St. Conor's College

Year 11 Revision Guide
Winter Exams 2024

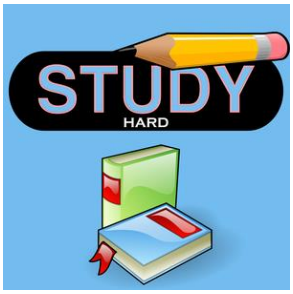
Monday 2nd December - Friday 6th December

Name: _____

Class: _____

Living, Learning, Excelling Together

CONTENTS



USE THIS STUDY GUIDE TO SECURE EXAM SUCCESS.

WORK HARD & GOOD LUCK!

YEAR 11 WINTER EXAMINATION TIMETABLE
MONDAY 2nd DECEMBER – FRIDAY 6TH DECEMBER

	Mon 2nd	Tues 3rd	Wed 4th	Thurs 5th	Fri 6th
Period 1	REVISION	REVISION	**STUDY DAY**	REVISION	REVISION
Period 2 & 3	ENGLISH LANGUAGE	SAS (DAS-CLASS WITH DT & HMG P1-3)	**STUDY DAY**	MATHS	ENGLISH LITERATURE PAL (CLASS WITH NM) PT (CLASS WITH CQ)
Period 4	REVISION	REVISION	**STUDY DAY**	REVISION	REVISION
Period 5 & 6	**OPTION C** AGRICULTURE CONSTRUCTION (NMK/SMS) CHILD DEVELOPMENT (CF) GEOGRAPHY FOOD & NUTRITION (HE) T&D ART (ART ROOM)	**OPTION A** BUSINESS STUDIES (JD) CHILD DEVELOPMENT (CF) MVRUS PE IT (OCN IT-CLASS WITH JMCC)	**STUDY DAY**	RE (OCN RE-CLASS WITH CG & MB P4-6)	**OPTION B** CONSTRUCTION (CMG) BUSINESS STUDIES (SM) HISTORY IRISH BACS (GO TO C24)

Please Note that WEDNESDAY 4TH DECEMBER is a Revision Day. All Year 11 pupils will study at home.

WEEKLY REVISION PLANNER
NOVEMBER

Date	Day	Subject	Revision Topics
18	MON		
19	TUE		
20	WED		
21	THUR		
22	FRI		
23	SAT		
24	SUN		

WEEKLY REVISION PLANNER
NOVEMBER/DECEMBER

Date	Day	Subject	Revision Topics
25	MON		
26	TUE		
27	WED		
28	THUR		
29	FRI		
30	SAT		
01	SUN		

WEEKLY REVISION PLANNER
DECEMBER

Date	Day	Subject	Revision Topics
02	MON		
03	TUE		
04	WED		
05	THUR		
06	FRI		
07	SAT		
08	SUN		

St Conor's College
Top Tips for Revision

- **It's never too early, or too late** –
  students who revise know more than those who don't.
- **Turn your time over to revision** –
  switch off your phone, TV, music etc. Your education is worth your full attention.
- **Have a dedicated study place –**
  choose somewhere quiet and away from others were you can concentrate.
- **Have a revision timetable** –
  stick to it.
- **Spread your revision of your subjects out over time** –
  you can then cover each subject several times.
- **Do the harder things first** –
  your brain is fresher and you will absorb more than leaving it till last.
- **Try different study techniques** –
  using a variety of methods will help you learn.
- **Take regular, short breaks** –
  get some fresh air, go for a walk, do something else. A 10 minute break every 50 minutes is about right.
- **STOP: don't burn out** –
  if you're starting to feel frustrated, angry or overwhelmed. Make a note of what the problem is and take the problem to your next lesson to ask your teacher for help.
- **Reward yourself** –
  after a revision session do something you enjoy, you deserve it after your hard work!
- **Focus on what you have done** –
  not all the things you haven't.
- **Drink water and eat 'brain food'** –
  avoid sugar and have healthy snacks to keep your mental energy up.
- **Ask for help –**
  from your friends, family and teachers.

What is retrieval practice?

"**Retrieval practice** is a learning strategy where we focus on getting information out. Through the act of retrieval, or calling information to mind, our memory for that information is strengthened and forgetting is less likely to occur. Retrieval practice is a powerful tool for improving learning."

Use your class notes & textbooks to make a list of the important information & content that you need to know across different subjects.

Then close your books & test yourself. You can create quizzes, use flashcards or complete past exam papers. **Make sure you don't use your notes!**

Retrieve as much information as you can then check your answers. It's important to know what you know and what you don't know … yet!

Use your answers to inform the next stage of your revision, focus on the areas that you struggled to recall from memory.

What is spaced practice?

"Start planning early for exams and set aside a little bit of time everyday. Five hours spread out over two weeks is better than the same five hours all at once."
This is **spaced practice** & it is regarded as one of the most effective revision strategies.



Divide up your revision into short manageable chunks of time . When revising aim for 20 - 30 minutes per session.

