expel from the examination room any student whose behaviour is interfering with the proper conduct of the examination

5. No questions may be asked of the invigilating teacher.

6. All materials which may not be used during the test (notes/textbooks) are to be left OUTSIDE of the classroom.

7. All exams must be completed in blue or black pen, unless instructed otherwise. Graphs and drawings can be done in pencil.

8. Students who finish the exam early are not allowed to leave the examination.

9. Students who are over 30min late to the exam will not be allowed to sit it. Students who are less than 30min late will be allowed to sit the exam but will not be given extra time.

10. Phones and **all watches** must be handed in as soon as you enter the examination room.

11. White-out is not to be used during the examination.

12. Students are not allowed to go to the toilet during the first hour and last 15 min of the exam.

What you need to bring to the assessment:

- Two pencils
- Sharpener
- Eraser
- Two blue or black pens
- Calculator
- Ruler

  -All above items placed in a clear, plastic bag
- Water bottle (optional)

What you are NOT allowed to bring into the room:

- Pencil case
- Mobile phone, **any type of watch** or any other electronics
- Own paper and white out / tipex
- Food (including candy and chewing gum)

G10 Spanish B – Language Acquisition

Name of Teacher:	Ms. Farah
Length of exam:	2 hours
Criteria assessed:	B and D
Revision topics:	Unidad 2 - Mitos y leyendas Unidad 3 - El acoso escolar Unidad 4 - El cuento
Materials needed during exam:	**Requisitos para los** **Criterio B** Leerás un texto de 400-500 palabras, donde deberás identificar la información explícita e implícita (datos y/u opiniones, e información complementaria) en una amplia variedad de textos auténticos sencillos y complejos. También deberás analizar las convenciones en textos auténticos sencillos y complejos. Por último, tendrás que analizar las conexiones entre textos auténticos sencillos y complejos. **Criterio D** Tendrás que escribir un texto de no menos de 250 palabras demostrando un amplio conocimiento y uso de vocabulario. También deberás usar una amplia variedad de estructuras gramaticales de forma correcta. Deberás organizar la información eficaz y coherentemente con un formato adecuado usando una amplia gama de recursos de cohesión sencillos y complejos. Finalmente, comunica toda la información necesaria teniendo claramente en cuenta el destinatario y el propósito para adecuarse al contexto. **Material para estudiar** - El vocabulario de cada unidad - Los verbos en presente, imperfecto e indefinido. - Los conectores - La estructura del correo electrónico, el blog, el cuento y el artículo. **Material para el exámen** - Un bolígrafo azul o negro

G10 Individuals and Societies - English

Name of Teachers:	Ms. Reham, Mr. Tareq, Ms. Ahlam
Length of exam:	2 hr
Criteria assessed:	A & D
Revision Topics:	**Unit 1- Economics and Social movements** **Unit 3– Conflict in the 20th century and Resolution** • Equality vs. Equity • Triggers that sparked the Civil Rights Movement: social injustice, slavery, economic inequity, segregation, discrimination • Impacts of the Civil Rights Movement: legislative change such as affirmative action, desegregating employment, opportunities for black businesses • Triggers that sparked the Arab Spring movement: corruption, economic hardship, inequality and high unemployment rates resulting from states' economic policies such neoliberalism • Impacts of the Arab Spring Social Movement: democratic elections, reduction in corruption, strengthened trade unions • World War I, WWII and Cold War • Present-day circumstances resulting from 20th century wars • Peace-Keeping and Peace-Making with focus on the United Nations
Materials needed during exam: Study Tips	Blue or black pen Go through content in revision slides; focus on critical thinking like in the Cold War source pack and notes for Unit 1 and Unit 3.

