

Ark Charter Academy



GCSE Essentials

Dear Parent/Carer,

This GCSE Essentials pack is compiled to support you to have a better understanding of each GCSE exam in order to support your child. In this booklet you will find:

- Key dates
- Revision Techniques
- The nature (topics/structure) of each GCSE exam
- List of revision resources in each subject

Our aim is for your child to have a great experience completing their GCSE exams and your support plays a significant role in this. We would love for you to encourage and support your child to plan a revision timetable to start preparing for the upcoming mock exams in November and January. Research shows that cramming doesn't work; so for your child to be successful, they should revise every day. Regular revision will enable them to memorise the key knowledge, transfer it to their long term memory and therefore be able to retrieve and recall it in exams.

Planning a revision timetable will also support your child to manage their time better. This will minimise stress during the busy exam season too. Our ultimate goal is for your child to achieve high grades in the GCSE exams to improve their life chances post 16 and be able to pursue careers of own choice.

Each subject has highlighted whether there have been any changes made to the examination format in the 2020/21 academic year as a result of the Covid-19 pandemic. It is however important to note that the procedures outlined below to support with revision will be beneficial regardless of the process Ofqual implement for the 2021 series. We are monitoring any changes and will communicate changes to parents as they arise alongside any guidance we are able to provide should these changes impact subject examinations.

On behalf of Team Charter, we wish all our Year 11 pupils a very successful year ahead.

Yours Sincerely,

Team Charter

Key Dates 2020/21

Autumn term

- Students will receive an ATL grade during Autumn 1 and Autumn 2
- Students will sit baseline assessments in Autumn 1 (NGRT & GL assessments)
- Students will complete a suite of paper 1 examinations, which would replace the examinations students would have sat at the end of year 10. These examinations will take place WB November 9th.
- Students will receive as part of the report described below an age related.
- Teachers will update predictions in light of the November mocks.
- We are currently waiting for conformation as to when results from the November mocks will be released – We are looking into emailing these reports home.
- Students and parents will be invited to attend a parents on 16th December (Details for the scheduling of these meetings will be shared shortly).

Spring term

- Students will receive an ATL grade during Spring 1 and Spring 2
- Students and parents will be invited to a parents support evening on 3rd February which will explain how students can be supported with the approach to exams from home.
- Students will complete a full suite of examinations WB 22nd February in all subjects.
- In Spring 2 parents will receive a report whether their child is on, above or below target. These will be distributed in April.
- Students will receive an updated predicted grade, an age related and current if examined grade as part of the report described above.
- Students and parents will be invited to attend a parents evening on 31st March (Details for the scheduling of the time slots will be shared nearer the time).

Further information on what each grade point represents can be found in the 'assessment cycle' letter on the schools website.

Revision Techniques

1 WHEN SHOULD YOU REVISE?

1.1 WHAT IS IT?

- Spacing out your revision is better than saving it all until the last minute
- Do a little – but do it frequently

1.2 WHY DOES IT WORK?

- Spacing out the revision helps you remember it better
- Avoiding cramming means you will feel less stressed what should you do?
- Plan backwards – work out how much time you have and divide into 30-minute sections
- Work in small chunks of 20-30 minutes focused on a particular part of a subject
- Be specific – say exactly what topic you'll be revising e.g. multiplying fractions

1.3 WHAT DOES NOT WORK?

- Doing all the revision for the week in a two-hour session – it's much more effective to spread it out!
- Leaving all the revision to the end – you need to do a little and often
- Not being clear about what topic you're revising

1.4 WHAT'S IN YOUR PACK TO HELP YOU?

- A blank term-time weekly revision timetable
- A sample term-time weekly revision timetable



Summary

- Don't save all your revision to the end – do a little and often (30 minutes per day) of a specific topic

2 WHERE SHOULD YOU REVISE?

2.1 WHAT IS IT?

- Having a quiet and focused environment you can work in

2.2 WHY DOES IT WORK?

- We work best when we have silence and are able to focus on a particular task without being distracted



