

HELSEBY

High School



**Achieving Success
Valuing Others**

Year 11
Quick Guide
Exam Preparation
for PPE 2
Spring 2025

Business

Assessment - 1 hour 45 minutes including a range of multiple choice, short answer questions and longer case study questions.

2.1.1 Business Growth

Methods of business growth and their impact:

- internal (organic) growth: new products (innovation, research and development), new markets (through changing the marketing mix or taking advantage of technology and/or expanding overseas)
- external (inorganic) growth: merger, takeover

The types of business ownership for growing businesses:

- public limited company (plc)

Sources of finance for growing and established businesses:

- internal sources: retained profit, selling assets
- external sources: loan capital, share capital, including stock market flotation (public limited companies)

Revision link: <https://www.bbc.co.uk/bitesize/guides/z72nt39/revision/1>

2.1.2 Changes in business aims and objectives

Why business aims and objectives change as businesses evolve:

- in response to: market conditions, technology, performance, legislation, internal reasons

How business aims and objectives change as businesses evolve:

- focus on survival or growth
- entering or exiting markets
- growing or reducing the workforce
- increasing or decreasing product range

Revision link: <https://www.bbc.co.uk/bitesize/guides/zhy9rj6/revision/1>

2.1.3 Business and Globalisation

The impact of globalisation on businesses:

- imports: competition from overseas, buying from overseas
- exports: selling to overseas markets
- changing business locations
- multinationals

Barriers to international trade:

- tariffs
- trade blocs

How businesses compete internationally:

- the use of the internet and e-commerce
- changing the marketing mix to compete internationally

Revision link: <https://www.bbc.co.uk/bitesize/guides/zh3847h/revision/1>

2.1.4 Ethics, the Environment and Business

The impact of ethical and environmental considerations on businesses:

- how ethical considerations influence business activity: possible trade-offs between ethics and profit
- how environmental considerations influence business activity: possible trade-offs between the environment, sustainability and profit
- the potential impact of pressure group activity on the marketing mix

Revision link: <https://www.bbc.co.uk/bitesize/guides/z7nr382/revision/1>

2.2.1 Product

The design mix:

- function, aesthetics, cost

The product life cycle:

- the phases of the product life cycle and extension strategies
- The importance to a business of differentiating a product/service

Revision link: <https://www.bbc.co.uk/bitesize/guides/z63847h/revision/1>

2.2.2 Price

- pricing strategies
- influences on pricing strategies: technology, competition, market segments, product life cycle

Revision link: <https://www.bbc.co.uk/bitesize/guides/zn47wty/revision/1>

2.2.3 Promotion

- appropriate promotion strategies for different market segments: advertising, sponsorship, product trials, special offers, branding
- the use of technology in promotion: targeted advertising online, viral advertising via social media, e-newsletters

Revision link: <https://www.bbc.co.uk/bitesize/guides/zvjhxye/revision/1>

2.2.4 Place

- methods of distribution: retailers and e-tailers (e-commerce)

Revision link: <https://www.bbc.co.uk/bitesize/guides/z7cq6d6f/revision/1>

2.2.5 Using the marketing mix to make business decisions

- How each element of the marketing mix can influence other elements
- Using the marketing mix to build competitive advantage
- How an integrated marketing mix can influence competitive advantage

Revision link: <https://www.bbc.co.uk/bitesize/guides/zn2shbk/revision/1>

Additional Revision Resources

Edexcel GCSE Business Revision Guide

- Page 49 Business growth
- Page 50 Public limited companies (PLCs)
- Page 51 Financing growth

- Page 52 Why business objectives change
- Page 53 How business objectives change
- Page 54 Business and globalisation
- Page 55 International trade
- Page 56 Competing internationally
- Page 57 Ethics and business
- Page 58 Environmental issues
- Page 59 Product
- Page 61 The importance of price
- Page 62 Pricing strategies
- Page 63 Promotion
- Page 64 Promotion, branding and technology
- Page 65 Place
- Page 66 Integrated marketing mix

Edexcel GCSE Business Knowledge Book – focus on the sections on Business Growth & Marketing Decisions

OCR RO76 Enterprise & Marketing

Topics 1 & 3 PPE2 Revision

Assessment – one hour and 15 minutes including multiple choice, short questions and case study questions on topics 1 and 3.