Arabic A – Language & Literature 10

Name of Teachers:	Reem Yassin & Alaa Arar
Length of exam:	2 hours
Criteria assessed:	A, B, C, D
Revision Topics:	على الطلبة دراسة التالي: القسم أ- دراسة كيفية تحليل نص أدبي ودراسة جميع المصطلحات الإرشادية القسم ب : دراسة الفنون الأدبية وغير الأدبية التالية : المقال ، المذكرات ، الخطبة ، التقرير
Breakdown of exam:	سيكون الامتحان من قسمين القسم الأول تحليل نص أدبي مبني على المصطلحات الارشادية ويكون تقييمه على معيار أ : التحليل أما القسم الثاني من الامتحان فسيكون إنتاج نص غير أدبي من الفنون غير الأدبية أعلاه وسيكون تقييمه مبنيا : 1-على السياق العالمي : الانصاف والتطوير ، والتوجه من حيث الزمان والمكان 2- على المعايير التالية: ب: التنظيم ج: إنتاج النص د: استخدام اللغة
Materials needed during exam:	على الطلبة دراسة طرق كتابة النصوص غير الأدبية من الملفين الخاصين بالوحدتين الثالثة والرابعة ويجب أن يكون هنالك فهم للسياقين العالمين بمختلف موضوعاتهما الفرعية. كما يجب دراسة جميع المصطلحات الإرشادية وفهمها فهما عميقا ليتمكن الطلبة من تحليل النص في القسم أ من الامتحان
Study / strategies study tips	دراسة كل الفنون التي تم ذكرها والتدرب على إنهاء الكتابة في الوقت المحدد

G10 English – Language & Literature

Name of Teachers:	Ms. Virginia, Ms. Ruba, Ms. Amal
Length of exam:	2 hours
Criteria assessed:	A, B, C and D
Revision Topics:	• 'All My Sons' full play (Act I, Act II and Act III) • Essay writing • Playscript conventions • Analysis of themes, characters, author's choices within the play
Breakdown of exam:	Part 1: Creating a scene in response to a prompt that is relevant to *'All My Sons'* Part 2: Textual analysis: Writing an analytical essay in response to a prompt that is relevant to *'All My Sons*'
Materials needed during exam:	Blue or Black pen
Study strategies / study tips:	• Read *'All My Sons*' again to highlight themes, characters' traits, author's stylistic choices. • Practice Essay Writing • Practice creating a scene • Review all the PowerPoint Presentations posted on GC • Revise notes and annotations from class • Review the formative assessments and your teacher's feedback • Study your analytical essays from Units 1, 3 and 4 to review the essay structure, techniques and to learn from your mistakes.

G10 Biology

Name of Teacher:	Mr. Emad
Length of exam:	2 hr
Criteria assessed:	A and C
Revision Topics:	1. Cells (tissues, organs, systems, structure, and function; factors affecting human health; physiology; vaccination) 2. Organisms (habitat, ecosystems, interdependency, unity and diversity in life forms; energy transfer and cycles [including nutrient, carbon, nitrogen]; classification) 3. Processes (photosynthesis, cell respiration, aerobic and anaerobic, word and chemical equations) 4. Metabolism (nutrition, digestion, biochemistry, and enzymes; movement and transport, diffusion; osmosis; gas exchange; circulation, transpiration, and translocation; homeostasis) 5. Evolution (life cycles, natural selection; cell division, mitosis, meiosis; reproduction; biodiversity; inheritance and variation, DNA and genetics) 6. Interactions with the environment (tropism, senses, nervous system, receptors, and hormones) 7. Interactions between organisms (pathogens/parasites, predator/prey, food chains/webs; competition, speciation, and extinction) 8. Human interactions with environments (human influences, habitat change or destruction, pollution/conservation; overexploitation, mitigation of adverse effects). 9. Biotechnology (genetic modification, cloning; ethical implications, genome mapping and application, 3D tissues and organ printing)
Breakdown of exam:	The exam will assess Knowing and understanding (Criterion A) in addition to Processing and evaluating (Criterion C)
Materials needed during exam:	Pen, pencil, eraser, sharpener, ruler and calculator
Study strategies / study tips	Review class notes and handouts: Make sure you have all the notes from class and read through them to ensure that you understand the concepts that were discussed. Creating a study schedule will help you manage your time effectively and ensure that you cover all the topics that will be tested in the exam. Students should refer to the teacher's notes and the textbook. Cambridge IGCSE Biology, third edition. D G Mackean and Dave Hayward. Online e-book: Cambridge IGCSE Biology, third edition. D G Mackean and Dave Hayward. http://www.gceguide.com/wp-content/uploads/2015/05/Cambridge-IGCSE-Biology-3rd-Edition-.pdf

