Holy Trinity College



Christmas examinations

2019

**Year 12**

**Revision Guide**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class \_\_\_\_\_\_

Prayer to the Holy Trinity

Almighty God, Father, Son and Holy Spirit,

Trinity of persons yet the one God,

Bless our school community here at Holy Trinity College.

God the Father, source of all creation,

Nurture in us a sense of true respect, support and friendship.

God the Son, our brother, Lord and Teacher, fill all of us who learn, teach and work with wisdom, understanding and love.

God the Spirit, Paraclete and Helper, guide us to seek the good in everyone and to celebrate the commitment and co-operation of all.

Most Holy Trinity, may our community share in your life and love as we journey in Faith and Hope,

AMEN.

This booklet is going to be an important part of your daily routine over the next few weeks. Use it to the best of your ability and follow all the advice included by your teachers...they know how to help you achieve your maximum potential!!

Some advice to help you over the next few weeks...

* Ask questions in class to make sure you understand the teacher.
* Take clear notes so you can review them later.
* Review your notes later. Rewrite them if they're messy or if it helps you to remember them.
* Study with friends, you can help each other.
* Don't be afraid to ask for extra help...Teachers will be happy to help!!
* Don't study in a setting with a lot of distractions eg in front of the TV
* Don't cram the night before. Plan ahead, set up a study schedule.
* Everybody has different studying techniques, figure out what works for you.
* Ask a friend, parent/guardian, or sibling to test you on the subject.
* Compare notes with the other members of your class.

* Make sure you have a copy of your exam timetable.
* Know what day and time you have each exam.
* Revise each evening for the exams you have the

     next day

Exams – Thursday 2nd to Wednesday 11th December

The days before your exams….

Spend about 45 minutes going over your revision notes for each subject being tested next week.

If there is one exam day when you think the tests will be more difficult, then plan ahead for this by doing a little of one of those subjects earlier this week.

Go to bed early and make sure you have breakfast the next morning. You will not be able to concentrate if you have not eaten.

There may be time to study before some of the exams. Make sure you have notebooks and revision notes from those subjects with you.

This way you can refresh what you have learnt immediately before the test begins.

Take some time each evening to make sure you have enough pens, pencils, etc with you. It is disruptive to others when a pupil has to borrow during an exam.

Do out a revision plan for the week beginning **Monday 26th November** to study for the subjects you have next week. In your plan include some relaxation time, take a few hours off to watch T.V, meet your friends etc.

 **YEAR 12**

**FRENCH REVISION**

**December assessment**

**Reading paper.**

**Unit 1** (foundation)

**Myself, family and friends.**

Physical appearance

Family types/life/job

Where I live (countries)

What I like doing

My Friends

Sport

Past Tense Verbs

In My Free Time

Customs, festivals and celebrations

**\*\*\*Context 1- CCEA vocabulary booklet**

**Unit 2** (foundation)

**Leisure and free time**

Cinema

TV

Opinions

Last Weekend (past tense)

Sporting events

Next Weekend (future Tense)

Technology

**\*\*\*\*Context 1- CCEA vocabulary booklet**

**Unit 3** (foundation)

**Home and the Environment**

My house

My bedroom

Where I live

My town

My area

Types of town

In town

**\*\*\*\*Context 2- CCEA vocabulary booklet**

**Unit 4** **Leisure 2** (foundation)

Ask for directions in town **\*\*\*Context 2- CCEA vocabulary booklet**

Shopping list

Places in town

Shops

Special occasions

Clothes

Colours

**\*\*\*Context 1- CCEA vocabulary booklet**

**Unit 5** revision booklet (foundation) and workbook pages 53-54 (higher)

**School life \*\*Context 3- CCEA vocabulary booklet**

Subjects

My school day

My opinion

Rules

Differences

My daily routine **(Context 1- CCEA vocabulary booklet)**

**Unit 6** revision booklet (foundation) and workbook pages 62 and 63 (higher)

**World of work**

Household chores

How often

Pocket money

Part time jobs

Professions

The future tense (future plans and careers)

Advantages/disadvantages

Work experience

What I had to do at work (past tense)

