

KS4 curriculum booklet

Dear parent,

Please find in this document an overview of your child's GCSE courses and some revision strategies to help them be successful.

After this set of assessments the next assessment students will sit will be in the summer term.

Y10 mocks: 21st of April – 7th of May

Once the reports come out I will send out more info about what each of the grades mean in different subjects and the style of assessments students have sat. You should also find links to revision guides in this document too.

Best wishes,

Kind Regards,

Mr T Rye

Lead Practitioner

Data and Assessment; KS4

Bolingbroke Academy

t.rye@arkbolingbrokeacademy.org

www.arkbolingbrokeacademy.org



Revision Guidance

Experts suggest that teenagers

1. Maintain a basic level of health. Do at least 60 minutes of physical activity every day – this should range from moderate activity, such as cycling and playground activities (walk to school and lunch break on Wandsworth Common), to vigorous activity, such as running.
2. Balance screen time. Excluding non-academic use, they should have no more than two hours a day in front of a screen. Parents/carers should encourage screen free times and check screen usage on their child's mobile.
3. Reflection time. We have been using quiet reflection and meditation time (2-4 mins) during Civitas on a weekly basis to help our pupils find a calm time. Encourage them to find this quiet and reflective time each day.
4. Healthy diet. Start their day with a nutritional breakfast and we'll ensure a healthy lunch. Dinner will feed their bodies as their revision feeds their minds.
5. Get enough sleep. Teenagers should be getting between 8-9 hours a sleep daily.





Revision Guidance

Parent/Carer and the Academics:

1. Ask your child to break each subject down into papers and topics.
2. RAG (red, amber, green) rate these with regards to confidence.
3. Ask them to use a study calendar to map out study days from now until Christmas
4. Check them off as they go 😊



After each topic revision is complete, it's time to **put down those flashcards** and **get testing!** Ask your child to give you their topic notes and test them on their knowledge. If it's a wider topic, phrases like, “**tell me about...**” or “**who is...**” are useful. Keep a **list** of incorrect responses or lack of confidence and **re-test later**

Practice papers are essential. Students will have had lots of these from us in school, but they need to be constantly practising meeting their **targets given by teachers** after these papers. **The more the merrier!** It's a good idea to do practice questions on topics **along with your revision**, rather than doing lots at the end. **Time them as often as possible!**





Pupil Revision Guidance

**Learn
knowledge/content.**

**Applying that
knowledge using a
test/quiz/question.**

**Gaining
feedback/check your
application of the
knowledge.**

Knowledge
and
Content

Read, write,
copy,
highlight,
make
flashcards,
make notes.

Apply the
Skill and
Test

Questions,
quiz, past
paper, write
an answer,
redraft,
timed.

Feedback
Check
Evaluate

Compare
to a model,
use a mark
scheme,
www/ebi



Pupil Revision Guidance

THE BARE MINIMUM

Put your phone away & don't listen to music

Evidence shows that students who spend more time texting and using social media get lower grades. In another fascinating study, researchers found that the mere sight of a phone was enough to reduce a person's ability to focus.



THE EXTRA MILE

Check with subject teachers:

when are academic support sessions?

Look into the following sites:

Futurelearn – free online courses

Itunes U - iTunes U is a part of the iTunes Store featuring free lectures, language lessons, audiobooks, and more, that you can enjoy on your iPod, iPhone, Mac or PC. Explore over 350,000 educational audio and video files from top universities, museums and public media organizations from around the world.

Seneca learning is a free online learning tool with interactive lessons to take students through their GCSEs

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



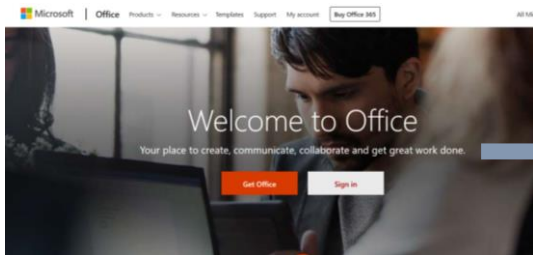
Using the School Network

All students have access to the O365 cloud based applications

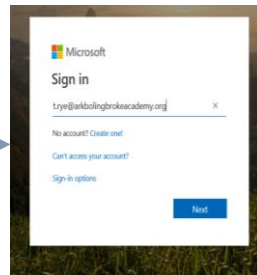
These are tools which can be used to support revision