2.3 WHAT SHOULD YOU DO?

- Be clear when you are revising – make sure your family/friends know
- Consider leaving your phone/electronic devices with your family whilst you are working – collect them when you have finished
- Avoid noise – don't work with the TV or music on
- Don't work with others – unless you have specifically planned to quiz each other (it's more efficient to work by yourself)
- Have a desk/clear space to work in

2.4 WHAT DOES NOT WORK?

- Talking to friends whilst you are revising (either in person or online)
- Trying to work in a busy environment

2.5 WHAT'S IN YOUR PACK TO HELP YOU?

- A checklist of what make a great working environment – see if you can tick off all the boxes!

Summary

- Find a quiet space to work where you won't be disturbed by others or by electronic devices.

3 HOW SHOULD YOU REVISE? – RETRIEVAL PRACTICE

3.1 WHAT IS IT?

- Trying to remember something you have learnt – not just re-reading it

3.2 WHY DOES IT WORK?

- By making yourself try to remember things from memory, it helps knowledge to stick in your long-term memory

3.3 WHAT SHOULD YOU DO?

- Make a list of important information for a particular topic
- Turn it into a quiz or flashcards or a label a blank diagram
- Try and remember the answers/facts
- Check your answers – go over anything you got wrong
- Repeat this again – spreading out the times you do it

3.4 WHAT DOES NOT WORK?

- Re-reading notes
- Highlighting lots of information – this doesn't help you remember it!

3.5 WHAT'S IN YOUR PACK TO HELP YOU?

- Some sample flashcards
- Blank flashcards to make your own for a particular subject
- An example of the Cornell method
- A mini Cornell-notes booklet

Summary

- Practice answering questions to recall information you have already learnt. Check any you can't do and repeat! Do this again and again over time.

Nature of GCSE exams

Subject: Art & Design



How your child will be assessed:

Students are following the AQA GCSE specification where coursework is now 100% of the Art GCSE. During the autumn term students will complete their 'Identity' coursework unit started in Year 10 and will complete a final piece for this project. Students who studied GCSE Art in Year 9 will also have the opportunity to go back to their 'Food' unit to refine and complete their sketchbook and final piece.

In the spring term Year 11 art students will study a final coursework unit and be asked to research and develop personal ideas and a final piece based on a chosen theme. This project will run over the entire spring term, until the end of May.

In completing two units of coursework students will address all four assessment objectives on recording, analysis of artists, refinement of ideas and materials, and creating a final piece. The four assessment objectives in Art are based on the AQA GCSE strands. They are contextual studies, use of materials, recording ideas and a personal response.

Classwork is assessed every three weeks, giving students three lessons to develop and refine a piece of work within their sketchbook. Each task focuses on one of the assessment objectives and all students are taught key skills and techniques to help them develop their knowledge, understanding, ability, confidence and use of materials. Students' home work is assessed throughout the year, based on levels of effort and attainment. The projects are formally assessed with levels at the end of each term and at the end of the summer term after students have produced their final pieces.

Any changes to the way in which subject will be examined in 2021 (If applicable):

The Art GCSE is currently 100% portfolio, hence the need for students to complete and refine at least two coursework units. There is no formal exam, which previously made up 40% of the GCSE. This is of course, subject to change from the government and the DfE.

Topics covered this academic year:

Identity Unit and Second Unit to be chosen by students.

- Mind map and Mood Board of personal ideas into the exam theme.
- Artist Studies on at least two appropriate artists.
- Primary source drawings from the exam theme.
- Experiments with a range of ideas, materials and techniques.
- Presentation of pages; refinement of techniques and processes.
- Design ideas for a personal response.
- Annotation of thoughts, ideas and intentions throughout preparatory pages.
- Personal response.

How you can help your child at home:

- Providing a suitable area for students to complete homework tasks to the best of their ability.
- Ask questions surrounding homework to support understanding.
- Encourage gradual independence, whilst reminding students of the homework times and expectations regarding effort.
- Offer advice and help if needed.
- Praise and encourage your child to help them develop confidence.
- Share discussions regarding the use and importance of art within society, life and careers.
- Contact the art teacher or art department if you have any concerns or questions.