**\*\*Context 3- CCEA vocabulary booklet**

Revision Tips\*\*\*\*\*\*\*\*\*

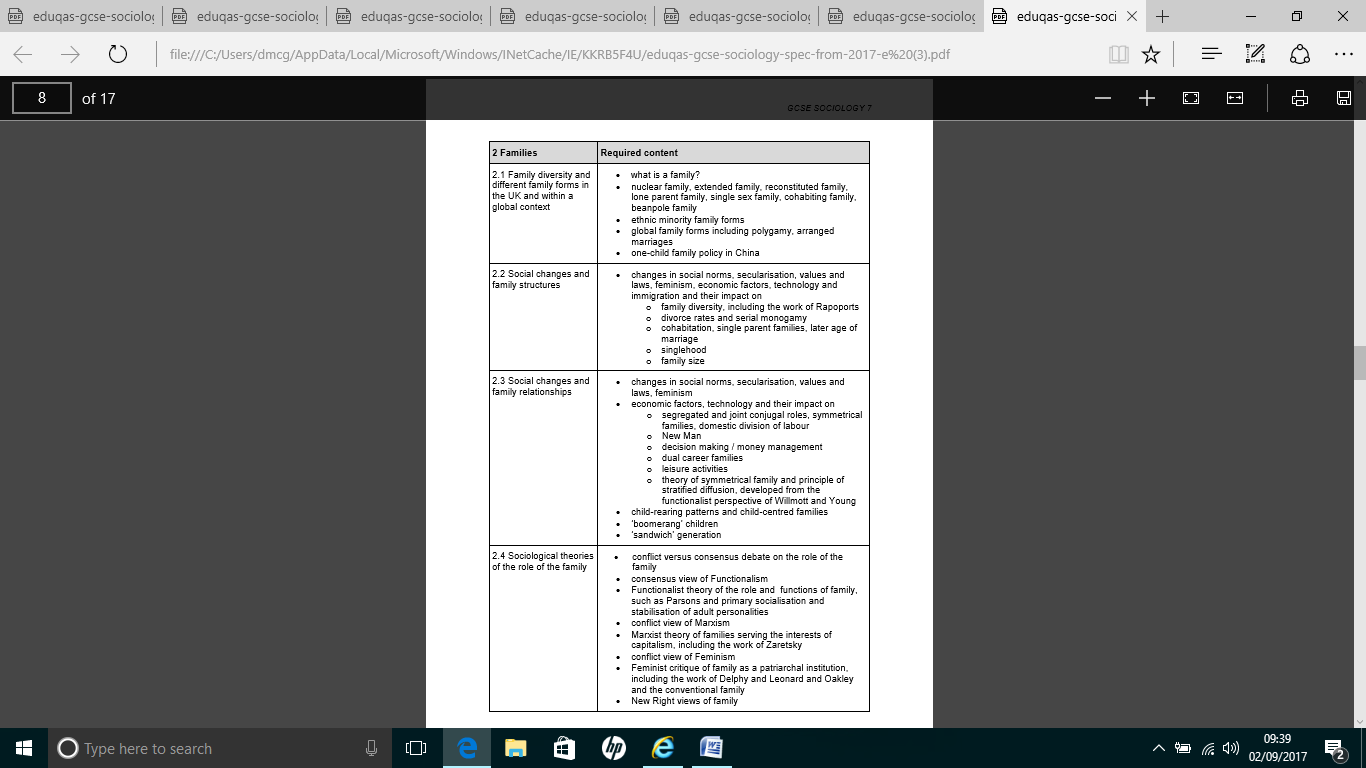
**Use your read/cover/write and check revision booklet**