Topics include;

1.1: Characteristics of Successful Entrepreneurs

1.2: Potential Rewards for Risk Taking

1.3: Potential Drawbacks for Risk Taking

3.1: Cost of Producing the Product

3.2: Revenue Generated by Sales of the Product

3.3: Profit/Loss

3.4: How to Use the Formula for Break-even as an Aid for Decision Making

3.5: Importance of Cash

Revision Guide

My Revision Notes: Cambridge National Level 1/2 Enterprise and Marketing by Tess Bayley

Business Ed Revision

<https://www.businessed.co.uk/index.php/home/theory/camnat-public/camnat-theory-notes-2022-public#r067-enterprise-and-marketing-concepts>

Revision Booklets

Use your class folders and revision booklets from Miss Kavanagh to help you preparation.

Computer Science

BTEC DIT PPE 2 Revision Guide

Assessment - 1 hour including a range of multiple choice, short answer questions and longer case study questions.

A. Modern Technologies

- Adhoc Networks
- Cloud Storage and Computing
- Cloud Tech
- Modern Team Working
- Inclusivity and Accessibility
- Impact of Tech

B. Cyber Security

- System attacks and external threats
- Internal threats and impact of breaches
- User restrictions and finding weaknesses
- Data level protection
- Policy, backups and data recovery

Revision

- KnowItAllNinja – students have an account
- BBC Bitesize
- www.theregister.com

Year 11 GCSE Computer Science Revision Guide (PPE 2)

Assessment

- Paper 1 (Programming) 1 hour 30 mins
- Paper 2 (Computing concepts) 1 hour

Paper 1 topics (1 hour 30 mins)

3.1 Fundamentals of algorithms (Exam paper 1)

3.1.1 Representing algorithms (pages 1-3, 32)

3.1.2 Efficiency of algorithms (page 32)

3.1.3 Searching algorithms (page 4)

3.1.4 Sorting algorithms (pages 5-6)

3.2 Programming (Exam paper 1) (Pages 23-27 for programming in Python)

3.2.1 Data types (page 8)

3.2.2 Programming concepts (pages 10, 12-15)

- 3.2.3 Arithmetic operations in a programming language (page 9)
- 3.2.4 Relational operations in a programming language (page 9)
- 3.2.5 Boolean operations in a programming language (page 16)
- 3.2.6 Data structures (pages 18-20)
- 3.2.7 Input/output (page 23)
- 3.2.8 String handling operations in a programming language (page 11)
- 3.2.9 Random number generation in a programming language (page 17)
- 3.2.10 Structured programming and subroutines (procedures and functions) (pages 21-22)
- 3.2.11 Robust and secure programming (page 29-31)

Paper 2 topics (1 hour)

3.1 Fundamentals of data representation (Exam paper 2)

- 3.3.1 Number bases (pages 38, 41)
- 3.3.2 Converting between number bases (pages 38, 41-42)
- 3.3.3 Units of Information (page 37)
- 3.3.4 Binary arithmetic (page 39-40)
- 3.3.5 Character encoding (page 43)
- 3.3.6 Representing images (page 44)
- 3.3.7 Representing sound (page 45)
- 3.3.8 Data compression (pages 46-48)

3.2 Computer systems (Exam paper 2)

- 3.4.1 Hardware and software (page 50)
- 3.4.2 Boolean logic (pages 34-36)
- 3.4.3 Software classification (pages 57-59)
- 3.4.4 Classification of programming languages and translators (page 60)
- 3.4.5 Systems architecture (page 50-56)

3.3 Fundamentals of computer networks (Exam paper 2) (pages 65-69)

3.4 Cyber security (Exam paper 2)

- 3.6.1 Fundamentals of cyber security (page 70)
- 3.6.2 Cyber security threats (page 70-72)
 - 3.6.2.1 Social engineering
 - 3.6.2.2 Malicious code (malware)

Revision resources

- CGP Revision book (page references are stated above)
- Class booklets
- Revision flash cards
- CraignDave on YouTube