Mass practice or cramming is not effective & can be stressful. This is when you study for a very intense period of time just before the exam.

You need to plan your time carefully to ensure all subjects & topics are covered in shorter chunks over a longer period of time.

Dividing up your revision into smaller, manageable sections will benefit you in the long term - the revision you do for mocks will stick for the final exams!

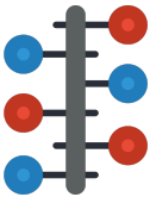
What is interleaving?

"**Interleaving** is a process where students mix & combine multiple subjects & topics while they study in order to improve their learning. Blocked practice on the other hand, involves studying one topic very thoroughly before moving to another. Interleaving has been shown to be more effective than blocked practice leading to better long-term retention."

Mon	Tues	Weds	Thurs	Fri
Algebra	Ratio	Statistics	Ratio	Algebra
Geometry	Statistics	Algebra	Geometry	Statistics

What is dual coding?

"**Dual coding** is the process of combining verbal materials with visual materials. There are many ways to visually represent materials, such as with infographics, timelines, cartoon/comic strips, diagrams and graphic organisers."



Dual coding involves you the learner drawing images, graphs, diagrams or timelines to support your revision notes.

When you are revising using your class materials find or create visuals that link with the information. Compare & combine the visuals with the words.

Don't worry if you don't consider yourself an artist - it isn't about the quality of your illustrations, the focus is to improve and deepen your understanding.

Make sure your images/diagrams are relevant. Becareful when using photos as too many background images can detract from the main points.

Exam vocabulary - Command words

There will be subject specific key terms that you need to learn for each subject. Below are a range of **command words** that could be used in your exams. Do you understand what the exam question is asking you? Command words can vary slightly across different subjects so it is important you understand the command words in the exam question & in the correct context.


Analyse - Examine something in detail and try to explain or interpret it.
Annotate - Add to a diagram, image or piece of text to illustrate or describe features rather than just identify them which is labelling.
Assess - Consider different options/arguments/factors and weigh them up to reach a conclusion about their effectiveness or validity.
Calculate - Work out the value of something.
Compare - Give a point by point identification of similarities and differences.
Define - This means *what is meant by* … give the precise meaning of a term or concept.
Describe - Provide an account in detail of an event/individual/concept etc.
Discuss - Set out both sides of an argument & reach a conclusion, including evidence.
Evaluate - Consider different options/factors & reach a conclusion about their importance/impact/value/worth.
Examine - Consider carefully & provide a detailed account of the topic.
Explain- Provide a detailed description or interpretation of a term/concept etc.
Identify - Point out & name from a number of possibilities.
Illustrate - Refer to a specific case study or example (not illustrate as in draw).
Label - Point out specific features on a diagram, image or piece of text.
Justify - Explain why your selected choice/judgement is better than other options.
Summarise - Sum up the main points/arguments this can be the similar to outline.

Well-being during exams

The exam period can be stressful that is why it's very important that you revise & prepare as this can help to reduce exam anxiety. In addition to revising there are other strategies you can do to look after your **mental & physical health**.

Eat. Diet is important so don't neglect it during the exam period. Don't skip meals, stay consistent with a healthy balance of meals & stay hydrated.

Sleep. Staying up late to revise is a bad idea! Sleep deprivation can have a very negative impact on concentration, performance & memory.

Exercise. Take regular breaks from revision with exercise. Take part in a sport you enjoy, go for a walk or any activity that is active & part of your daily routine.

Relax. Relax during the exam period? Yes! It is essential that you do make time to switch off & have a break. Watch Netflix, read or talk to friends.

AGRICULTURE & LAND USE

To complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen; pencil/ruler; calculator

Topic	What do I need to know
1. **Composition of Soils**	• 4 components of soil • Soil types; particle size and profiles • NPK and fertiliser bags • Nitrogen cycle • Soil practicals
2. **Plant Biology**	• Seed germination • Flower structure and function • Plant structure and life cycles • Wind and insect pollination differences • Pollination and fertilisation processes • Role of bees in pollination • Photosynthesis
3. **Crop Production**	• Identify grasses, weeds and crops • Silage making and indicators of quality • Oven drying technique to compare % dry matter in silage • Estimating grass yields • Key factors that impact on crop yield • Benefits of crop rotation • GM crops • Farm machinery used in crop production • Organic farming

NB: Please use notes, revision material, past paper questions and the specification to complete your own revision notes to fully prepare for the exam.