Tick this list as you revise each section

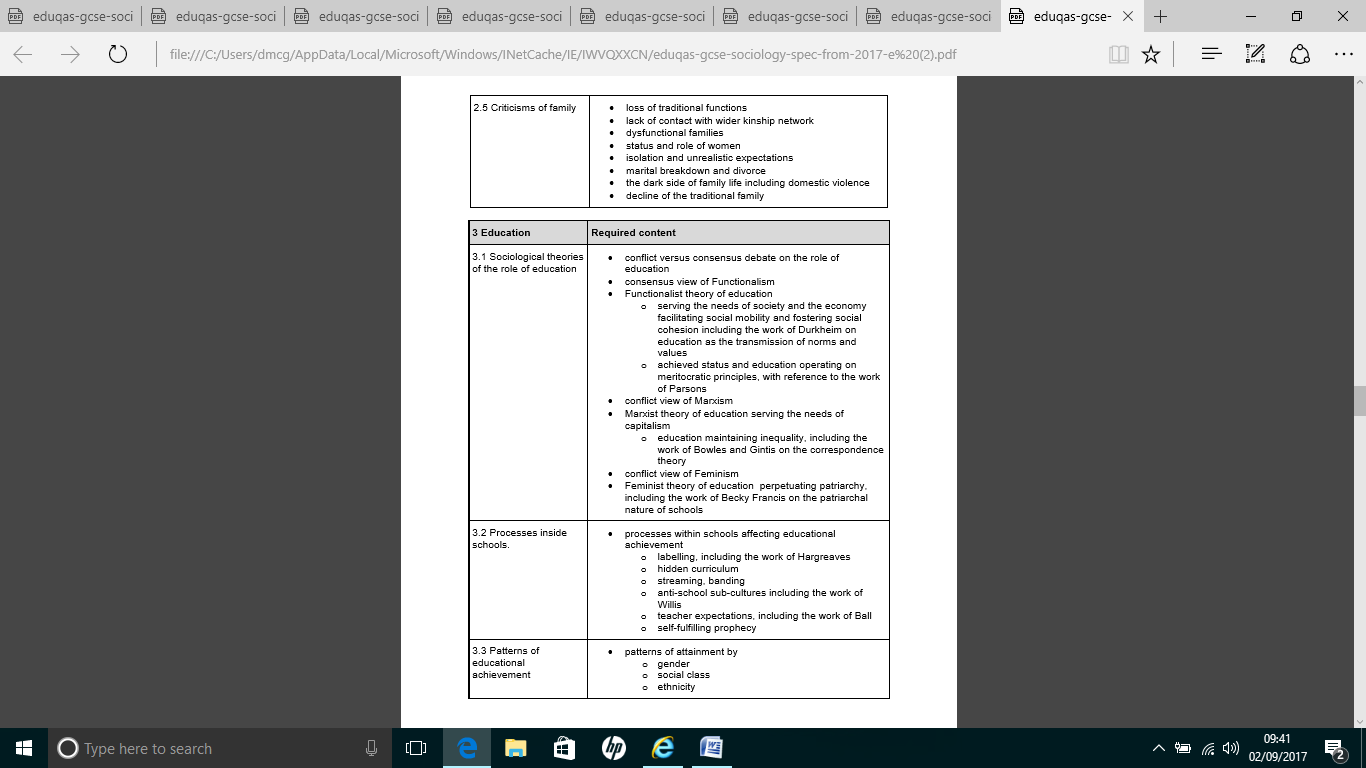
Use a blank timetable to plan revision

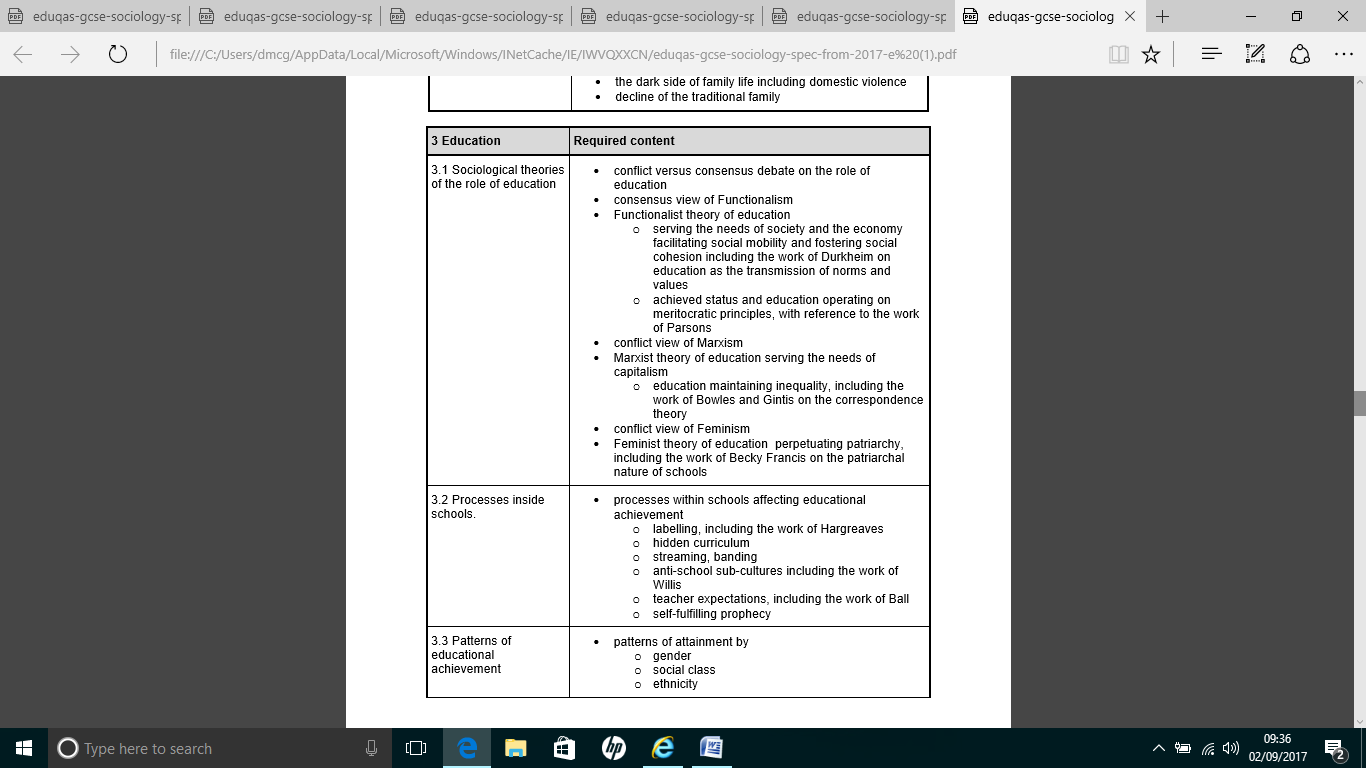
**Year 12 – Revision List – Dec 2019**

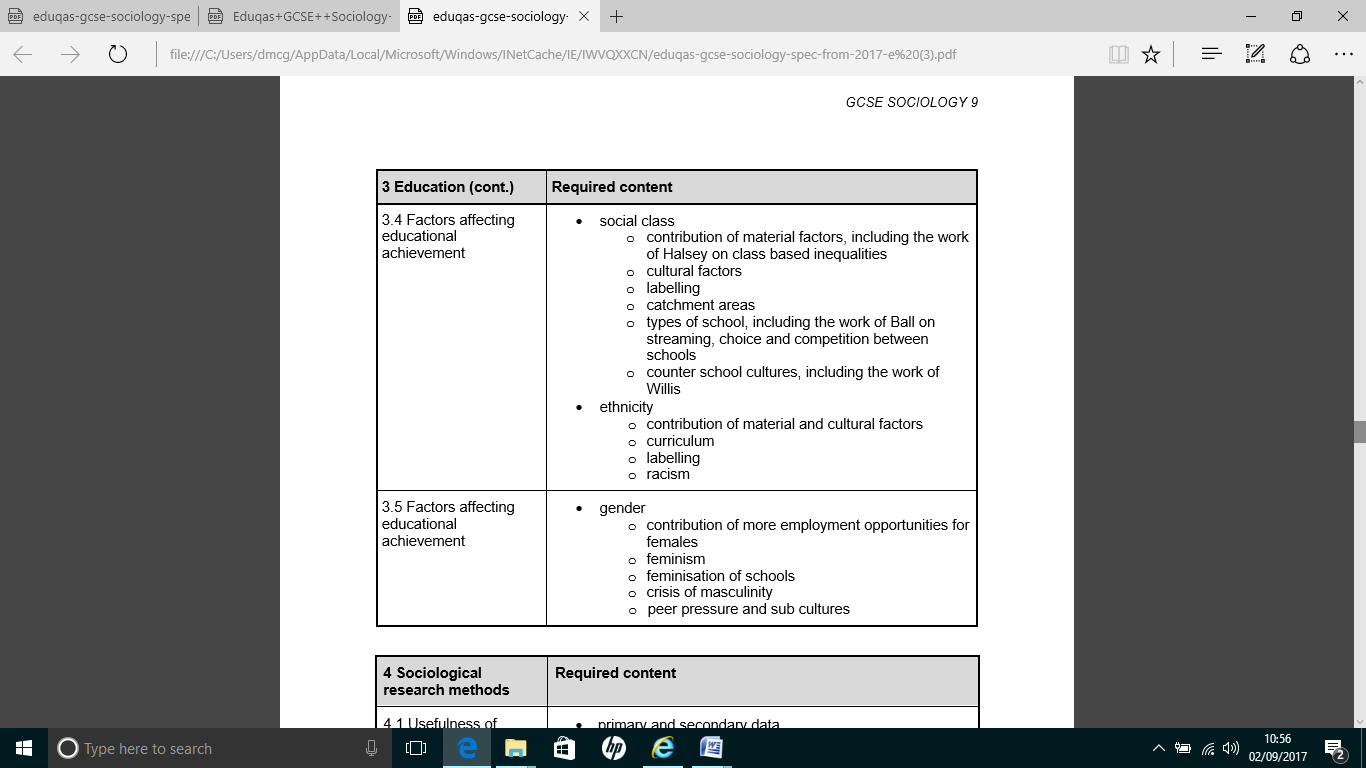
**WJEC GCSE Sociology**

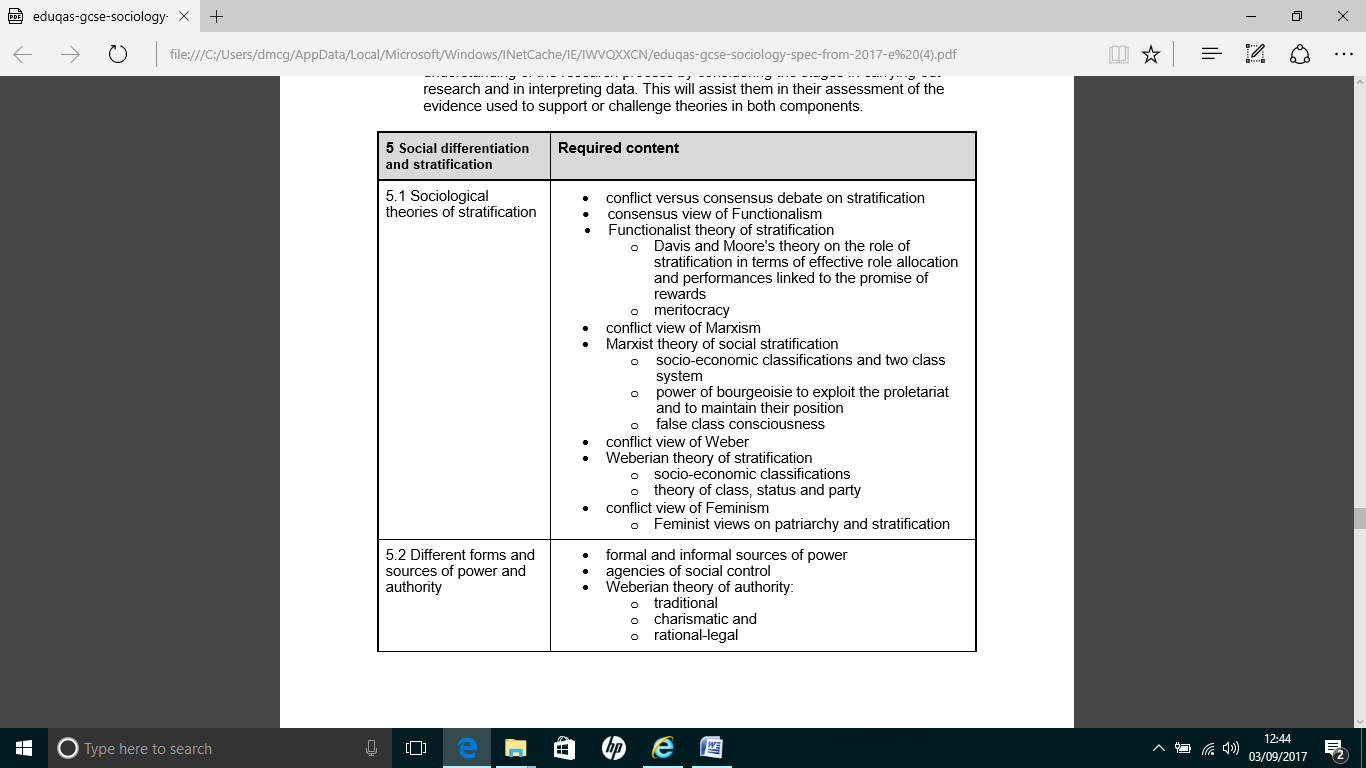


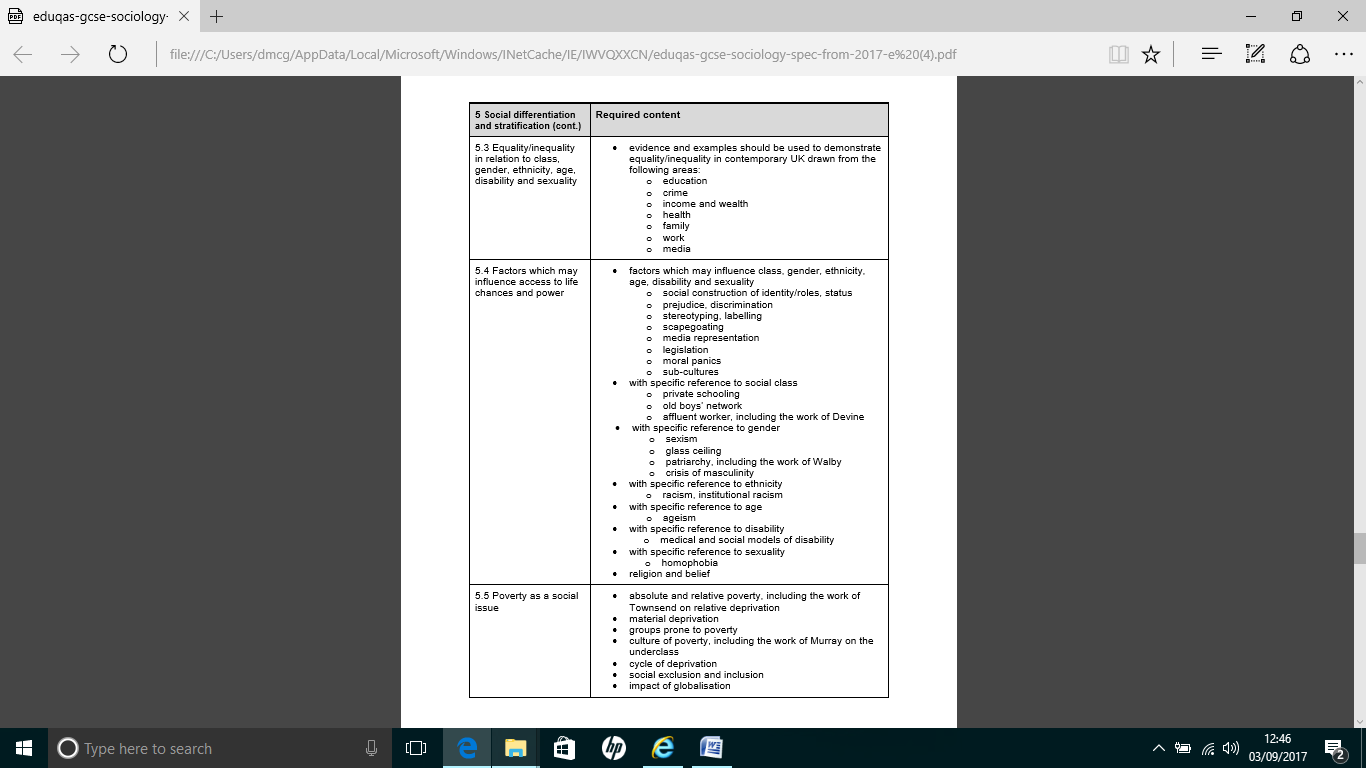
**Family**

**Education**



**Social Differentiation and Stratification**

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**Year 12 Double Award Science revision list- December 2019**

Unit 7: Practical skills

Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context for **Biology**.

Practicals being examined include:

* carry out practical work to make a temporary slide and use a light microscope to examine and identify the structures of a typical plant and animal cell*;*