Subject: Business & Enterprise



How your child will be assessed:

The course has two units. Unit one is called “introduction business and enterprise” and unit two is called “understanding resources for business and enterprise planning”. to

40% of the qualification is achieved via the completion of a 1 hour 30 minute written exam sat in exam conditions. This exam covers unit one content.

60% of the qualification is achieved via the completion of a project over 21 hours in supervised conditions. This exam uses both unit one and unit two content.

Any changes to the way in which subject will be examined in 2021 (If applicable):

There are no planned changes to the way the subject will be examined (correct as per 02/09/2020).

Topics covered this academic year

Planning, HR requirements, Finance and exam techniques.

How you can help your child at home:

Ensure student has the official revision guide which will be provided for revision;

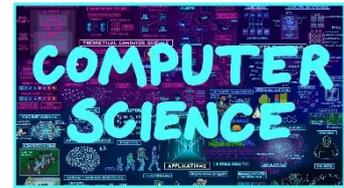
Remind students they can complete revision at their own pace on the iachieve platform;

Encourage completion of tasks on Satchel (show my homework);

Keep abreast of what is happening to business in the local and national News and discuss relevance with the student;

Discuss aspects of your current or previous jobs and businesses where you have worked with the student.

Subject: Computer Science



How your child will be assessed:

The assessment for Year 11 Computer Science (AQA) will focus upon both theory and practical aspects of the GCSE course. The assessment will consist paper 1 (Computational thinking, problem solving) and paper 2 (Theoretical knowledge)

Topics covered:

The students' assessment will be based on the work they have been undertaking in class. This includes the following topics:

AQA Paper 1

1. Fundamentals of algorithms
2. Programming
3. Fundamentals of data representation
4. Computer systems

**80 Marks 50% of the mark
1.5 hrs**

AQA Paper 2

1. Fundamentals of computer networks
2. Fundamentals of cyber security
3. Ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy
4. Aspects of software development

80 Marks 50% of the mark 1.5 hrs

AQA

Students will complete a programming project of 20 hours and questions related to the project will be in the end of year exam, paper 1

Assessments throughout the year: AQA and OCR

- Autumn mocks will cover paper 1 content.
- Spring mocks will cover paper 1 & 2 content.
- Students will be assessed on each of the above units (end of unit assessment)

How you can help your child at home:

Wherever possible, your contribution to your child's success is encouraged. There are several ways in which you can do this including:

- Making a suitable, quiet revision space available.
- Encourage reading around the subject of Computer Science.
- Encourage them to consider the various ways in which Computer Science is used in society.
- Challenge / test them on key definitions and key concepts

- Practice their Programming skills using freely available Python resources.
- Highly recommended that students further develop their knowledge of python.
- Use resources for students provided by AQA
- Strongly recommend:
 - BBC Bitsize GCSE computer science
 - Teach-ict.com
 - AQA PG online Computer Science Book

Changes to examinations for 20/21

Students will no longer sit an NEA as part of the qualification. Any further changes to examinations will be communicated to parents as and when they arise.

Subject: Drama

How your child will be assessed:

There are three separate NEA and Exam modules that make up the Eduqas GCSE.

Component One: Devised Performance and Portfolio (40% of qualification)

- Each student to participate as either a performer or designer in a devised performance of at least 1.5 minutes (for monologue), and/or 2 minutes (for duologue or group).

Component Text Based Performance: (20% of qualification)

- Require each student to participate as either a performer or designer in a text based performance of at least 1.5 minutes (for monologue), and/or 2 minutes (for duologue or group).
- Provide evidence their application of theatrical skills to realise artistic intentions, contribution to the creation and development of ideas, and analysis and evaluation of their own work, as appropriate to the task.

(Eduqas will accept alternative evidence to illustrate the intended final piece, the student's contribution to the creation and development of ideas, and their analysis and evaluation of their own work, as appropriate to the task. Alternative evidence may include audio-visual recordings of complete performance/physical demonstrations of key aspects with explanation of how they inform final piece/original and non-original photographs, images, drawings or sketches with annotations to illustrate intentions for performance or design/scripts/written accounts/video diary. Exam boards to provide clarification about their requirements.)