Design & Technology

The NEA lessons will encompass working on section D and E of their NEA design folder to ensure brief, specification, research, design ideas and final design are up to date and of expected standard. Once the NEA is finished, we will be moving on to preparation for the written paper in all lessons and will conduct a mock exam in our own lesson time. Pupils should be completing ongoing home learning tasks in preparation for this. The following revision resources are useful for this:

- Class notes and homework tasks.
- Knowledge organiser provided by teacher.
- <https://www.bbc.co.uk/bitesize/examspecs/zby2bdm>
- <https://www.pgonline.co.uk/resources/design-and-technology/gcse-aqa/clearrevise-8552/>

English Language

Component One: 21st Century Literature Reading and Creative Prose Writing

For section A you will be given an extract from a story and you will have 5 questions to answer on it. You have one hour to complete this section.

For section B you will be asked to write a short story and choose one option from a choice of four. You will be tested on the accuracy of your work in this section so check spelling, punctuation and grammar carefully. You have 45 minutes to complete this section.

There are practice papers and an exam walk through for you to use as part of your preparation on the KS4 GCSE Support section on Teams in GCSE English Language. In addition to this use the revision notes and guidance given to you by your class teacher. Revision materials are also available on your Seneca Learning account.

English Literature

Component Two 'An Inspector Calls', 'A Christmas Carol' and Unseen poetry.

Section A: answer one question on 'An Inspector Calls' You should spend around 45 minutes on this question. You need to make sure that you comment on the whole text as well as the extract that you will be given on the exam paper.

Section B: Answer one question on 'A Christmas Carol' You should spend around 45 minutes on this question. You need to make sure that you comment on the whole text as well as the extract that you will be given on the exam paper.

Section C: you will be given two unseen poems. You should spend an hour on this section. The first question will focus on one of the poems printed on the exam paper. The second question will ask you to compare the first poem to a second one. Spend 20 minutes answering the first question and then 40 minutes on the second question where you will need to compare both poems.

There are practice papers and an exam walk through for you to use as part of your preparation on the KS4 GCSE Support section on Teams in GCSE English Literature. In addition to this use the revision notes and guidance given to you by your class teacher. Revision materials are also available on your Seneca Learning account.

Food Preparation and Nutrition

The NEA lessons will encompass working on section C of their NEA2 folder – evaluating the food made in their 3 hour practical exam that they will have done at the end of January.

Once NEA2 is finished we will be moving on to preparation for the written paper and will conduct a mock exam in our own lesson time after February half term. The following revision resources are useful for this:

- Eduqas GCSE Food Preparation and Nutrition: Revision Guide Paperback – 21 May 2017 by [Jayne Hill](#) , Illuminate publishing, ISBN-13 : 978-1908682871
- My Revision Notes: WJEC Eduqas GCSE Food Preparation and Nutrition Paperback – 27 Jan. 2017 by [Helen Buckland](#), Hodder Education ISBN-13 : 978-1471885396
- GCSE Food Preparation & Nutrition WJEC Eduqas Revision Question Cards, (CGP WJEC Eduqas GCSE Food Prep) Cards

Geography

Geography students will be tested on a full Geography Skills paper (Paper 3).

The length of this exam is 1 hour 30 minutes.

Students are advised to make use of class notes, revision guides, Year 11 revision TEAMS page, and past papers to support independent revision.

Students need to revise the Liverpool fieldwork write-up and the River Alyn fieldwork to support their revision.

Health and Social Care

- The written assessment is for unit R032: Principles of care in health and social care settings. This assessment will be for Topic Area 3 which focuses on effective communication in health and social care settings.
- For the written assessment the resources already provided by Mrs Gilbert are the best sources of revision (Lesson Pack, A3 Revision Sheets, Exam Pack). However, you could also use the following revision guide: https://www.amazon.co.uk/My-Revision-Notes-Cambridge-National/dp/1398351245/ref=sr_1_2?crd=6TBG7YTFHEN7&keywords=cambridge+national+health+and+social+care+my+revision+notes&qid=1702399838&srefix=cambridge+national+health+and+social+care+my+revision+notes%2Caps%2C71&sr=8-2

History

History – OCR B (SHP)

Paper 1: History Around Us (Quarry Bank Mill)

1hr

2 x 25 mark essay questions (from a choice of three)

Paper 2: The Making of America 1789-1900

55 mins

3 x 1 mark questions

1 x 9 mark question

1x 10 mark question

1x 18 mark question (from a choice of 2)

Revision Materials

- Students will follow a revision schedule to help them prepare for the assessment. This will include a specific task each week and will be followed up with a short knowledge test in class the following week.