* explain investigations into how photosynthesis requires light, carbon dioxide and chlorophyll to show that biology is an evidence-based discipline, including:

1. how and why a plant is destarched;
2. testing a leaf for starch by boiling in water, boiling in ethanol, softening in water and testing with iodine solution;
3. the production of oxygen;
4. using sodium hydroxide to absorb carbon dioxide; and
5. using a variegated leaf to illustrate the role of chlorophyll;

***Prescribed practical B1:***

***investigate the need for light and chlorophyll in photosynthesis by testing a leaf for starch.***

* investigate food samples using food tests, including:

1. reducing sugar (Benedict’s);
2. starch (iodine solution);
3. amino acid or protein (Biuret); and
4. fats (ethanol);

***Prescribed practical B2:***

***investigate the energy content of food by burning food samples.***

***Prescribed practical B3:***

***investigate the effect of temperature on the action of an enzyme.***

* carry out practical work to investigate the respiration of yeast.
* measure biotic and abiotic factors such as wind speed, water, pH, light, temperature and biodiversity (the number of plant and animal species) and explain how they affect communities;
* describe how to use quadrats to investigate changes in the distribution and population of organisms within a sample area of a habitat, limited to belt transect and random sampling;

***Prescribed practical B4:***

***use quadrats to investigate the abundance of plants and/or animals in a habitat.***

* investigate the key features of the decay process (temperature and water content) and their effect on the rate of decomposition in aerobic and anaerobic environments.