Component 3: Written examination: 1 hour 30 minutes (20% of qualification)

- No changes to exam at present

For Autumn mock examinations there will be a paper based solely on the set text DNA

Spring mock will include the Live Theatre Review element full paper.

Any changes to the way in which subject will be examined in 2021 (If applicable):

No changes to 2021 examinations.

Topics covered this academic year (GCSE examinations will however cover content covered in Y10- Y11):

- C1 – Performance and portfolio
- C2 – Text based performance
- C3 – DNA revision and Live Performance Review

How you can help your child at home:

- Encourage them to attend as many lessons as possible due to the group nature of the content.
- Encourage line learning at home.
- Encourage online revision and provided tasks for the C3 exam and set text revision tasks.

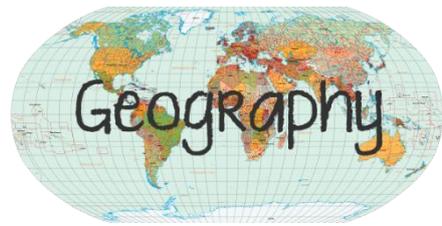
Subject: Geography

How your child will be assessed:

- Paper 1: Written exam, 1 hour and 30 mins in exam conditions

Paper 2: Written exam, 1 hour and 30 mins in exam conditions

- Paper 2: Written exam, 1 hour and 15 mins in exam conditions



Paper 1: Living with the physical environment

What's assessed

3.1.1 The challenge of natural hazards, 3.1.2 The living world, 3.1.3 Physical landscapes in the UK, 3.4 Geographical skills

How it's assessed

- Written exam: 1 hour 30 minutes
- 88 marks (including 3 marks for spelling, punctuation, grammar and specialist terminology (SPaG))
- 35% of GCSE

Questions

- Section A: answer all questions (33 marks)
- Section B: answer all questions (25 marks)
- Section C: answer any two questions from questions 3, 4 and 5 (30 marks)
- Question types: multiple-choice, short answer, levels of response, extended prose

Paper 2: Challenges in the human environment

What's assessed

3.2.1 Urban issues and challenges, 3.2.2 The changing economic world, 3.2.3 The challenge of resource management, 3.4 Geographical skills

How it's assessed

- Written exam: 1 hour 30 minutes
- 88 marks (including 3 marks for SPaG)
- 35% of GCSE

Questions

- Section A: answer all questions (33 marks)
- Section B: answer all questions (30 marks)
- Section C: answer question 3 and one from questions 4, 5 or 6 (25 marks)
- Question types: multiple-choice, short answer, levels of response, extended prose

Paper 3: Geographical applications

What's assessed

3.3.1 Issue evaluation, 3.3.2 Fieldwork, 3.4 Geographical skills

How it's assessed

- Written exam: 1 hour 15 minutes
- 76 marks (including 6 marks for SPaG)
- 30% of GCSE
- Pre-release resources booklet made available 12 weeks before Paper 3 exam

Questions

- Section A: answer all questions (37 marks)
- Section B: answer all questions (39 marks)
- Question types: multiple-choice, short answer, levels of response, extended prose

Any changes to the way in which subject will be examined in 2021 (If applicable):

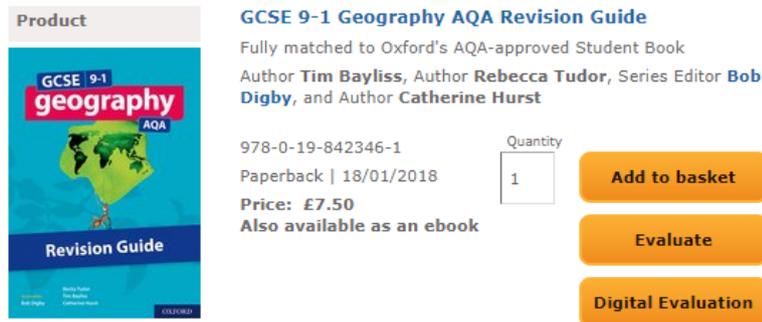
Not yet confirmed

Topics covered this academic year (GCSE examinations will however cover content covered in Y9 - Y11):