BIOLOGY-SINGLE AWARD SCIENCE

1.1 Cells

By the end of this topic I should be able to:

Microscopy

1.1.1 make a temporary slide and use a light microscope to examine and identify the structures of a typical plant and animal cell (Prescribed Practical B1);

Animal Cells

1.1.2 demonstrate knowledge of the structure and function of animal cells, including nucleus and chromosomes, cytoplasm and cell membranes;

Plant Cells

1.1.3 demonstrate knowledge that plant cells have additional structures not found in animal cells: cellulose cell wall, large permanent vacuole and chloroplasts;

Stem Cells

1.1.4 demonstrate understanding that a stem cell is a simple cell in animals and plants which has the ability to divide to form cells of the same type;

1.2 Food and Diet

By the end of this topic I should be able to:

Food and Energy

1.2.1 describe food as a source of chemical energy in humans;

1.2.2 *investigate the energy content of food by burning food samples (Prescribed Practical B2);*

1.2.3 explore and evaluate how the energy required by individuals is different depending on age, gender and activity;

Biological Molecules

1.2.4 explain the functions and sources of biological molecules, limited to:

carbohydrates as sources of energy;

fats as sources of energy and insulation;

proteins for growth and repair;

water as a solvent and for transport;

fibre to prevent constipation;

sources and functions of the vitamins C and D; and sources and functions of the minerals calcium and iron;

Nutrition and Food Tests

1.2.5 recall the following reagents and their colour changes:

Reagent	Initial colour	End colour for positive result
Benedict's	Blue	Brick red precipitate
Iodine	Yellow-brown	Blue-black
Biuret	Blue	Lilac/Purple
Ethanol	Clear	White emulsion

1.2.6 carry out practical work to investigate food samples

using food tests, including:

- reducing sugar (Benedict's);
- starch (iodine solution);
- amino acid/protein (Biuret); and
- fats (ethanol);

Food and Health

1.2.7 examine and evaluate the relationship between diet and health, obesity, heart disease and strokes, and recognise why many people in society are slow to accept these links or fail to adapt their lifestyle;

1.2.8 research the ways in which the risk of heart disease or strokes may be reduced, including:

lifestyle – increasing exercise, reducing stress and stopping smoking; and diet – choosing low salt, low saturated fats and low cholesterol;

Cost to Society

1.2.9 evaluate the costs to society of circulatory diseases (medical and wider costs, such as the effect on families);

Effects of Exercise

1.2.10 investigate the effects of exercise on the pulse rate;

1.3 Chromosomes and Genes

By the end of this topic I should be able to:

Genome

1.3.1 describe the genome as the entire genetic material of an organism;

Chromosomes

1.3.2 identify and describe chromosomes as genetic structures occurring in functional pairs in the nucleus of cells;

Genes

1.3.3 identify and describe genes as sections of chromosomes made up of short lengths of deoxyribonucleic acid (DNA) that operate as functional units to control characteristics;

DNA

1.3.4 recognise DNA as the core component of genes and chromosomes;

1.3.5 recognise the double helix structure of DNA;

Cancer

1.3.7 demonstrate understanding that cancer cells are produced by uncontrolled cell division;

Mutations

1.3.8 explain that variation in living organisms can be due to mutations – random changes in the structure or number of chromosomes or genes which can be triggered by environmental factors (such as ultraviolet (UV) light causing skin cancer); and

Genetic Conditions

1.3.9 recall that cystic fibrosis and Down's syndrome are examples of genetic conditions (symptoms and causes are not required).

Genetic Screening

1.3.10 evaluate ethical issues linked to genetic screening, including:

who decides who will be tested; benefits and risks of amniocentesis.

the dilemma for potential parents carrying a foetus with a genetic condition following diagnosis of abnormalities by a test; and making genetic information available to wider society, for example insurance companies;

1.4 Co-ordination and Control

By the end of this topic I should be able to:
Central nervous system 1.4.1 describe the basic structure and function of the central nervous system, explaining how the brain and spinal cord together form the central nervous system that controls and co-ordinates the responses between the receptors and effector muscles;
Voluntary and reflex actions 1.4.2 distinguish between voluntary and reflex actions in terms of conscious control and speed of response;
Plant hormones 1.4.4 explain how plant hormones are important in controlling and co-ordinating plant growth and development, referring to phototropism in stems
Hormones 1.4.5 demonstrate understanding that hormones are chemical messengers produced by glands and released into the blood, which carries them to a target organ, where they act;
Insulin 1.4.5 demonstrate understanding that hormones are chemical messengers produced by glands and released into the blood, which carries them to a target organ, where they act;
Diabetes 1.4.7 demonstrate understanding that: diabetes is a condition in which the blood glucose control mechanism fails; Type 1 diabetes usually occurs early in life when the pancreas stops producing insulin, which then must be taken as medication throughout life; Type 2 diabetes is a progressive disease linked to lifestyle factors and obesity, where the pancreas gradually produces less insulin; Type 2 diabetes can be controlled by diet but later requires medication or insulin injections; the symptoms of diabetes include high blood glucose, the presence of glucose in the urine, lethargy and thirst; possible long-term effects of diabetes include eye damage, kidney failure, heart disease and strokes; and the number of people with diabetes in the population is rising and evaluate why.