***Prescribed practical B5:***

***investigate the process of osmosis by measuring the change in length or mass of plant tissue or model cells, using Visking tubing.***

***Prescribed practical B6:***

***use a potometer (bubble and weight potometer) to investigate the factors affecting the rate of water uptake by a plant and washing line method to investigate the factors affecting the rate of water loss from leaves*.**

* use a microscope to examine a blood smear and identify the component parts.
* investigate the effects of exercise on the pulse rate and describe how the circulatory system benefits from regular exercise – strengthened heart muscle and increased cardiac output when at rest; and
* examine the heart and relate its structures to the function of a unidirectional pump, including identifying the four chambers, valves, thickness of muscle wall and coronary blood vessels.
* investigate variation in living things and display data using appropriate graphical techniques, including:

1. height and length as examples of continuous variation (histogram); and
2. tongue rolling and hand dominance as examples of discontinuous variation (bar chart);

* safely use aseptic techniques to grow uncontaminated colonies of bacteria in nutrient broth or on an agar plate, including:

• sterilising Petri dishes, culture media, inoculating loops and culture bottles by autoclaving, flaming and alcohol to kill unwanted microorganisms;

• needing to keep Petri dishes partially covered and to work near a Bunsen burner during inoculation to reduce the risk of contamination by microorganisms from the air;

• incubating sealed Petri dishes at a maximum temperature of 25°C to avoid growth of pathogens; and

• cleaning work surfaces and hands and safely disposing of bacterial cultures by autoclaving.

Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context for **Chemistry**.

Practicals being examined include:

* The physical properties of different types of substances
* The properties of elements
* Group 1 metals and their reaction with water
* Sublimation of iodine
* Test for chlorine
* Displacement reactions of halogens/halide ions in solution
* The properties of Group 1 elements and compounds including colour of solid compounds and solutions
* Chemical reactions involving reacting masses, percentage yield and limiting reactant
* investigate the displacement reactions of Group 7 (VII) elements with solutions of other halides to establish the trend in reactivity within the group and make predictions based on this trend;
* Indicators and pH meter
* investigate the temperature change during neutralisation and demonstrate understanding that neutralisation reactions are exothermic (heat is given out);

***Prescribed Practical C1:***

***investigate the reactions of acids, including temperature changes that occur*.**

* Tests for CO2 and H2 gases
* Colour of Group 2, aluminium and zinc salts and solutions
* investigate practically how mixtures can be separated using filtration, crystallisation, paper chromatography, simple distillation or fractional distillation (including using fractional distillation in the laboratory to separate miscible liquids, for example ethanol and water);
* analyse given data on mixtures to make judgements on the most effective methods of separation and plan experiments to carry out this separation;
* use anhydrous copper(II) sulfate to test for water;

***Prescribed Practical C2:***

***identify the ions in an ionic compound using flame tests.***

***Prescribed Practical C3:***

***investigate the reactivity of metals*.**

* investigate experimentally rusting as a reaction of iron with water and air producing hydrated iron(III) oxide;
* suggest appropriate practical methods to measure the rate of a reaction and collect reliable data (methods limited to measuring a change in mass, gas volume or formation of a precipitate against time) for the reaction of:

1. metals with dilute acid;
2. calcium carbonate/marble chips with dilute hydrochloric acid;
3. catalytic decomposition of hydrogen peroxide; and
4. sodium thiosulfate with acid (equation not required);

|  |  |
| --- | --- |
| ***Prescribed Practical C4:***  ***investigate how changing a variable changes the rate of reaction.*** | |
|  |  |

Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context for **Physics**.

Practicals being examined include:

* investigate and use the quantitative relationships between initial speed, final speed, average speed, distance moved, rate of change of speed and time, to:

1. calculate the average speed from linear distance–time graphs;
2. define that distance is measured in metres (m), speed in metres per second (m/s) and rate of change of speed in metres per second squared (m/s2);

***Prescribed Practical P1:***

***use simple apparatus, including trolleys, ball-bearings, metre rules, stopclocks and ramps to investigate experimentally how the average speed of an object moving down a runway depends on the slope of the runway measured as the height of one end of the runway;***

* investigate experimentally Newton’s first and second laws, for example using an air track and data logger, or a computer simulation, to study the effect of balanced and unbalanced forces on an object, and through mathematical modelling derive the relationship between resultant force, mass and acceleration.

***Prescribed Practical P2:***

***investigate experimentally the extension of a spring and how it is related to the applied force, and recall that the extension of a spring is directly proportional to the force applied, provided that the limit of proportionality is not exceeded.***

***Prescribed Practical P3:***

***plan and carry out experiments to verify the Principle of Moments using a suspended metre rule and attached weights or a pivoted beam and square weights.***

* use the Principle of Moments to carry out a practical task to find the weight of an object;
* investigate that the centre of gravity of an object is the point where all of the weight of the object can be considered as acting;
* carry out practical work to investigate experimentally the relationship between the mass and volume of liquids and regular solids;
* measure the density of an irregular solid (that sinks in water), and use the displacement method to measure the volume using either a measuring cylinder or eureka can;

***Prescribed Practical P4:***

***plan and carry out experiments to measure personal power, either by measuring the time taken to climb a staircase or perform a number of step-ups to a platform;***

* investigate how light is reflected by a plane mirror, and recall that:

1. angles of incidence and reflection are measured from a line at right angles to the mirror known as the normal; and
2. the angle of incidence equals the angle of reflection, and apply this rule in practical situations;

* investigate the properties of an image seen in a plane mirror through ray tracing and use the properties to solve simple problems;
* observe the refraction of light as it passes from air into glass and air into water and vice versa;