The login for O365 is the same as the school network

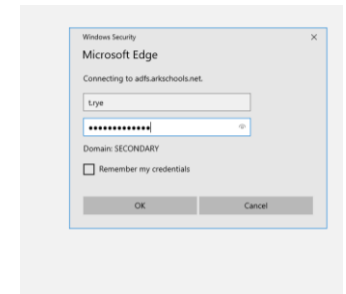
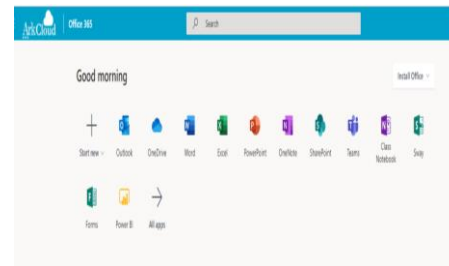
Steps for completing this are below:



Step 1: Google Office 365 and click the link. It should look like the above



Step 2: When in school type in your email and click next (you will not have to enter a password)



When at home -You will need to type in your school username and password – the one you used to log into the network. Chrome is usually the most reliable browser to use.




Show My Homework

As we will not be using planners Show My Homework is the go to tool to check on what students need to complete in their own time

A guide for students logging in is below:


Ark Bolingbroke Academy

Enter email address or username

Enter password 

Log in

Or log in with:

 Sign in with Office 365

You should have been given a pin which shows the details for logging in for parents and students

Please download the application so you can track the homework your child is meant to be doing

For parents you will be given your login details at Civitas Evening



Y11 Curriculum Overview – English

KS4 lead – s.twyman@arkbolingbrokeacademy.org

Exam board – AQA

Key texts – available on Wise Pay

£16.00 for the Y10 text bundle

£2.75 for each of the KS4 literature guides

	Year 10 Autumn 1 & 2	Year 10 Spring 1 & 2	Year 10 Summer 1 & 2	Year 11 Autumn 1 & 2	Year 11 Spring 1 & 2
English Literature	A Christmas Carol	Macbeth or The Merchant of Venice	An Inspector Calls	Power and Conflict Poetry	Revision
English Language	Paper 1 Q1 + Q2 Paper 1 Q5	P2 Q1 + Q3 P2 Q5 + revision	mocks + feedback Paper1, qu3 paper 1 Qu3, Sp&L presentations	Paper 1, question 4 Revision Mocks + feedback Paper 2, question 2	Paper 2, question 4



KS4 Curriculum Overview – Combined Science

KS4 lead - g.turner@arkbolingbrokeacademy.org

Exam Board – AQA

Key texts: New Grade 9-I Combined Science Trilogy
Higher AQA Workbook (Collins GCSE 9-I Revision)

[Amazon Link](#)

Combined Science	
Y10 Autumn 1	Biology – Communicable Diseases Biology – Preventing and Treating Diseases Chemistry – Chemical Calculations Physics – Energy Transfer by Heating (SHC) Physics – Molecules and Matter
Year 10 Autumn 2	Biology – Non-Communicable Disease Chemistry – Electrolysis Physics - Radioactivity

Combined Science	
Year 10 Spring 1	Biology – Photosynthesis Chemistry – Energy Changes Physics – Forces in Balance
Year 10 Spring 2	Biology – Human Nervous System Chemistry – Rates and Equilibrium Physics – Motion Physics – Force and Motion
Year 10 Summer 1	Biology – Reproduction Chemistry – Crude Oil and Fuels
Year 10 Summer 2	Chemistry - Energy changes, electrolysis, Physics - Molecules and matter, radioactivity To be updated for 2019/2020 sy by Ark
Year 11 Autumn 1	Biology – Hormonal Coordination Chemistry – Extent of Chemical Change Physics – Force and Motion
Year 11 Autumn 2	Biology – Genetics and Evolution Chemistry – Crude Oil and Fuels Physics – Magnets and Electromagnetism
Year 11 Spring 1	Biology – Organising an Ecosystem Chemistry – Earth’s Resources
Year 11 Spring 2	Biology - Biodiversity and ecosystems Physics - forces, magnets and elctromagnets