1.5 Reproductive System

By the end of this topic I should be able to:
Male and female reproductive system 1.5.1 demonstrate knowledge of the structure and function of the male reproductive system, including the testes, urethra, scrotum, penis, sperm tube and prostate gland; 1.5.2 demonstrate knowledge of the structure and function of the female reproductive system, including the ovaries, oviducts, uterus, cervix and vagina;
1.5.3Menstrual cycle
Pregnancy 1.5.4 demonstrate knowledge that: fertilisation takes place in the oviducts when the sperm and egg nuclei fuse to give a zygote;

the zygote divides many times to form a ball of cells as it travels down the oviduct to the uterus; this then implants in the uterus lining, where it develops over 40 weeks; the placenta is where exchange of dissolved nutrients, oxygen, carbon dioxide and urea occur; these substances are carried to or from the foetus in the blood vessels in the umbilical cord; the amnion and amniotic fluid cushion the foetus; and scientific evidence shows that consuming alcohol while pregnant can cause harm to the foetus.
Contraception Students should be able to: 1.5.5 examine how different methods of contraception work and evaluate the advantages and disadvantages of each, including: mechanical – the condom (male and female) as a barrier to prevent the passage of sperm and also to prevent the spread of sexually transmitted infections (such as HIV leading to AIDS), some of which can lead to infertility if left untreated, for example chlamydia; chemical – the contraceptive pill and implants which change hormone levels and stop the development of the egg; surgical – male and female sterilisation to prevent the passage of sperm and eggs respectively; and an awareness that contraception can raise ethical and moral issues for some people;

1.6 Variation and Adaptation

By the end of this topic I should be able to:	Textbook pages	Covered in class	Revised
Types of Variation 1.6.1 Demonstrate understanding that variation can be observed in living things, for example: • Height and length as examples of continuous variation (as displayed in a histogram); • Tongue rolling and hand dominance as examples of discontinuous variation (as displayed in a bar chart); and			
1.6.2 Demonstrate understanding that variation can be genetic and / or environmental.			

1.7 Disease and Body Defences

By the end of this topic I should be able to:	Textbook pages	Covered in class	Revised
Types of microorganisms 1.7.1 demonstrate knowledge of the types of communicable diseases caused by microorganisms and how they are spread, prevented and treated, including: bacteria (chlamydia, salmonella and tuberculosis); viruses (HIV leading to AIDS, cold and flu, and human papilloma virus (HPV)); and fungi (athlete's foot and potato blight);			
The body's defence mechanisms 1.7.2 demonstrate understanding of the body's defence mechanisms, including: the skin, mucous membranes and blood			

clotting; the production of antibodies by white blood cells (lymphocytes) in response to antigens; the role of antibodies in defence – antibody-antigen reaction, clumping, reduced spread of disease microorganisms and symptoms; the role of phagocytes in engulfing and digesting microorganisms; the role of memory lymphocytes in a secondary response; and immunity, in terms of active and passive.			
Antibiotics 1.7.3 demonstrate understanding that antibiotics, for example penicillin, are chemicals produced by fungi which are used against bacterial diseases to kill bacteria or reduce their growth;			
Development of medicines 1.7.5 demonstrate understanding of how medicines are developed, including the discovery of penicillin by Fleming and its later development for medical applications by Florey and Chain; 1.7.6 evaluate issues involved in developing treatments, including: in vitro testing; animal testing; species difference and side effects; and clinical trials and licensing; and			
Alcohol and Tobacco 1.7.7 demonstrate understanding of how the misuse of drugs can affect health, including: alcohol – binge drinking can cause liver disease and affect the development of the foetus; and tobacco smoke, which contains tar – a cause of bronchitis, emphysema and lung cancer; nicotine – which is addictive and affects heart rate; and carbon monoxide – which combines with red blood cells to reduce the oxygen-carrying capacity of the blood			

BUSINESS & COMMUNICATION SYSTEMS (BACS)

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Practical Computer Based Exam **All Information/notes is in booklets provided.**	• Spreadsheets

BUSINESS STUDIES

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Entrepreneurs **Key Characteristics of Entrepreneurs** **Business Resources (CELL)**	Students should be able to: • describe what it means to be enterprising; • identify and explain the key entrepreneurial characteristics displayed by successful business people (such as risk taking, innovation, decision making, determination, leadership, planning and persuasiveness); • analyse why the government encourages enterprise; •analyse the nature and rewards of risk taking; Business resources • explain the resources a business needs: – land; – labour; – capital; and – enterprise; and • analyse how businesses use resources differently.
Business Ownership **Public Sector** **The Role of Social Enterprise** **Business Location**	Students should be able to: • explain why and how a business starts; • identify and describe different sizes of businesses, including micro, small and medium-sized enterprises; • identify and describe different types of business ownership; • evaluate each of the following types of ownership: – sole trader; – partnership; – franchise; – private limited company; and – public limited company; • compare and contrast different types of private sector companies, considering ownership, control and decision making, finance and liability; • explain the meaning of the term public sector; • compare and contrast public and private sector organisations in terms of ownership, purposes and aims, control and finance; • explain the meaning of the term social enterprise; • analyse how a social enterprise aims to deliver a range of outputs, including: – economic, for example employment; – social, for example sense of community; and – environmental, for example sustainable business practice; and • explain the following factors that influence the location of businesses locally, nationally and internationally: – proximity to raw materials; – proximity to market; – availability and price of land; – governmental influences; – communication; and – transport infrastructure and parking.
Business Aims and Objectives	Students should be able to: • describe and explain the following business aims and objectives: – survival; – profit and turnover; – growth; – corporate image; – concern for the environment; and – social responsibility;