G10 Chemistry

Name of Teacher:	Mr. Boopathy
Length of exam:	2 hr
Criteria assessed:	A (Knowing and Understanding) and B (Inquiring and designing)
Revision Topics:	Periodic table (metals and non-metals; transition metals, noble gases; periodic trends: atomic size, melting pt, boiling pt, halogen reactivity, metal reactivity; groups and periods; determining valency and electron configuration from PT • Properties of 2nd period elements • International Union of Pure and Applied Chemistry (IUPAC naming and classification of: alkanes, alkenes, alcohols, carboxylic acids and esters; structural formulas) • Reactions of organic molecules (addition and polymerization) • Matter (states and properties of matter; particle/kinetic theory, diffusion; atomic structure [including relative atomic mass and Isotopes]) • Pure and impure substances (types of mixtures [solutions, oils, alloys, emulsions]; separation techniques, including: filtration, distillation [including crude oil], chromatography) • Bonding (structure and bonding, properties, chemical formulas, chemical reactions and the conservation of mass; balancing equations, the mole concept and chemical calculations; reaction kinetics [rates, and factors affecting rates/collision theory]; energy changes in reactions, endo- and exothermicity; combustion of fuels). Calculations involving quantity of heat and enthalpy. • Chemical and physical properties of ionic, covalent and metallic compounds. • Polar and nonpolar molecules • Intermolecular forces - hydrogen bonding and Vander Waals forces • Redox reactions, reactivity series; extraction of metals, and corrosion, electrochemical cells • Different types of chemical reactions. (combustion, double displacement, single-displacement – metal activity series, neutralization, decomposition and synthesis) •Stoichiometry (calculation involving empirical formula, molecular formula, concentrations, reacting mass, moles)
Breakdown of exam:	Part 1- Criterion A: Knowing and understanding Questions will be divided into 4 categories based on achievement levels: 1-2: state, apply, interpret; 3-4: outline, apply, interpret; 5-6: describe, apply, analyse 7-8: explain, apply, analyse Part 2- Criterion B:(Inquiry and designing)
Materials needed during exam:	Pencil, pen, erasers, sharpener, ruler and calculator. Periodic table will be provided with your End of Year exam. Revise your notebook, ALL hand-outs and chapters posted in google classroom. MYP chemistry book page number(1-25)(26-52)(84-107)(108-133)
Study strategies / study tips	Everyday plan 30 minutes to revise concepts.

G10 Physics

Name of Teacher:	Mr. Khaled Za'rrour
Length of exam:	2hr
Criteria assessed:	Criterion A and Criterion D
Revision Topics:	• Measurements in science • Motion (motion, speed, motion graphs) • Forces (Newton's laws; density; forces and effects of forces; forces and pressure) • Work, energy and power, efficiency; energy sources and resources, fuels and environmental impact; transfer and transformation of energy, conservation of energy) • Electromagnetism (magnetism, electric and magnetic fields; static electricity; electromagnetic forces and induction, AC & DC; current, voltage, power, generation and transmission of electricity; electric circuits) • Atomic physics (atomic structure, particles, charges and masses; radioactivity, decay and half-life, forms of radiation; uses and dangers)
Breakdown of exam:	Part 1- Criterion A: Knowing and understanding Part 2- Criterion D: Reflecting on the Impact of Science
Materials needed during exam:	Blue/black pen, pencil, eraser, sharpener, ruler and calculator **Formula sheet on next page will be provided during the End of Year exam**
Study strategies / study tips	Students should refer to the teacher notes and the (Physics booklets). Exampro physics questions

MYP Physics Formula Sheet – will be provided with End of Year Exam

Density	$\text{density} = \frac{\text{mass}}{\text{volume}}$	$\rho = \frac{m}{V}$
Force	$\text{force} = \text{mass} \times \text{acceleration}$	$F = ma$
Motion	$\text{final velocity} = \text{initial velocity} + (\text{acceleration} \times \text{time})$	$v = u + at$
	$\text{distance} = (\text{initial velocity} \times \text{time}) + \frac{1}{2} \times \text{acceleration} \times (\text{time})^2$	$s = ut + \frac{1}{2}at^2$
	$(\text{final velocity})^2 = (\text{initial velocity})^2 + 2 \times \text{acceleration} \times \text{distance}$	$v^2 = u^2 + 2as$
	$\text{distance} = \frac{(\text{final velocity} + \text{initial velocity}) \times \text{time}}{2}$	$s = \frac{(v+u)t}{2}$
Momentum	$\text{momemtum} = \text{mass} \times \text{velocity}$	$p = mv$
Pressure	$\text{pressure} = \frac{\text{force}}{\text{area}}$	$p = \frac{F}{A}$
Work	$\text{work} = \text{force} \times \text{distance}$	$W = Fs$