- Students will take their books home to revise.
- A CGP revision guide is available to purchase on ScoPay.
- Students may also find it helpful to use the following website to revisit topics and quiz themselves.
<https://www.bbc.co.uk/bitesize> <https://senecalearning.com/en-GB/> (click 'Students use for free' and use your school email and password to log-in).

Maths

The Maths department will provide a list of revision topics on Class Charts. Students should revise all topics covered since the start of year 9.

Pupils will have 3 x 1hour 3 min exams. Paper 1 is non calculator, papers 2 and 3 are calculator.

Students should be working through past papers provided by their class teachers in preparation for the exam.

Revision resources:

<https://www.drfrostmaths.com/>

<https://www.mathsgenie.co.uk/gcse.html>

<https://corbettmaths.com/contents/>

<https://www.sparxmaths.uk/>

<https://www.onmaths.com/>

GCSE Further Maths

- Product rule for counting
- Surds – simplifying and rationalising
- Binomial expansion
- nth term of quadratic sequences
- Equation of straight line graphs inc parallel and perpendicular
- Length of a line segment
- Equation of a circle
- Equation of a tangent to a circle
- Factorising
- Algebraic fractions – simplifying, multiplying and dividing, addition and subtraction
- Algebraic fractions – solving equations
- Rearranging formula
- Algebraic division
- Factor theorem
- Solutions of linear and quadratic equations
- Solving linear simultaneous equations
- Solving linear equations with three unknowns
- Solving linear inequalities and representing graphically
- Solving quadratic inequalities and representing graphically
- Multiplying matrices
- Representing transformations with matrices including combined transformations
- Simplifying indices
- Solving equations with indices
- Differentiation of polynomials
- Equations of tangents and normal
- Turning points inc problem solving
- Curve sketching/interpreting

Use Sparx Maths to revise. Log on and then click on independent learning on the left hand menu. Change "Your curriculum" to AQA Level 2 Further Maths and then you can search for any of the above topics.

Media

For GCSE Media Studies, students will sit a full Component 1 exam paper (90 minutes long) where they will be assessed on *some* of the following topics:

Advertising: This Girl Can & Quality Street.

Film industry: 'No Time To Die' & 'The Man With The Golden Gun' marketing.

Magazines: GQ & Vogue.

Radio: BBC Radio 4's 'The Archers'

Newspaper industry: The Guardian & The Sun.

An 'unseen' element which could be a magazine or newspaper front cover, an advert, or a film poster.

In order to revise, students should:

- Use their Zig-Zag e-revision accounts (accessed via school email) to attempt all the revision quizzes and activities for each of the set texts listed above.
 - Make use of the fact sheets and free digital resources on the Eduqas exam board website:
<https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rlid=950>
 - Re-watch all the relevant Mrs Fisher revision videos on YouTube for each set text and all the key GCSE Media theorists.
- Refer to ALL their notes in their books and folders from class.

MFL

French

Students will be given the writing, reading & listening components of a full GCSE exam for these PPEs.

The practice speaking exams will be in January (this will include role play, photo card & conversation). Students will be given an appointment for just after the Christmas holiday.

The listening exam will take place in lessons the week before the other exams.

To prepare for the reading & listening exams, students should prepare by revising vocabulary (into English) and by completing any exam practice activities on Language Nut (just search AQA French GCSE legacy). They can also complete practice tasks on BBC Bitesize AQA French.