Stakeholders	• analyse how the aims and objectives of a business affect its activities and why, on occasion, these aims may be in conflict; • analyse why aims and objectives are helpful to businesses; • analyse the ethical issues associated with business aims: – environmental issues; – employee working conditions; – equality; and – social responsibility; • describe and explain the following groups that have an interest in a business: – owners; – directors; – shareholders; – managers; – producers; – consumers; – lenders; – employees; – pressure groups, for example trade unions; and – the community; and • discuss how the aims of stakeholders may differ.
Marketing and Market Research	• Student should be able to: • Explain the term marketing • Explain the purpose of market research • Describe and explain the main methods of market research – Primary (field) and secondary (desk) • Describe and explain the main methods of market sampling (random and quota) • Discuss the most appropriate methods of market research and sampling for particular circumstances • Explain market segmentation • Analyse and evaluate the results of market research, including qualitative and quantitative data.
Marketing Mix	• Explain the term marketing mix
Price	explain and discuss the following pricing policies: – skimming; – penetration; and – competitor-based pricing; • evaluate pricing policies for given circumstances; • analyse the following factors that affect price: – demand; – cost of production; – need to make profit; – competition in the market; – price that the market can bear; – seasonality; and – quantity of inventory in hand; and • analyse simple demand curves to explain the relationship between price and demand.
Product	Students should be able to: • demonstrateknowledge of the product life cycle and discuss the strategies used to extend it; • demonstrate knowledge of the Consumer Right Act 2015 and the Consumer Protection Act 1987;
Place	• describe and explain the following channels of distribution:

	– traditional (manufacturer to wholesaler to retailer to consumer); – modern (manufacturer to retailer to consumer); and – direct (manufacturer to consumer).
Promotion	• describe and explain the following methods of promotion: – advertising; – sales promotion; – sponsorship; and – public relations (PR); • evaluate each method of promotion; • explain how social media can be used to promote business activity; • identify and justify the most appropriate methods of promotion in particular circumstances; • demonstrate knowledge of the following legal constraints on promotion: – the Trade Descriptions Act 1968; – the work of the Advertising Standards Authority (ASA); and – the Office of Communications (Ofcom)

Useful Business Studies resources and videos to aid revision;

- **Bee Business Bee (YouTube)**
- **Tutor2You (YouTube)**
- **BBC Bitesize www.bbc.co.uk**
- **Two Teachers Business Studies**

www.twoteachers.co.uk

- **Superprof Business Studies**

www.superprof.co.uk

CHILD DEVELOPMENT

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
The Family & Parental Responsibility	• Family roles & responsibilities • Factors that affect the decision to have a baby • How having a baby can affect family life
Reproduction	• Parts & functions of female & male reproductive system. (labelled diagram) • Menstrual cycle • Conception • Female hormones • Family planning • Infertility male and female
Pregnancy	• Signs of pregnancy • Minor problems associated with pregnancy • Healthy brain development in womb • Benefits of antenatal care • Tests and checks carried out • Role of a partner • Health professionals • Antenatal Care

Spelling, punctuation and grammar will be assessed, and marks awarded in the examination-9 mark question****

CONSTRUCTION & THE BUILT ENVIRONMENT

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen
- Pencil & ruler

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Construction Cycle - RIBA Plan of Work	• Strategic Definition; • Preparation and Brief; • Concept Design; • Developed Design; • Technical Design; • Construction; • Handover and Close Out; and In Use
Low rise Buildings	• Residential • Commercial • Industrial • Agricultural • Community • Recreational and religious
Structural Forms of Buildings	• Cellular • Portal • Rectangular • Timber frame
Principal Activities of the Construction Industry	• Building • Civil Engineering • Utilities services

DIGITAL TECHNOLOGY (IT)

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Digital Data	• Representing data • Students should be able to: • describe the difference between information and data; • describe how data is stored in the following units: • bit; • nibble; • byte; • kilobyte; • megabyte; • gigabyte; and • terabyte; • identify the following data types: numeric (integer and real), date/time, character and string; • Representing images • Students should be able to: • demonstrate understanding of how pixels are used in image representation; • demonstrate understanding of how image resolution affects file size; • describe how vector-based graphics and bitmap graphics are stored; • describe the difference between vector-based and bitmap graphics; and • demonstrate understanding of how buffering and streaming are used to support the transfer of moving image files. •
Representing Sound	• Students should be able to: • describe factors that affect sound quality when recording sound, including sample rate, bit depth and bit rate; • explain the need for analogue-to-digital conversion in sound recording;
Data Portability	• Students should be able to: • demonstrate understanding of data portability and the following file formats that support it: jpeg, tiff, png, pict, gif, txt, csv, rtf, mp3, mp4, midi, mpeg, avi, pdf, wav and wma; • demonstrate understanding of the need for data compression;
Software	• Students should be able to: • describe the functions of system software, referring to allocating the following: • memory; • storage; and