***Prescribed Practical P5:***

***use ray tracing to measure the angles of incidence and refraction when light is refracted by a glass block, demonstrate knowledge that the angles of incidence and refraction are measured from a line at right angles to the normal and use the measurements taken to plot a graph of angle of incidence against angle of refraction to show that they are related but not proportional;***

* investigate how prisms disperse white light and recall that:

1. a spectrum can be produced because different colours of light travel at different speeds in the glass;
2. the greater the amount of refraction, the greater the change of speed; and
3. since red is refracted the least, it is slowed the least, and violet is refracted the most because it has been slowed the most;

* carry out and describe an experiment that uses a distant object to measure the focal length of a converging lens;

It will also include:

1. Factors to be considered to make a test fair;
2. Types of variable- independent, dependent, controlled;
3. Analysis of trends and patterns in graphs/tables of results;
4. Possible explanations for any trend/pattern discovered;
5. Anomalous results-identification of these and determination of reasons why they are anomalous;
6. Using data from a table to calculate increase/decrease in variables measured, either as a % or simply a numerical value e.g. increase in heart rate over a period of time;
7. Complete graphs/tables from data provided;
8. Possible ways to improve an investigation;

Risk Assessment-possible dangers and how these could be reduced

**Year 12 Single Award Science Revision List- December 2019**

It will include:

1. Factors to be considered to make a fair test;
2. Types of variable- independent, dependent, controlled;
3. Analysis of trends and patterns in graphs/tables of results;
4. Possible explanations for any trend/pattern discovered;
5. Anomalous results-identification of these and reasons why they are anomalous;
6. Using data from table to calculate increase/decrease in variables measured, either as a percentage or a numerical value e.g. increase in heart rate over a period of time;
7. Complete graphs/tables from data provided;
8. Possible ways to improve an investigation;
9. Risk Assessment-possible dangers and how these could be reduced.

**Unit 1: Biology**

**Prescribed Practical B1:**

* **make a temporary slide and use a light microscope to examine and identify the structures of a typical plant and animal cell;**

**Prescribed Practical B2:**

* **investigate the energy content of food by burning food samples;**
* carry out practical work to investigate food samples using food tests, including:

1. reducing sugar (Benedict’s);
2. starch (iodine solution);
3. amino acid/protein (Biuret); and
4. fats (ethanol);

* investigate the effects of exercise on the pulse rate;
* explain investigations of how light is needed for photosynthesis, including:

1. how and why a plant is destarched;
2. testing a leaf for starch by boiling in water, boiling in ethanol, softening in water and testing with iodine solution; and
3. the production of oxygen;

**Prescribed Practical B3:**

* **investigate the need for light and chlorophyll in photosynthesis by testing a leaf for starch;**

**Unit 2: Chemistry**

* investigate how indicators can be obtained from natural dyes that can be extracted from plants, such as red cabbage or beetroot;
* explore neutralisation in everyday contexts, for example treating indigestion and using toothpaste;

**Prescribed Practical C1:**

* **follow a neutralisation reaction by monitoring pH.**
* investigate how mixtures can be separated using filtration, crystallisation, paper chromatography and simple distillation; and
* describe paper chromatography as the separation of mixtures of soluble substances by running a solvent through the mixture on the paper which causes the substances to move at different rates over the paper.
* interpret a paper chromatogram including measuring Rf value using the solvent front and leading edge of the spot;
* analyse given data on mixtures to make judgements on the most effective methods of separation, and plan experiments to carry out this separation;
* examine how materials differ with respect to their physical properties, such melting point, boiling point, strength, conductivity, density and hardness, and use such data to assess the suitability of a material for a particular purpose;
* investigate how a flame test can be carried out with a nichrome wire and concentrated acid using metal chlorides to identify metal ions.

**Prescribed Practical C2:**

* **investigate the reactivity of metals.**
* investigate the temperature change during a reaction;

**Prescribed Practical C3:**

* **investigate the temperature changes which occur during a reaction.**
* suggest appropriate practical methods to measure the rate of a reaction and collect reliable data (methods limited to measuring a change in mass or gas volume against time) for the reaction of:

1. metals with dilute acid; and
2. metal carbonates with dilute acid;

* carry out practical work to investigate how changing a variable changes the rate of reaction;

**Year 12 Geography Revision Winter 2019**

**Unit Two – Living in Our World**

**Theme A - People and Migration**

* **Birth and Death rates.**
* **Migration.**
* **Population Structure - Population pyramids both LEDC and MEDC.**
* **Dependency.**
* **Case Study – Greece.**
* **Issues facing inner-city areas in MEDC’s – Housing, Traffic, Cultural Mix.**
* **Case Study – Urban Renewal, Titanic Quarter Belfast.**
* **Case Study – Shanty town areas – Kolkata, India.**

**Year 12 GCSE Food & Nutrition Revision**

1. Use-by, best before, display until and sell by dates.
2. Fridge and freezer storage temperatures.
3. Northern Ireland Farm Quality Assurance Scheme and Bord Bia Scheme.
4. The role of the Environmental Health Office.
5. Food storage, which foods where?
6. Causes of food waste while shopping and while cooking.
7. Which foods are most commonly wasted?
8. The use of shopping apps – Advantages
9. How would shopping in a market be a suitable choice for an elderly person.
10. Evaluate the choice of shopping in a large supermarket for a large family.
11. The Food Hygiene Scheme. How is it of use to consumers?
12. Examples of foods which are grown, reared or caught.
13. The Food Safety Order 1991.
14. Long question – preventing food waste.
15. Long question – why water is essential for health?