KS4 Curriculum Overview – Triple Science

KS4 lead - g.turner@arkbolingbrokeacademy.org

Exam Board – AQA

Key texts – available on Amazon

CGP GCSE Biology/Chemistry/Physics 9-1 Revision

Triple Science	
Y10 Autumn 1	Biology – Communicable Disease; Preventing and Treating Diseases Chemistry – Chemical Calculations; Earth's Resources; Organic Reactions; Polymers Physics - Using Earth's Resources
Year 10 Autumn 2	Biology – Non-Communicable Disease Chemistry – Electrolysis Physics – Radioactivity
Year 10 Spring 1	Biology – Photosynthesis Chemistry – Energy Changes Physics – Forces in Balance

Triple Science	
Year 10 Spring 2	Biology – Human Nervous System Chemistry – Rates and Equilibrium Physics – Motion; Force and Motion
Year 10 Summer 1	Biology - Reproduction Chemistry - Crude Oil and Fuels Physics - Force and Pressure; Space Physics
Year 10 Summer 2	Biology and Chemistry – revision Chemistry - Crude Oil and Fuels
Year 11 Autumn 1	Biology – Hormonal Coordination Chemistry - Organic Reactions; Polymers Physics - Force and Pressure; Space Physics
Year 11 Autumn 2	Biology - Genetics and Evolution Chemistry – Extent of Chemical Change Physics - Force and Pressure; Space Physics
Year 11 Spring 1	Biology – Organising an Ecosystem; Homeostasis in Action Chemistry - Crude Oil and Fuels Physics - Force and Pressure; Waves: Light
Year 11 Spring 2	Biodiversity and ecosystems, human impact on the environment Chemistry – Earth's Resources; Organic Reactions; Polymers Physics - Using Earth's Resources



KS4 Curriculum Overview – Maths Foundation

Exam board - Edexcel

KS4 lead - s.davidson@arkbolingbrokeacademy.org

Online Hegarty Maths homework (set every two weeks) to review topics from across the year. Pupils also can do independent revision beyond assigned homework to strengthen their skills.

There are a number of websites that may be useful for revision:

www.emaths.co.uk

www.bbc.co.uk/bitesize

www.kangaroomaths.com

www.mathsmadeeasy.co.uk

www.khanacademy.org

Maths foundation	
Y10 Autumn 1	Four Operations ; Rounding and Estimating; Multiples, Factors, LCM and HCF; Prime Factorization; Standard Form; Fractions; Percentages; Compound Interest and Depreciation; Ratio
Year 10 Autumn 2	Angles; Surds; Pythagoras' Theorem; Trigonometry in right-angled triangles; Bearings

Maths foundation	
Year 10 Spring 1	Simplifying expressions; Expanding and Factorising expressions; Solving Equations; Rearranging Formulae; Simultaneous Equations; Drawing Quadratic Graphs; Factorising quadratic expressions and Solving quadratic equations
Year 10 Spring 2	Substitution; Speed, Distance, Time; Density, Mass, Volume; Pressure, Force, Area; Linear Graphs; Cubic and Reciprocal Graphs; Real Life Graphs
Year 10 Summer 1	Perimeter and Area; Volume; Surface Area ; Circumference of a circle and arc length; Area of a circle and sector; Similarity
Year 10 Summer 2	Loci and construction ; Vectors; Transformations (translation, rotation, reflection)
Year 11 Autumn 1	Sequences; Simplifying expressions; Expanding and Factorising expressions; Solving Equations; Rearranging Formulae; Inequalities; Proof; Probability
Year 11 Autumn 2	Mean, median and mode averages; Range; Averages from a table; Construct and interpret statistical diagrams including pie charts; Scatter Graphs; Frequency Polygons; Probability Trees; Questionnaires and Sampling
Year 11 Spring 1	Structured reteach lessons



KS4 Curriculum Overview

– Maths Higher

Exam board - Edexcel

KS4 lead -

s.davidson@arkbolingbrokeacademy.org

Online Hegarty Maths homework (set every two weeks) to review topics from across the year. Pupils also can do independent revision beyond assigned homework to strengthen their skills.