	• processing time; • describe the following modes of processing: real-time, batch and multi-user; • describe the following tasks carried out by the utility applications: disk defragmenting, task scheduling, backup and restoring data; • describe the role of antivirus software and the importance of regular updates;
Database Applications	• Students should be able to: • demonstrate understanding of and explain basic database concepts such as table, record, field, key field, query, form, report, macro, relationship and importing data; • identify and use appropriate data types when creating a database structure; and • demonstrate understanding of the need for data validation. • describe the following types of validation checks: presence, length, type, format and range; • extract data from a database structure using simple query structures and using the following logical operators: <, >, =, <=, >=, AND, OR and BETWEEN; • demonstrate understanding of big data, referring to volume, velocity and variety; • demonstrate understanding of the need for data analytics to interpret big data;

ENGLISH

Unit 1, Section B: Reading media and non-fiction texts

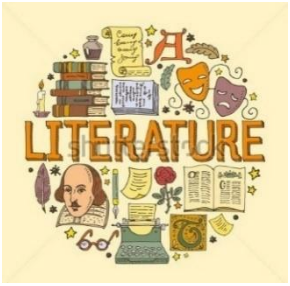
Use your bookets for tasks 2-5 and your notes to ensure you have a good understanding of the following for Unit 1, Section B

- **Task 2: Analysing a writer's craft** - Using PEAK/PEEL to explain the writer's use of language in a non-fiction text, addressing the following aspects of the writer's craft:
    - tone;
    - words and phrases;
    - linguistic techniques;
    - sentence structure; and
    - punctuation.

- **Task 3: Extracting meaning:**
    - summarising the main points; and
    - supporting interpretations.

- **Task 4: Reading media texts** - Using PEAK/PEEL to explain the writer's use of language in a media text, addressing the following aspects of the writer's craft:
    - persuasive language;
    - rhetoric;
    - fact and opinion;
    - promotional language; and
    - language to engage and connect with a reader.

- **Task 5: Analysing presentational features**
    - identify presentational features;
    - analyse the use of colour;
    - analyse the use of layout;
    - analyse the use of images; and
    - analyse the use of font.



ENGLISH LITERATURE

You will be asked to write an essay on how the writer engages the reader in a section of Unseen 19th Century Prose.

Follow these steps in each of your practice tasks:

1. Read the passage

2. Highlight and annotate the methods used by the writer to engage the reader. Consider the following linguistic and stylistic devices and narrative techniques:
    - structure of the text: beginnings, climax, sequential / chronological ordering, flashback, conclusion;
    - descriptive techniques (e.g. vocabulary choices, use of imagery and the senses);
    - creation of setting (e.g. time, place, atmosphere);
    - creation of character (e.g. through narrator's descriptions, use of dialogue, actions);
    - narration (e.g. omniscient narrator, 1st person narration, multiple narrators' use of persona, autobiography);
    - cohesive elements (e.g. repetition of words or ideas, climax, suspense, sequential ordering);
    - disjunctive elements (e.g. cliff-hanger endings, flashbacks);
    - use of punctuation and other typographical effects (e.g. italics, capitalisation, suspension points).

3. Form your response into a series of PEAK paragraphs as shown in the examples in class. Use the structure strips given to ensure you are always answering the question appropriately.

FOOD & NUTRITION (HE)

In order to complete this exam, you will need to bring the following materials/equipment:

- Black pen

Topics	KNOWLEDGE REQUIRED You will need to know and understand:
4.Energy and nutrients	• Explain a range of factors that influence energy requirements. • State the kilocalories provided by 1g of the three macronutrients: protein(4kcal), fat (9kcal) and carbohydrate(3.75kcal/50%). • Define EAR. • Explain why the body needs energy.
5. Macronutrients	• Function and sources of Protein (LBV&HBV), Fat and Carbohydrates (starch and sugar).
6. Micronutrients	• Functions and sources of Vitamins, Minerals

The exam paper will be **one hour.**
In your exam paper you will answer a range of short questions and one long question worth 5 marks.