- Urban issues and challenges (to complete)
- The changing economic world
- Issue evaluation (this is released 12 weeks before the exam date)
- Fieldwork

How you can help your child at home:

- Revision guide: recommended:
<https://global.oup.com/education/product/9780198423461/?region=uk>



Product

GCSE 9-1 Geography AQA Revision Guide

Fully matched to Oxford's AQA-approved Student Book

Author **Tim Bayliss**, Author **Rebecca Tudor**, Series Editor **Bob Digby**, and Author **Catherine Hurst**

978-0-19-842346-1

Paperback | 18/01/2018

Price: £7.50

Also available as an ebook

Quantity: 1

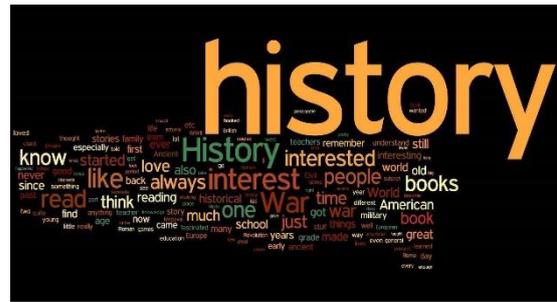
Add to basket

Evaluate

Digital Evaluation

- Use the AQA website for specification information, exam dates, past papers, etc
- Knowledge organisers with key words have been provided for each topic, test your child on key vocabulary and ideas.
- Use show my homework to ensure your child is up to date on completing weekly tasks
- Websites:
 - o Internet geography has a range of quizzes
 - o Geography Cat has some great model exam answers
 - o Seneca learning has some great quizzes

Subject: History



How your child will be assessed:

Your child will sit three written exams at GCSE.

Paper 1 (1h 15m)- Warfare through time 1250 present.

Paper 2 (1h 45m)- Superpower relations and the Cold War 1941-91 and Early Elizabethan England 1558-88.

Paper 3 (1h 20m)- Weimar and Nazi Germany 1918-39

For autumn mocks, students will be assessed on paper 2 content.

For spring mocks, students will sit all three papers.

Any changes to the way in which subject will be examined in 2021 (If applicable):

The government have stated that students may drop one unit, however it is yet to be confirmed by Edexcel how this will look. Students will continue to be taught all 4 units until a decision is made.

Topics covered this academic year (GCSE examinations will however cover content covered in Y9- Y11):

Autumn 1: Topic three in Superpower relations and the Cold War

Autumn 2- Spring 1: Early Elizabethan England

Spring 2 onwards: Revision

How you can help your child at home:

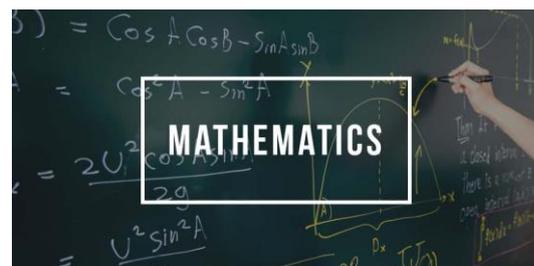
Help test your child on content in their knowledge organisers, which they will need to complete for homework.

Your child would also benefit from doing revision at home and revisit the content studied. They can do this on SENECA, or through revision packs provided by their teacher.

Subject: Mathematics

How your child will be assessed:

Within the first two weeks of the Autumn term, your child will be completing a diagnostic assessment to enable us to identify any gaps that your child may have in their learning from Year 10. This assessment will also be important in supporting our planning and intervention this term.



Throughout the year, we will be completing weekly diagnostic assessments in Mathematics through the Eedi resource (online and in print). These assessments will give us an important insight into your child's progress with the curriculum, and where further revision and teaching time is required. They will be vital for informing teacher planning, as well as giving your child regular feedback and next steps to further improve their understanding and skills.