There are a number of websites that may be useful for revision:

www.emaths.co.uk

www.bbc.co.uk/bitesize

www.kangaroomaths.com

www.mathsmadeeasy.co.uk

www.khanacademy.org

Maths Higher	
Y10 Autumn 1	Multiples, Factors, LCM and HCF; Prime Factorisation; Index Laws ; Surds; Standard Form; Recurring Decimals; Bounds; Ratio; Proportion; Percentages
Year 10 Autumn 2	Angles; Pythagoras' Theorem; Trigonometry non right-angled triangles; Bearings; Trigonometry Graphs
Year 10 Spring 1	Factorising quadratic expressions; Solving Equations; Solving quadratic equations by factorising, completing the square and applying the quadratic formula; Drawing Quadratic Graphs; Solving Inequalities; Simultaneous Equations; Substitution; Iteration
Year 10 Spring 2	Linear Graphs; Equation of a Circle; Speed, Distance, Time; Density, Mass, Volume; Pressure, Force, Area; Real Life Graphs
Year 10 Summer 1	Circumference of a circle and arc length; Area of a circle and sector; Circle Theorems; Congruence and Similarity; Area; Volume; Surface Area
Year 10 Summer 2	Loci and construction; Vectors; Transformations
Year 11 Autumn 1	Functions; Transformation of Graphs; Sequences; Proof; Algebraic Fractions
Year 11 Autumn 2	Mean, median and mode averages; Comparing sets of data; Averages from a table; Box Plots; Construct and interpret statistical diagrams including pie charts; Histograms; Probability
Year 11 Spring 1	Structured reteach lessons



KS4 Curriculum Overview – MFL

KS4 lead - p.vazquez-lopez@arkbolingbrokeacademy.org

Exam board – Edexcel

Spanish Revision books:

[Textbook link](#)

Grammar and translation workbook:

[Textbook link](#)

Revision workbook (Spanish)

[Textbook link](#)

MFL	
Y10 Autumn 1	Talking about interests, TV programmes and sports. Being able to use the present, preterite, imperfect and present perfect tenses
Year 10 Autumn 2	Talking about role models, general conversation questions and speaking exam practice

MFL	
Year 10 Spring 1	Talking about city, giving directions, describing your area and saying what you can and cannot do, being able to use the future tense
Year 10 Spring 2	Talking about the advantages and disadvantages of the city, being able to use the conditional tense, general conversation questions
Year 10 Summer 1	Talking about illnesses and injuries, talking about gastronomy and festivals
Year 10 Summer 2	Talking about food and festivals, being able to make comparisons and using superlatives, general conversation questions
Year 11 Autumn 1	Being able to talk about job opportunities, gap year, working experience
Year 11 Autumn 2	Being able to talk about the environment, healthy eating, being able to use the subjunctive
Year 11 Spring 1	Being able to talk about sports, drug addictions, tense revision, general conversation questions
Year 11 Spring 2	Revision/speaking exams



KS4 Curriculum Overview – Humanities

KS4 lead - e.gelder@arkbolingbrokeacademy.org

Geography – AQA

History – Edexcel

RE - AQA

R.E useful books: [textbook link](#) [textbook 2 link](#)

History:

[textbook 1 link](#) [textbook 2 link](#)

Humanities	
Year 10 Spring 1	Geography – physical landscapes (coasts) History – cold war R.S. – Islam Beliefs
Year 10 Spring 2	Geography – physical landscapes (rivers) History – cold war R.S. – Islam Practices
Year 10 Summer 1	Geography – fieldwork History – Elizabeth R.S. – Thematic Studies: Relationships
Year 10 Summer 2	Geography – fieldwork History – Elizabeth R.S. – Thematic Studies: Relationships
Year 11 Autumn 1	Geography – resource management History – Elizabeth + Germany R.S. - Themes
Year 11 Autumn 2	Geography – Fieldwork and changing economic world History – Weimer and Nazi Germany R.S. - Themes
Year 11 Spring 1	Geography – changing economic world History – Re-teach R.S. - Themes
Year 11 Spring 2	Geography – changing economic world History – Re-reach R.S. - Themes

Humanities	
Y10 Autumn 1	Geography - Challenge of Resource Management (food) History – medicine R.S. – Christian Beliefs
Year 10 Autumn 2	Geography – Living world (hot deserts) History – medicine R.S. – Christian Practices



KS4 Curriculum Overview – Art & Design

KS4 lead - h.gougeon@arkbolingbrokeacademy.org

Exam board – AQA

Books

The Story of Art E Gombrich

Draw the Draw 50 Ways (Paperback) Lee J. Ames

Digital Nature Photograph: The Art and the Science, John Gerlach

The Impact of Technology in Art (Hardback) Alex Woolf

Art What Job Can I Get? (Paperback) Richard Spilsbury

Year 11 two day mock – 18th and 19th of November 2019

Windsor and Newton or Daler-Rowney			
Colour	Acrylic	Watercolour	
Cold	Lemon yellow	Lemon yellow	
Hot	Cadmium yellow medium	Cadmium yellow	
Hot	Cadmium red medium	Cadmium red	
Cold	Permanent alizarin	Alizarin crimson	
Hot	Ultramarine blue	French ultramarine	
Cold	Cerulean blue	Cobalt blue	
	Titanium white	Titanium white	
	Ivory black	Lamp black	



Brushes:

For Watercolour you will need a small and medium brush. Get ones that have a really good point. Always clean your brushes properly after use and roll paint on and off from the palette to ensure you keep their point.