To prepare for the writing exam students will need to revise all of the topics covered so far and practise essay questions (40 & 90 word foundation and 90 & 150 word higher) on topics of:

Family & friends

Free time (sport, media, technology)

Healthy living

Town & region

Holidays

School

Future study, careers & other ambitions

Social & global issues (higher only)

Students should have a clear checklist of the tenses and other grammatical structures that they plan to include in their answers. They would also be well advised to memorise a few good phrases for each topic.

If you make any revision notes or write out some practice answers, your teacher will willingly mark these for you.

The best & most reasonable revision guides are published by CGP, but make sure you get the AQA editions.

German

Students will be given the writing, reading & listening components of a full GCSE exam for these PPEs.

The practice speaking exams will be in January (this will include role play, photo card & conversation). Students will be given an appointment for just after the Christmas holiday.

The listening exam will take place in lessons the week before the other exams.

To prepare for the reading & listening exams, students should prepare by revising vocabulary (into English) and by completing any exam practice activities on Language Nut (just search AQA German GCSE legacy). They can also complete practice tasks on BBC Bitesize AQA German.

To prepare for the writing exam students will need to revise all of the topics covered so far and practise essay questions (40 & 90 word foundation and 90 & 150 word higher) on topics of:

Family & friends

Free time (sport, media, technology)

Healthy living

Town & region

Holidays

School

Future study, careers & other ambitions

Social & global issues (higher only)

Students should have a clear checklist of the tenses and other grammatical structures that they plan to include in their answers. They would also be well advised to memorise a few good phrases for each topic.

If you make any revision notes or write out some practice answers, your teacher will willingly mark these for you.

The best & most reasonable revision guides are published by CGP, but make sure you get the AQA editions.

Music

The year 11 Music PPE2 will be structured like a full GCSE exam. The exam is split into two sections.

- Section A is a listening section in which students have to listen to extracts and write the correct response to the question in relation to the elements of music. Students should ensure that they have revised the elements of music and key terms within each element.
- Section B is comprised of questions based on the set works students have been studying. Students will have questions on their study of three songs from Little Shop of Horrors and Mozart's Clarinet Concerto 3rd movement in relation to the style or genre of the piece. For example, the classical idea of balance and symmetry for Mozart's Clarinet Concerto. Students will have an essay question on both set works. Students should use their books and revision resources on Teams to study for this section.

• Please use your books to revise all Little Shop of Horror pieces and Mozart's Clarinet Concerto 3rd movement Rondo. You must revise key features of each piece in relation to the element of music it relates to. You must also revise keywords relating to elements of music and practice recognising these aurally.

You will receive a revision pack which includes all information for LSOH and Mozart's CC organised into the relevant elements of music.

You can access good revision resources on BBC Bitesize by searching 'BBC Bitesize AQA GCSE Music' [GCSE Music - AQA - BBC Bitesize](#)

You can also access aural listening questions by searching on YouTube 'aqa gcse music listening tests'.

If you have any questions or need any further support. Feel free to come to music during any break time throughout the week for some revision.

Performing Arts

Students will be completing their external idea's log for Component 3. This will be completed in exam conditions on the computers based on the brief that was released in January. The students will prepare 1 side of A4 notes that they will submit prior to the assessment to be checked. These notes will then be brought into the exam.

GCSE Physical Education

Paper 1

1. Applied anatomy and physiology

- The structure and functions of the musculoskeletal system
- The structure and functions of the cardiorespiratory system
- Anaerobic and aerobic exercise
- The short- and long-term effects of exercise

2. Movement analysis

- Lever systems, examples of their use in activity and the mechanical advantage they provide in movement
- Planes and axes of movement

3. Physical Training

- The relationship between health and fitness and the role that exercise plays in both
- The components of fitness, benefits for sport and how fitness is measured and improve
- The principles of training and their application to personal exercise/ training programmes
- The long-term effects of exercise
- How to optimise training and prevent injury
- Effective use of warm up and cool down

4. Use of data

Use of data

Paper 2

Sport psychology

- Classification of skills
- The use of goal setting and SMART targets to improve and/or optimise performance
- Guidance and feedback on performance
- Mental preparation for performance

Students can revise using their course booklets, Exams Made Easy exam style question books, Everlearner online package, Everlearner YouTube channel, and BBC bitesize (Edexcel specification)

Science

GCSE Biology Combined Science Trilogy

Your assessment will be on any of the content found in the last 3 large topics of the course. Content was taught in year 10 and 11. The following is an indication of the broad content that you could be tested on.