GEOGRAPHY

In order to complete this exam, you will need to bring the following materials/equipment:

- Black pen
- Ruler

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
River Environments	• Elements of the drainage basin and their interrelationships: • inputs (precipitation); • stores (interception by vegetation); • transfers (surface runoff/overland flow, infiltration, throughflow, percolation and groundwater flow); and outputs (river discharge and evapotranspiration). • define the following characteristics of a drainage basin: • watershed; • source; • tributary; • confluence; and • river mouth; • demonstrate knowledge and understanding of how gradient, depth, width, discharge and load change along the long profile of a river and its valley • Types of erosion (attrition, abrasion/corrasion, hydraulic action and solution/corrosion); • transportation (solution, suspension, saltation & traction • deposition • Be able to explain the formation of the following river landforms using annotated cross-sectional diagrams: • waterfall; • meander, including slip-off slope and river cliff; and • floodplain and levees; • CASE STUDY for lFooding – Somerset Levels • Recognise the impacts of flooding on: • people (loss of life, property and insurance cover); and • the environment (pollution and destruction of wildlife & habitats • Know and be able to explain the following

	• hard engineering (dams, flood walls, levees, embankments, and straightening and deepening the river); • soft engineering (washlands, land use zoning and afforestation); • Evaluate the management strategies used in the Mississippi River
Coastal Environments	• Know the difference between constructive and destructive waves; • demonstrate knowledge and understanding of the following processes: • erosion (attrition, abrasion, hydraulic action and solution/corrosion); • transportation (longshore drift); and • deposition; • • explain the formation of the following coastal landforms • erosional landforms (headland, cliff, wave cut platform, cave, arch, stack and stump); • depositional landforms (sandy beach, shingle beach • spit, including hooked spit). • • describe and evaluate the following methods of coastal management: • hard engineering (sea walls, groynes and gabions); • soft engineering (beach nourishment and managed retreat) • investigate one case study of coastal management - NEWCASTLE and evaluate the coastal management strategy used, referring to the principles of sustainability.

Spelling, punctuation and grammar will be assessed, and marks awarded in the examination

HISTORY

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC **Life in Nazi Germany 1933-45**	**KNOWLEDGE REQUIRED** **You will need to know and understand:**
Hitler takes political control, 1933–34	• The removal of opposition by Hitler and the significance of • the following for the German people: - the Reichstag fire - the election, March 1933 - the Enabling Act - *Gleichschaltung* - the threat from Rohm and the *Sturm-Abteilung* (SA) - the Night of the Long Knives - the death of von Hindenburg • - Hitler becomes Fuhrer
Control and Opposition **Opposition:**	• The creation of the Police State: - the roles of Himmler, the *Schutzstaffel* (SS), the Gestapo, • the law courts and concentration camps - the impact of the Police State on the lives of the German people • Propaganda and censorship: - the role of Goebbels in spreading Nazi ideas - the Ministry of Propaganda and the spreading of Nazi ideas - the impact of propaganda and censorship on the lives of the German people - the extent of support for the Nazi regime - opposition from the churches, including the role of Pastor Niemöller • - opposition from young people, including Swing Youth and Edelweiss Pirates
Life for workers in Nazi Germany	• **Nazi attempts to reduce unemployment:** - public works, conscription, rearmament, autarky, • National Labour Service (RAD) - the impact of Nazi actions on the lives of workers - the effectiveness of Nazi actions by 1939

Life for women and the family in Nazi Germany **Life for young people in Nazi Germany**	• **Nazi attempts to change the lives of workers:** - the German Labour Front (DAF), Strength Through Joy • (KDF), Beauty of Labour (SdA), prices and wages - the impact of Nazi actions on the lives of workers - the effectiveness of Nazi actions by 1939 • Nazi views of women and the family: - Aryan ideals - *Kinder*, *Küche*, *Kirche* • Nazi actions and policies to change the lives of women and the family: - marriage, employment and appearance - family life - the impact of Nazi actions and policies on the lives of • women and the family - the effectiveness of Nazi actions and policies by 1939 • Nazi actions and policies to change the lives of young people: • the effectiveness of Nazi actions and policies by 1939 - labour shortages and the role of women in the workplace - education - youth movements - the impact of Nazi actions and policies on the lives of • young people in Germany - the effectiveness of Nazi actions and policies by 1939

Spelling, punctuation and grammar will be assessed and marks awarded in the examination

IRISH

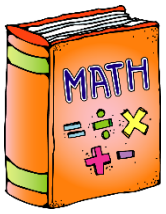
In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
UNIT 1 **Myself, Family & Friends**	• **Myself** • **Relatives** • **Adjectives to describe family & friends** • **Jobs** • **Days, Months, Years** • **Relationships with my family & friends** • **Hobbies** • **Description of friend**
UNIT 2 **School Life**	• **School Types** • **Subjects** • **Likes & Dislikes** • **Justifying Opinions** • **Adjectives to describe school subjects** • **Time** • **School Day** • **School Uniform** • **School Facilities** • **School Clubs/Extra Curricular Activities**

Use notes, topic booklets and past paper questions to revise.

Ádh Mór Ort!