**Year 12 Learning for Life and Work Revision List**

Students need to complete revision notes for the topics listed below. It will be helpful if students visit the past paper section on [www.ccea.org.uk](http://www.ccea.org.uk) and start completing the relevant papers.

**Citizenship Topics**

1. Influences on cultural identity
2. Ways of expressing cultural identity
3. Benefits of a multicultural society
4. Causes of conflict in society
5. Causes of prejudice and discrimination
6. The impact of sectarianism and racism on individuals and society
7. Government support for immigrants
8. Ways of promoting inclusion in schools, workplace and society
9. Ways to resolve conflict in society
10. United Nations Declaration of Human Right and the benefits of these on an individual

Homework/Revision club in room 54 Monday during lunch and Tuesday after school until 4.30pm

**12H Business and Communication**- I have requested computer rooms for them for completion of their controlled assessment. EBE/NMG

**12T- BTEC Business**- computer access for completion of their coursework- Unit 1- Introduction to Business. BGE

**RELIGION Year 12H1 Mrs Coleman, 12H2 Mrs Lagan,**

**12H3 Mrs Quinn, 12H4 Mr McGuigan Dec Revision list**

**Topic 1 -Personal and Family Issues**

• Christian views on the meaning and purpose of sexual relationships,

• Christian teachings about the benefits and challenges of marriage and divorce,

**Topic 2 - Matters of Life and Death**

• the debate about abortion, taking account of social, political, biblical, Church and other ethical viewpoints

• the views of pro-life and pro-choice groups

• the debate about euthanasia, taking account of social, political, biblical, Church and other ethical viewpoints

GCSE Music- **Full listening paper-please revise all areas of study.  Practical exam- please prepare one piece on your chosen instrument.**

**Christmas Revision list – Year 12 GCSE Physical Education**

**December exam – 1hr 15mins**

**Week beginning 5th December - TBC**

**Please know and understand:**

Component 1: Factors underpinning Health & Performance

* THE BODY AT WORK
* The SKELETAL system
* The MUSCULAR system
* The CARDIOVASCULAR system
* The RESPIRATORY system
* The DIGESTIVE system
* The NERVOUS system

**Revision List English Year 12**

**Unit 1- Repeat pupils only**

**Writing section**

1. Purpose, audience and form- page 8
2. Identifying purpose, audience and form- page 9
3. Register and style- page 9
4. Organising ideas- page 11
5. Openings and endings- page 12
6. Promoting a point of view- page 14
7. Engaging a reader- page 14
8. Writing persuasively- page 16
9. Counter-arguing- page 18
10. Spelling – page 19
11. Vocabulary for effect- page 20
12. Sentence structures- page 21
13. Sentence lengths-page 22
14. Punctuation- page 23
15. Writing speeches- page 25
16. Writing articles- page 26
17. Writing letters- page 27
18. Online blogs- page 28

Reading Section

1. Identifying purpose- page 30
2. Point. Evidence. Explain. (P.E.E.)-page 32
3. Summarising the main ideas-page 36
4. Supporting interpretations-page 38
5. Persuasive language- Page 40
6. Rhetoric- page 40
7. Fact and opinion- page 41
8. Promotional language- page 41
9. Language to connect and engage a reader- page 42
10. Presentational features- page 45
11. Analysing colour- page 45
12. Analysing layout- page 47
13. Analysing images- page 48
14. Analysing font- page 52

Unit 4- All Year 12 pupils

Writing section

1. Purpose, audience and form- page 55
2. Planning for writing- page 56
3. Structuring your writing- page 57
4. Narrative perspective- page 59
5. Openings- page 60
6. Adding interest- page 60
7. Endings- page 62
8. Creating a character- page 63
9. Creating setting- page 66
10. Creating atmosphere- page 68
11. Crafting for effect- page 70
12. Sentence structures, sentence types and sentence lengths- pages 70 & 71
13. Vocabulary for effect- page 71
14. Making selections of verbs, adverbs and adjectives- page 72
15. Describing feelings- page 73
16. Imagery- page 73

Reading section

1. Comparing texts- pages 78-80
2. Language to compare and contrast- pages 81-82
3. Understanding writers’ attitudes and intentions- pages 83-84
4. Analysing techniques- page 85
5. Evaluating the effect- pages 86-87

**Yr 12 revision Maths:**

**GCSE – Yr12**

M6 (See learning outcomes for full details of units)

Exact calculations

Number systems

Transformations

Indices

Trial and improvement

Changing subject of formulae

Ratio

Units and measurement, maps and scale drawing

Polygons

Graphs

M7 (See learning outcomes for full details of units)

|  |
| --- |
| Exact Calculations |
| Indices and Standard Form  Binary |
| Trial and Improvement |
| Changing the subject of the Formula |
| Simultaneous Equations |
| Linear Inequalities |
| Transformation of Shapes |
| Similarity |
| Graphs |
| Construction and Loci  Ratio  Sequences |
|  |

Further Maths (See learning outcomes for full details of units)

Algebraic fractions and manipulation

Quadratic equations

Simultaneous equations

Quadratic equations

Trigonometry

Differentiation

Integration

Logs

Matrices

Irish - Revision Year 12

Verbs

All past papers

The Individual-myself and friends/area/leisure/health and lifestyle

Employability –school/ part time jobs/future

Citizenship-Travel/environmental/festivals/Gaeltacht