- All of B5: Homeostasis and response. (example topics include: The nervous system, Hormones, Blood sugar control, Fertility)
- All of B6: Inheritance, variation and evolution. (example topics include: Meiosis, DNA, Genetic crosses, Evolution, Selective Breeding, Genetic engineering, Extinction, Classification)
- All of B7: Ecology. (example topics include: Adaptation, food webs, cycles, biodiversity)
- How Science Skills work, such as analysing data, simple calculations and evaluating information.
- You may also be tested on work covered when performing a required practical.

Your assessment will last 75 minutes, and you should bring a pen, pencil, calculator and ruler.

You will be provided with digital copies of knowledge organisers and past papers via ClassCharts, and links to interactive tasks such as Seneca.

GCSE Separate Science: Biology

Your assessment will be on any of the content found in the last 3 large topics of the course. Content was taught in year 10 and 11. The following is an indication of the broad content that you could be tested on.

- All of B5: Homeostasis and response. (example topics include: The nervous system, Brain, Eye, Thermoregulation, Hormones, Blood sugar control, Fertility, Plant Hormones)
- All of B6: Inheritance, variation and evolution. (example topics include: Meiosis, DNA, Cloning, Genetic crosses, Evolution, Speciation, Selective Breeding, Genetic engineering, Extinction, Classification)
- All of B7 covered so far: Ecology. (example topics include: Adaptation, cycles, biodiversity, sampling, decomposition)
- How Science Skills work, such as analysing data, simple calculations and evaluating information.
- You may also be tested on work covered when performing a Required practical.

Your assessment will last 1 hour and 45 minutes, and you should bring a pen, pencil, calculator and ruler.

You will be provided with digital copies of knowledge organisers and past papers via Class Charts, and links to interactive tasks such as Seneca.

GCSE Combined Science Trilogy – Chemistry

Your assessment will be on any of the content found in the last 3 large topics of the course. Content was taught in year 10 and 11. The following is an indication of the broad content that you could be tested on.

5.6 The rate and extent of chemical change:

- rate of reaction, calculating rate of reaction, factors effecting rate of reaction, collision theory.
- Required practical activity 11: investigate how changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity.
- Catalysts and reversible reactions.
- Chemical equilibrium (HT only).

5.7 Organic chemistry

- Crude oil, hydrocarbons and alkanes
- Fractional distillation and petrochemicals

- Properties of hydrocarbons
- Cracking and alkenes

5.8 Chemical analysis

- Purity, formulations and chromatography
- Identification of common gases
- Required practical activity 12: investigate how paper chromatography can be used to separate and tell the difference between coloured substances. Students should calculate R_f values.

5.9 Chemistry of the atmosphere

- The composition and evolution of the Earth's atmosphere
- Carbon dioxide and methane as greenhouse gases
- Human activities which contribute to an increase in greenhouse gases in the atmosphere
- Global climate change
- The carbon footprint and its reduction
- Common atmospheric pollutants and their sources

5.10 The Earth's Resources

- Finite and renewable resources
- Water safe to drink
- Treating water
- Extracting metals from Ores
- Life Cycle Assessment (LCA)
- Reduce, reuse, recycle

Your assessment will last 75 minutes, and you should bring a pen, pencil, calculator and ruler.

You will be provided with digital copies of knowledge organisers and past papers via ClassCharts, and links to interactive tasks such as Seneca.

The link to the specification: <https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>

GCSE Separate Science: Chemistry

Your assessment will be on any of the content found in the last 3 large topics of the course. Content was taught in year 10 and 11. The following is an indication of the broad content that you could be tested on.

Your assessment will last 1 hour and 45 minutes, and you should bring a pen, pencil, calculator and ruler.

You will be provided with digital copies of knowledge organisers and past papers via ClassCharts, and links to interactive tasks such as Seneca.