MATHS

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen
- Highlighter
- Calculator (you need to bring your own)

This is a calculator exam

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Number	• Writing numbers in words and figures (M2) • Rounding to nearest 10, 100, 1000 (M2) • Decimal Places and Significant Figures (M2) • Multiples, Factors and Prime Numbers (M2/M3/M4) • Prime Factor Decomposition, LCM and HCF (M2/M3/M4) • Square number, cube number, Square root, Cube root (M2/M3/ M4) • Negative Numbers(M2) • Adding and Subtracting Fractions (M2/M3/ M4) • Finding a Fraction of an Amount (M2/M3/ M4) • Recurring Decimals (M2/M3/M4) • Finding a Percentage of an Amount (M2/M3/M4) • Writing a percentage (M2/M3/M4) • Percentage Increase and Decrease (M2/M3/M4) • Hire Purchase (M2/M3/M4) • Simple Interest (M2/M3/M4) • Reverse Percentages (M3/M4) • Compound Interest, Appreciation and Depreciation (M3/M4) • Bounds (M4)
Algebra	• Expressions, Equations, Formulae and Inequalities (M2/M3/M4) • Simplifying Expressions/Collecting Like Terms (M2/M3/M4) • Expanding Brackets (M3/M4) • Factorising (M3/M4) • Solving one step equations (M3/M4) • Expanding 2 brackets (M3/M4) • Factorising the difference of 2 squares (M3/M4) • Factorising a quadratic (M3/M4) • Using formula (word) (M3/M4) • Substitution (M3/M4) • Simplifying algebraic expressions (M3/M4)

Marks will be awarded for working out, therefore show working out for ALL questions

MOTOR VEHICLE AND ROAD USER STUDIES

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Motor Vehicle and Road User Theory	• The Highway Code • Driving and riding under adverse conditions • Physical and mental fitness of the driver • Causes and prevention of road collisions • Methods to reduce road and traffic collisions
Legal Requirements	• Motor insurance – including terminology used and documentation • The vehicle • Helmets • Components checked at the MOT etc
Road Transport and its Effect on Society	• Development of the Modern Road System and Traffic Management • Development of the Internal Combustion Engine • Development of Transport: Motor Cars Pre–1914, Horseless Carriages, Motorcars Post–1914, Mass Production and Modern Motor Cars • Motoring Laws • Social and Environmental Effects of Pollution •
Motoring Mathematics	• Buying a vehicle • Standing/running costs • Additional costs • Other – such as fuel consumption, stopping distances, speed, travel graphs etc

Resources to be used for revision:

- Past Paper Question Booklet
- Mind Maps for each chapter
- Revision Booklet

P.E.

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Health, Fitness and Exercise	• Definitions for health, fitness and exercise • The importance of general health and wellbeing • Consequences of a sedentary lifestyle
Diet and Nutrition	• Nutrients • Protein diets and Carb loading • Energy balance equations • Consequences of poor diet
Components of fitness	• All the components and their definitions • A sporting example of how each component is needed • Fitness tests for each component
The Methods and Principles of training	• A detailed knowledge of each training method and the components they benefit • Training principles – SPORV and FID and what they mean • The training zones

Spelling, punctuation and grammar will be assessed and marks awarded in the examination

TECHNOLOGY & DESIGN

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know and understand:
Technology in Manufacturing	• the manufacturing system stages, advances in technology and manufacturing
Production Systems	• the meaning of CAD/CAM and examples of machinery/equipment and processes
Product Sustainability	• product life cycle, sustainability, carbon footprint, the 6 Rs and social issues
Products in Society	• ways of funding, push/pull, effect on society and culture
Powering Systems	• ways of providing energy and advantages/disadvantages
Properties of Materials	• the 11 properties
Paper, Board and Timber	• the different types, properties and differences
Metals, Alloys and Polymers	• the properties of ferrous, non-ferrous, alloys, thermoplastics and thermosetting plastics
Textiles and Manufactured Boards	• how they are manufactured • the different types : natural, synthetic, yarns and fabrics

Spelling will be assessed and marks awarded in the examination

RELIGION

In order to complete this exam, you will need to bring the following materials/equipment:

- A blue or black pen

TOPIC	KNOWLEDGE REQUIRED You will need to know, understand and be able to critically evaluate:
The Identity of Jesus	Students should be able to demonstrate knowledge and understanding of, and critically evaluate: The meaning and significance of the identity of Jesus, both for His disciples and for Christians today, by studying key events relating to His titles as Son of God, Messiah, Son of Man, Son of David and Saviour: - the ministry of John the Baptist - calming the storm - Jesus feeds the 5000 - Peter's declaration about Jesus - the Transfiguration - the request of James and John - blind Bartimaeus - Jesus' entry into Jerusalem
Jesus the Miracle Worker	Students should be able to demonstrate knowledge and understanding of, and critically evaluate: The healing miracles Jesus performed, taking account of their controversial nature and their contemporary meaning and significance for Christian truth and witness: - A man with an evil spirit - Jesus heals many people - A man with a dreaded skin disease - A paralysed man - A man with a paralysed hand - Jairus' daughter - A woman with a haemorrhage - the Syro-Phoenician woman's daughter - A boy with an evil spirit

Spelling, punctuation and grammar will be assessed and marks awarded in the examination

EXAMINATION PRAYER

Dear Lord,

Help me approach my exams

with a clear head and a calm mind.

Give me your strength

and your peace

and let me do justice to

all that I have learned.

Thank you Lord,

for all my talents and gifts.

AMEN