At the end of the Autumn and Spring terms, we will be completing mock GCSE papers. The Autumn term papers will cover learning from Year 10 and the first term of Year 11 (see topics outlined below). The Spring term mock papers will cover the entire GCSE curriculum and will take the form of past GCSE papers. These papers will indicate what level your child is working at, and any key areas for revision.

The GCSE Assessment Dates for Mathematics 2021 are as follows (Provisional):

- Mathematics Paper 1 (Non-calculator): 25th May 2021 (am)
- Mathematics Paper 2 (Calculator): 8th June 2021 (am)
- Mathematics Paper 3 (Calculator): 15th June 2021 (am)

Any changes to the way in which subject will be examined in 2021 (If applicable):

Not applicable

Topics covered this academic year (GCSE examinations will however cover content covered in Y10- Y11, building on the foundations laid at Key Stage 3 Y7-9):

Autumn Term:

Higher: Algebra (Algebraic manipulation, expanding, factorising, solving, rearranging, quadratics, formula, inequalities, simultaneous equations, sequences), Graphs (linear graphs, $y=mx+c$, parallel and perpendicular lines, quadratic graphs, other graphs including circles, graphing inequalities, solving

simultaneous equations graphically), Number (Bounds, iterations), Data (Sampling, averages, grouped data, representing data, histograms, scatter graphs, cumulative frequency)

Foundation: Geometry (Perimeter, area, nets, plans, elevations, volume, surface area, enlargement, similarity, vectors, translation, Pythagoras' theorem), Number (Types of number, HCF & LCM, directed number, four operations, fractions, decimals and percentages, growth & decay, rounding, roots and indices, ratio, standard form, proportion), Algebra (forming & solving equations, representing and solving inequalities), algebraic expressions)

Spring Term: TBC (Depending on Autumn Term, diagnostic assessments and long term SoL planning)

Summer Term: Higher & Foundation – Revision and past paper practice

How you can help your child at home:

Supporting your child's learning at home is vital to enabling them to succeed at GCSE and achieve their potential in Mathematics. Regular practice at home will embed the content knowledge being covered in class, and develop the problem solving and reasoning skills required to excel in the final examinations.

We recommend that your child schedules 1-2 hours per week at home to complete practise tasks for Mathematics. We encourage you to speak with your child's teacher to find out more about how you can support them at home.

You can support your child at home by encouraging them to use the following resources:

- Hegarty Maths: <https://hegartymaths.com/> (Personalised, comprehensive practice questions that help the student to identify key gaps in their learning)
- Eedi Maths: <https://eedi.com/> (Access to engaging and interactive maths lessons online that identify where your child's strengths and weaknesses are in their learning)
- Maths Genie (<https://www.mathsgenie.co.uk/gcse.html>) A comprehensive, topic by topic breakdown of all of the GCSE curriculum areas with exam practice questions and model solutions, separated by grade, so your child can access learning at the right level.

- Component Two, Section B: News. Students will cover contemporary and historical covers of The Observer Newspaper.

How you can help your child at home:

- Official revision guides and textbooks from OCR will be provided. These include model answers, quick quizzes and key information.
- Students can access online copies of the set texts for Component 1, Section A (Cuffs and The Avengers) on the Charter Academy home-learning OneDrive.
- Knowledge organisers will be provided for students for all set texts.
- Independent research into 1960s Britain culture and history will be beneficial for The Avengers, and historical issues of The Observer.
- Quiz them on key words and definitions.
- Encourage media consumption through a variety of platforms.

Subject: Music

How your child will be assessed:

There are three components in the EDEXCEL GCSE Music.



Component One: Performance (30%)

- 1 solo performance
- 1 ensemble performance

Component 2: Composition (30%)

- 1 free composition
- 1 set brief composition

Component 3: Listening and Appraising (40%)

- Written examination: 1 hour 45 minutes
- Students answer questions on the set works (set out below) and two unfamiliar pieces of music.