This is the link to your specifications: <https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-8462-SP-2016.PDF>

4.6 The rate and extent of chemical change

- Calculating rates of reactions
- Factors which affect the rates of chemical reactions
- Required practical 5: investigate how changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity.
- Collision theory and activation energy
- Catalysts
- Reversible reactions and dynamic equilibrium

- Energy changes and reversible reactions
- The effect of changing conditions on equilibrium (HT only)
- The effect of changing concentration (HT only)
- The effect of temperature changes on equilibrium (HT only)
- The effect of pressure changes on equilibrium (HT only)

4.7 Organic chemistry

- Crude oil, hydrocarbons and alkanes
- Fractional distillation and petrochemicals
- Properties of hydrocarbons
- Cracking and alkenes
- Structure and formulae of alkenes
- Reactions of alkenes
- Alcohols and Carboxylic acids
- Addition polymerisation
- Condensation polymerisation (HT only)
- Amino acids (HT only)
- DNA (deoxyribonucleic acid) and other naturally occurring polymers

4.8 Chemical analysis

- Purity, formulations and chromatography
- Required practical 6: investigate how paper chromatography can be used to separate and tell the difference between coloured substances. Students should calculate R_f values.
- Identification of common gases
- Identification of ions by chemical and spectroscopic
- Required practical 7: use of chemical tests to identify the ions in unknown single ionic compounds covering the ions from sections Flame tests and Sulfates test as well as other ions.

110 Options Only (Ms Dannan's Separate Class) will also be tested on all of the above as well as the following two topics:

5.9 Chemistry of the atmosphere

- *The composition and evolution of the Earth's atmosphere*
- *Carbon dioxide and methane as greenhouse gases*
- *Human activities which contribute to an increase in greenhouse gases in the atmosphere*
- *Global climate change*
- *The carbon footprint and its reduction*
- *Common atmospheric pollutants and their sources*

5.10 The Earth's Resources

- *Finite and renewable resources*
- *Water safe to drink*
- *Treating water*
- *Extracting metals from Ores*
- *Life Cycle Assessment (LCA)*
- *Reduce, reuse, recycle*

GCSE Physics Combined Science Trilogy

Your assessment will be a full Paper 2 physics exam, for which the content was taught in year 10 and 11. The following topics can be assessed in Paper 2.

- P8 – Forces in Balance

- P9 – Motion
- P10 – Force and Motion
- P11 – Wave Properties
- P12 – Electromagnetic Waves
- P13 - Electromagnetism
- How Science Works skills such as; analysing data, simple calculations and evaluating information.
- Required practicals:
 - Investigating the relationship between force & extension of a spring
 - Investigating the relationship between force & acceleration
 - Investigating waves in a ripple tank & waves in a solid
 - Investigating infrared radiation

Your assessment will last 75 minutes, and you should bring a pen, pencil, calculator, ruler and protractor.

You will be provided with digital copies of knowledge organisers and past papers via ClassCharts, and links to interactive tasks such as Seneca.

GCSE Separate Science: Physics

Your assessment will be a Paper 2 physics exam, **except from P16 – Space (not assessed in PPE 2)**, for which the content was taught in year 10 and 11. The following topics can be assessed in Paper 2.

- P8 – Forces in Balance
- P9 – Motion
- P10 – Force and Motion
- P11 – Force and Pressure
- P12 – Wave Properties
- P13 – Electromagnetic Waves
- P14 - Light
- P15 – Electromagnetism
- P16 – Space
- How Science Works skills such as; analysing data, simple calculations and evaluating information.
- Required practicals:
 - Investigating the relationship between force & extension of a spring
 - Investigating the relationship between force & acceleration
 - Investigating waves in a ripple tank & waves in a solid
 - Investigating reflection & refraction of light
 - Investigating infrared radiation

Your assessment will last 1 hour and 45 minutes, and you should bring a pen, pencil, calculator, ruler and protractor.

You will be provided with digital copies of knowledge organisers and past papers via ClassCharts, and links to interactive tasks such as Seneca.

Sociology

Students need to revise the following areas for their Sociology PPE

You will complete Paper 2 during a double lessons

1st lesson of the double will be on Crime and Deviance

2nd lesson of the double will be on Social Stratification

Revision material will be provided in lesson and also placed on Class charts