Kinetic energy	$\text{kinetic energy} = \frac{1}{2} \times \text{mass} \times (\text{velocity})^2$	$E_k = \frac{1}{2}mv^2$
Gravitational field strength	$\text{gravitational field strength} = \frac{\text{force}}{\text{mass}}$	$g = \frac{F}{m}$
Gravitational potential energy	$\text{change in gravitational potential energy} = \text{mass} \times g \times \text{change in height}$	$\Delta E_p = mg\,\Delta h$
Efficiency	$\text{efficiency} = \frac{\text{useful energy out}}{\text{total energy in}} \times 100$	
Power	$\text{power} = \frac{\text{work done}}{\text{time}}$	$P = \frac{W}{t}$
Current	$\text{current} = \frac{\text{flow of charge}}{\text{time}}$	$I = \frac{\Delta Q}{t}$
Power	$\text{power} = \text{voltage} \times \text{current}$	$P = IV$
Voltage	$\text{voltage} = \text{current} \times \text{resistance}$	$V = IR$
Transformers	$\frac{\text{primary voltage}}{\text{secondary voltage}} = \frac{\text{turns on primary coil}}{\text{turns on secondary coil}}$	$\frac{V_p}{V_s} = \frac{V_p}{N_s}$
Wave speed	$\text{wave speed} = \text{frequency} \times \text{wavelength}$	$v = f\lambda$
Time period	$\text{time period} = \frac{1}{\text{frequency}}$	$T = \frac{1}{f}$

G10 Integrated Science

Name of Teacher:	Ms. Maha and Ms. Nemah
Length of exam:	2 hr
Criteria assessed:	Criterion A – Knowing and Understanding and Criterion C – Processing and Evaluating
Revision Topics:	**Unit 1- Human Body Systems:** 1. Level of Organization (atom, molecule, cell, tissue, organ, organ system, organism) 2. Human's Body systems (overview of all system, check Human body Systems ppt on GC). 3. Digestive system (what happens to food in: oral cavity, esophagus, stomach, small intestine, large intestine, liver, gall bladder, pancreas) 4. Processes involving digestive system: mechanical digestion, chemical digestion, peristalsis, emulsification, absorption) 5. Role of enzymes in the digestion process. Factors that affect enzyme's activity (Temperature, pH and substrate concentration). 6. Components of blood – plasma, red blood cells, white blood cells and platelets. 7. Arteries, veins, blood capillaries – structure and function 8. Structure of the heart and associated blood vessels 9. Parts of respiratory System (structure and function)- Nasal Cavity, Larynx, Trachea, Bronchi, Bronchioles, Air sacs, Diaphragm 10. Gas exchange Vs. Breathing vs. Cellular respiration (aerobic and anaerobic) **Unit 2- Bonding and Chemical Reactions** 1. Atomic structure and Valency. 2. The properties of metals, nonmetals, metalloids, halogens and noble gases. 3. Atomic number vs. mass number. 4. Periodic trends - atomic radius, ionization energy, group 1/2 metal reactivity, halogen reactivity 5. Bonding - Chemical bonds are formed when valence electrons are: - Transferred from one atom to another – ionic. - Shared between atoms – covalent. - Mobile in a free moving "sea" of electrons – metallic. 6. Types of chemical reactions: Synthesis -Decomposition- Combustion-single replacement reaction, Double replacement reactions. 7. Acids and Bases- definition of acid and bases, properties, pH, indicators, theories of acids and bases, neutralization reaction. **Unit 3-Electricty and Magnetism** 1. The concept of electrical charge 2. Static electricity and its uses in life. 3. Parallel and series circuits. 4. Current and potential difference in series and parallel circuits 5. The concept of resistance and Ohm's Law 6. How to calculate voltage, current and resistance in both series and parallel circuit. 7. Factors that affect the resistance in a circuit. 8. Electrical power 9. The concept of magnetism and magnetic fields 10. Electromagnets – applications and factors that affect its strength 11. How our knowledge of electromagnetism can be applied to construct simple devices - the relay, electric bell and DC motor examples **Unit 4- Energy around Us** • Definition of energy, work, power, efficiency • The SI unit for energy as well as work is the joule (J), or Newton · meter (N · m).