For Acrylic you will need a small, medium and larger brush- 6/8,10 and 14 are good sizes. Also get a pointed brush for details. Always clean your brushes immediately after use as this will prevent paint build up and keep them like new. If you look after them, they will last for years.

Art & Design	
Y10 Autumn 1	Theme Identity, facial features and skin tones. photographs, observational drawings, artists' research and analysis AO1/2 and 3
Year 10 Autumn 2	Material workshops - AO2/3
Year 10 Spring 1	Theme Identity, photographs, observational drawings and artists' research and analysis AO1/2/3
Year 10 Spring 2	Identity Theme- AO2/AO3 Workshops on different materials based on AO1 studies of artists work
Year 10 Summer 1	Identity Theme- AO1/AO2/AO3 Developing ideas through artist's research, exploration of materials and recording of intentions
Year 10 Summer 2	Identity Theme- AO1/AO2/AO3 Developing ideas through artist's research, exploration of materials and recording of intentions
Year 11 Autumn 1	Reflection theme- photographs, observational drawings, artists' research and analysis AO1/2 and 3
Year 11 Autumn 2	Reflection Theme- AO2/AO3 Workshops on different materials based on AO1 studies of artists work
Year 11 Spring 1	ESA Theme- AO1/AO2/AO3 Developing ideas through artist's research, exploration of materials and recording of intentions



KS4 Curriculum Overview – P.E.

KS4 lead - r.bridges@arkbolingbrokeacademy.org

Exam board – OCR

Revision guide: [textbook link](#)

P.E.	
Y10 Autumn 1	Components of Fitness; Methods of training; Principles of training; Goal setting SMART; Skeletal System; Types of Movement at joints; Completion of AEP (Coursework 1/3 lessons)
Year 10 Autumn 2	Muscular system; Levers; Planes of movement; Axis of rotation; Skill classification; injury prevention; Warm up and Cool down; Hazards Completion of AEP (Coursework 1/3 lessons)
Year 10 Spring 1	Cardiovascular system; Pathway of blood through the heart; Short and long term effects of exercise; Respiratory system Completion of AEP (Coursework 1/3 lessons)

P.E.	
Year 10 Spring 2	Gas exchange; Aerobic and Anaerobic; Reteach of skeletal system; Reteach of joints, tendons and cartilage; Reteach of muscular system Completion of AEP (Coursework 1/3 lessons)
Year 10 Summer 1	Reteach of Lever Systems; Reteach planes of movement; Reteach axis of rotation; Reteach cardiovascular system; Reteach Effects of exercise
Year 10 Summer 2	Trends in participation; Factors affecting participation; Strategies to increase participation Media and commercialization; Sponsorship
Year 11 Autumn 1	Sportsmanship; Gamesmanship; Deviance; Performance enhancing drugs; Violence in sport; Motor skills; Classification of skill; Mental preparation; Feedback
Year 11 Autumn 2	Health, fitness and well-being; Health benefits of physical activity; Diet; Hydration; Principles of training – reteach; Risks and hazards – reteach; Trends in participation – reteach
Year 11 Spring 1	Mental preparation – Reteach; Types of guidance – Reteach; Feedback – Reteach; Sedentary lifestyle – Reteach; Diet – Reteach



KS4 Curriculum Overview – Drama

KS4 lead - j.murphy@arkbolingbrokeacademy.org

Exam board - Edexcel

Revise Edexcel GCSE (9-1) Drama Revision Guide

Publisher: Pearson

Author: John Johnson, William Reed

ISBN: 9781292131986

Edexcel GCSE (9-1) Drama Student Book

Publisher: Pearson

Author: Melissa Jones, Phil Cleaves

ISBN: 9781292150680

Drama	
Y10 Autumn 1	Introduction to GCSE Drama and set text
Year 10 Autumn 2	An Inspector Calls
Year 10 Spring 1	Mock component 1
Year 10 Spring 2	Component 1: Devising Performance
Year 10 Summer 1	Component 1: Devising Performance (exam towards final grade)
Year 10 Summer 2	Component 1 completion
Year 11 Autumn 1	An Inspector Calls and Live Theatre Evaluation
Year 11 Autumn 2	An Inspector Calls and Live Theatre Evaluation
Year 11 Spring 1	Component 2 (doubles) Component 3 (singles)
Year 11 Spring 2	Component 2 (doubles) Component 3 (singles)