- Forms of energy: mechanical, chemical, electrical, electromagnetic, thermal, sound, and nuclear energy.
- Mechanical energy commonly changes back and forth between kinetic and potential energy.
- The Law of Conservation of Energy
- The table below summarizes the most important equations:

Potential Energy	$E_P = mgh$
Kinetic Energy	$E_K = \frac{1}{2}mv^2$
Mechanical Energy	$E_M = E_K + E_P$

- Definition of wave, wavelength, frequency, amplitude, pitch and echo
- Difference between **Infrasound** and **Ultrasound** waves
- The **amplitude** of a sound determines its *loudness* or volume.
- Factors that affect the speed of sound
- Applications of ultrasound
- Echolocation is used by animals such as dolphins and bats to "see" their surroundings by using ultrasound.
- Ships use sonar to determine how deep the ocean is or to locate shoals of fish.
- The table below shows the units used in sound:

Physical Quantities		
Quantity	**Unit name**	**Unit symbol**
Velocity (v)	metre per second	$\mathrm{m \cdot s^{-1}}$
Wavelength (λ)	metre	m
Amplitude (A)	metre	m
Period (T)	second	s
Frequency (f)	hertz	Hz ($\mathrm{s^{-1}}$)

Breakdown of exam:	Criterion A – Questions will be divided into 4 categories based on achievement levels: 1-2: state, apply, interpret; 3-4: outline, apply, interpret; 5-6: describe, apply, analyse 7-8: explain, apply, analyse Criterion C- will address work, energy and power Recommended Time: Criterion A – 50 min; Criterion C – 50 min…20 min to revise
Materials needed during exam:	Blue/black pen, pencil, eraser, sharpener, ruler and calculator Periodic Table will be provided during End of Year exam. **Formula sheet on next page will be provided during the End of Year exam**
Study strategies / study tips	Revise notes, practice questions, know the key terms introduced for each unit

MYP Integrated Science Formula Sheet – will be provided with End of Year Exam

Density	$\text{density} = \frac{\text{mass}}{\text{volume}}$	$\rho = \frac{m}{v}$
Force	$\text{force} = \text{mass} \times \text{acceleration}$	$F = ma$
Motion	$\text{final velocity} = \text{initial velocity} + (\text{acceleration} \times \text{time})$	$v = u + at$
	$\text{distance} = (\text{initial velocity} \times \text{time}) + \frac{1}{2} \times \text{acceleration} \times (\text{time})^2$	$s = ut + \frac{1}{2}at^2$
	$(\text{final velocity})^2 = (\text{initial velocity})^2 + 2 \times \text{acceleration} \times \text{distance}$	$v^2 = u^2 + 2as$
	$\text{distance} = \frac{(\text{final velocity} + \text{initial velocity}) \times \text{time}}{2}$	$s = \frac{(v+u)t}{2}$
Momentum	$\text{momentum} = \text{mass} \times \text{velocity}$	$p = mv$
Kinetic energy	$\text{kinetic energy} = \frac{1}{2} \times \text{mass} \times (\text{velocity})^2$	$E_k = \frac{1}{2}mv^2$
Gravitational field strength	$\text{gravitational field strength} = \frac{\text{force}}{\text{mass}}$	$g = \frac{F}{m}$
Gravitational potential energy	$\text{change in gravitational potential energy} = \text{mass} \times g \times \text{change in height}$	$\Delta E_p = mg\,\Delta h$
Current	$\text{current} = \frac{\text{flow of charge}}{\text{time}}$	$I = \frac{\Delta Q}{t}$
Power	$\text{power} = \text{voltage} \times \text{current}$	$P = IV$
Voltage	$\text{voltage} = \text{current} \times \text{resistance}$	$V = IR$
Transformers	$\frac{\text{primary voltage}}{\text{secondary voltage}} = \frac{\text{turns on primary coil}}{\text{turns on secondary coil}}$	$\frac{V_p}{V_s} = \frac{V_p}{N_s}$
Wave speed	$\text{wave speed} = \text{frequency} \times \text{wavelength}$	$v = f\lambda$
Time period	$\text{time period} = \frac{1}{\text{frequency}}$	$T = \frac{1}{f}$

G10 Mathematics

Name of Teachers:	Ms. Tahani and Mr. Hani
Length of exam	2 Hours
Criteria assessed:	Criterion A: 1 hour Criteria C and D: 1 hour
Revision Topics:	**Unit 1: Quadratic equations and quadratic functions** • Haese textbook pages 213 to 232; 295-308; 313-314; 320-322; 413-436; 471-472 • Oxford textbook Pages 290 to 302; Pages 321 to 343 **Unit 2: transforming functions and number sequences** • Arithmetic and geometric sequences: Haese textbook: pages 344 to 356 • Exponents rules and exponential equations • Exponential functions: Growth and decay; Depreciation • Haese textbook: pages 386-395, Oxford textbook pages519-532 • Transformations: Transformations refer to the investigation and worksheets done in class, and on moodle. **Unit 3: trigonometry** • Right angled trigonometry and their applications • Non-right-angled trigonometry • Haese textbook pages 235-245; pages 252-260 • Oxford textbook Pages 257-269 **Unit 4: probability and statistics** • Statistical terminology • Quantitative (numerical) data • Grouped discrete data and continuous data • Measuring the center • Cumulative data • Measuring the spread • Box-and-whisker plots • Sets • Experimental probability; Probabilities from tabled data • Representing combined events • Theoretical probability • Compound events • Using tree diagrams • Sampling with and without replacement • Mutually exclusive and non-mutually exclusive events • Conditional probability • Haese textbook Pages: (30- 41), (169-200) and Pages (267-292)
Breakdown of exam:	Crit A and C/D assessment papers. Including questions with a range of difficulty (i.e., Level 1-2, Level 3-4, Level 5-6 and Level 7-8). Remember to show working out. Good luck!
Materials needed during exam:	Scientific calculator, Pen Pencil and a ruler. Formula booklet will be provided at End of Year exam. It is available on your Maths Moodle Page.
Study strategies / study tips:	Revise all textbooks Haese, Oxford SL, worksheets, transformation booklet, and notes from math classes.

G10 Extended Mathematics

Name of Teacher:	Ms. Hadeel
Length of exam	2 hours
Criteria assessed:	Criteria A, C and D
Breakdown of exam:	Criterion A : 1 hour Criteria C and D: 1 hour
Revision Topics:	**Unit 1: Modelling** • Haese textbook pages 213 to 232; 295-308; 313-314; 320-322; 413-436; 471-472 • Oxford textbook Pages 290 to 302; Pages 321 to 343 **Unit 2: Transforming functions and exponential functions.** • Arithmetic and geometric sequences: Haese text: p. 344 to 356 • Arithmetic series: Oxford extended textbook: pages 145 to 153 • Exponents rules and exponential equations • Exponential functions: Growth and decay; Depreciation • Haese textbook: pages 386-410, Oxford textbook pages519-532 • Logarithms laws and log equations: Oxford Ext: p. 251-262, 99-121 • Composite and inverse functions: Oxford Ext: p. 22-33, 37-50 • Transformations: Transformation Booklet on Moodle **Unit 3: Geometry and Trigonometry** • Right angled trigonometry and their applications • Non-right-angled trigonometry • Haese textbook pages 235-245; pages 252-260 • Oxford textbook pages 242-254; Pages 257-269 • Oxford Extended textbook Pages 184-200 **Unit 4: Sets, Probability and Statistics** • Statistical terminology • Quantitative (numerical) data • Grouped discrete data and continuous data • Measuring the centre, Measuring the spread • Cumulative data • Box-and-whisker plots • Line of best fit • Sets • Experimental probability; Probabilities from tabled data • Representing combined events • Theoretical probability • Compound events • Using tree diagrams • Sampling with and without replacement • Mutually exclusive and non-mutually exclusive events • Conditional probability • Haese textbook Pages (169-200) and Pages (267-292) • Oxford SL pages 21-37
Study strategies / study tips:	Revise all textbooks Haese, Oxford SL and extended, worksheets, transformation booklet, notes from maths classes.
Materials needed during exam:	Scientific calculator, Pen Pencil and a ruler. Formula booklet will be provided at End of Year exam. It is available on your Extended Maths Moodle Page.

2023 EOY Exams – Grade 10

- Report to exam location at 8.15am
- Bring your textbook for that subject to return to the teacher
- All exams start at 8.30 am, with the exception of IAS-E starting at 12pm
- All exams will be on pen and paper – make sure you have the required materials for each exam

Sun May 28th	Mon May 29th	Tues May 30th	Wed May 31st	Thurs June 1st	Sun June 4th	Mon June 5th	Tues June 6th	Wed June 7th	Thurs June 8th
Spanish	English	IAS-E at 12pm	No exams	No exams	Biology	Physics	Arabic A	Maths Ext Maths	Chemistry Int Science

Job Shadowing: June 11th – 19th

DP Transition: June 20th – 21st