KS4 Curriculum Overview – Computer Science

KS4 lead - t.rye@arkbolingbrokeacademy.org

Exam board - AQA

Revision guides available on Wise Pay

Computer Science	
Y10 Autumn 1	Computational Thinking; Python Programming (IF, ELIF + syntax errors); Python Programming (Boolean comparisons in IF statements); Set piece algorithms; Bubble sort; Binary search; Computer Systems (Input, process, output, binary); Computer Systems (Data – binary & hex); Computer Systems (Bitmap file size); Computer Systems (Compression (lossy VS. lossless)); Computer Systems (Compression (Run Length Encoding)); Computer Systems
Year 10 Autumn 2	Python Programming (Conditional loops, password program); Solving problems with pseudo code; Go over main structures in programming

Computer Science	
Year 10 Spring 1	Data representation; Dry Running; Mock NEA; Logic Gates
Year 10 Spring 2	Computer Systems; System Architecture; Algorithms
Year 10 Summer 1	Computer Networks; Computer Systems; Algorithms and Programming; Revision/Reteach
Year 10 Summer 2	Dry running algorithms
Year 11 Autumn 1	Parts of the CPU; RAM vs. ROM; Recap on what a sub routine is; Dry running/trace tables; Concatination (strings VS. integers); Iteration recap (iterate over a string as a list); Concatination (strings VS. integers); Iteration recap (iterate over a string as a list); Binary search algorithm (dry run); Sound file size; Bitmaps; Run length encoding
Year 11 Autumn 2	Converting between number bases; Binary shift; Ascii VS. Unicode; Embedded computer systems; Huffman coding; Purpose of an operating system; Cloud storage; Magnetic disk drive
Year 11 Spring 1	Computer Networking; Social Engineering; Cyber Security; How the internet works
Year 11 Spring 2	Logic Circuits; Issues in Computer Science; Social Engineering; Cyber Security



KS4 Curriculum Overview – Music

KS4 lead -

r.breckon@arkbolingbrokeacademy.org

Exam board - Edexcel

Music	
Y10 Autumn 1	Intro to Music GCSE, Game of Thrones, solo performance
Year 10 Autumn 2	Star Wars, ensemble performance
Year 10 Spring 1	Music for a while, ground bass composition, solo performance
Year 10 Spring 2	Release, Bach Brandenburg, ensemble performance
Year 10 Summer 1	Defying Gravity, solo performance, free composition
Year 10 Summer 2	Killer Queen, ensemble performance, free composition
Year 11 Autumn 1	Samba Em Preludio, submit free composition, both solo and ensemble recordings
Year 11 Autumn 2	Beethoven, composition to a brief, solo and ensemble recordings
Year 11 Spring 1	Beethoven, composition to a brief, solo and ensemble recordings
Year 11 Spring 2	Re-draft both compositions, reteach specific set works



KS4 Curriculum Overview – Food

KS4 lead – c.edis@arkbolingbrokeacademy.org
Exam board – WJEC/Eduqas
Exam: Tuesday 9th June (afternoon exam)
Revision guide: [link](#)

Y10 Autumn 1	FOOD Theory tests on UOW x3 (marks each)
Year 10 Spring 1	TASK 2 - PRACTICE
Year 10 Spring 2	TASK 2 - PRACTICE - MOCK TASK 2 EXAM 4HR THEORY 50% OF EXAM = 50 MARKS
Year 10 Summer 1	Task 1 - practice
Year 10 Summer 2	Task 1 - complete and theory plus revision
Year 11 Autumn 1	Food Commodities, Principles of nutrition, The Science of food
Year 11 Autumn 2	NEA Assessment 1: The food Investigation 15% of GCSE
Year 11 Spring 1	Cooking & Food Preparation. Diet & Good Health
Year 11 Spring 2	NEA Assessment 2 - The Food Preparation Assessment 35% of course