Area of study	Set works
Instrumental Music 1700–1820	<ul style="list-style-type: none">• J S Bach: 3rd Movement from Brandenburg Concerto no. 5 in D major• L van Beethoven: 1st Movement from Piano Sonata no. 8 in C minor 'Pathétique'
Vocal Music	<ul style="list-style-type: none">• H Purcell: Music for a While• Queen: Killer Queen (from the album 'Sheer Heart Attack')
Music for Stage and Screen	<ul style="list-style-type: none">• S Schwartz: Defying Gravity (from the album of the cast recording of Wicked)• J Williams: Main title/rebel blockade runner (from the soundtrack to Star Wars Episode IV: A New Hope)
Fusions	<ul style="list-style-type: none">• Afro Celt Sound System: Release (from the album 'Volume 2: Release')• Esperanza Spalding: Samba Em Preludio (from the album 'Esperanza')

For Autumn mock examinations students will be assessed on their work completed so far towards components 1 and 2, and will complete a full exam which will include questions on each of the set works.

Any changes to the way in which subject will be examined in 2021 (If applicable):

Component One: Performance (30%)

- 1 solo performance of 1 or more pieces of music of at least 1.5 minutes. There is no requirement to perform as an ensemble this year.

Component 2: Composition (30%)

- 1 free composition at least 2 minutes in duration. There is no requirement to complete a set brief composition this year.

No guidance for any changes to Component 3 yet- this has yet to be published by EDEXCEL.

How you can help your child at home:

- Encouraging regular practice of their instrument. Students who are not Grade 4 (Standard or More Difficult level) in their instrument have performance marks capped.
- Encourage students to revise and listen to the set works regularly.
- Revision cards note taking and mind maps are key to remembering content.
- Quiz them on key features and specialist terminology from knowledge organisers.

Subject: NCFE Health and Fitness

How your child will be assessed:

Students will complete a 1 hour 30 min written paper in exam conditions in November (date to be confirmed) on the topics covered throughout Yr10 and Yr11. This assessment makes up 40% of the overall grade. Students can have the option of re-sitting this assessment in March 2021.



In January, students will have 21 hours to complete an assignment using a scenario which is released from the exam board at the end of December. This is a controlled assessment and can only be completed in school during timetabled lessons. This assignment makes up 60% of the overall grade.

Student will be continually assessed in lessons as we revisit topics from Yr10 in preparation for the November assessment. After the assessment, we will be covering the remaining content the students will require to be successful in the coursework element.

Any changes to the way in which subject will be examined in 2021 (If applicable):

None at present.

Topics covered this academic year (GCSE examinations will however cover content covered in y__ - Y11):

Skeletal System

- Structure of the skeleton
- Functions of the skeletal system
- Types of bones
- Types of joints
- Joint actions
- Structure of a synovial joint (knee)
- Structure of the spine and posture

Muscular System

- Types of muscle
- Structure of the muscular system
- Muscle movement and contraction
- Muscle fibre types

Cardiovascular system

- Structure and function of blood vessels
- Structure of the heart
- The cardiac cycle
- Cardiovascular measurements
- Blood Pressure

Respiratory system

- Structure of the respiratory system
- Functions of the respiratory system
- Lung volumes

Energy Systems

Effects of Health and Fitness Activities on the Body

- Short-term effects of health and fitness activities
- Long-term effects of health and fitness activities

How you can help your child at home:

- * Helping pupils understand the benefits of participating in physical activity and that they are able to identify each as a Physical, Social or Mental benefit.
- * Encourage participation to extra-curricular activities
- * Reviewing and revising the definitions of key terms around the subject
- * Using websites for preparation for end of term topics (e.g. BBC bitesize and iAchieve platform)

Subject: RE

How your child will be assessed:

There are three separate exams that make up the Eduqas GCSE.

Component One: Religious, Philosophical and Ethical Studies in the Modern World.

- Written examination: 2 hours 50% of qualification

Component 2: Study of Christianity.

- Written examination: 1 hour 25% of qualification

Component 3: Study of Islam.

- Written examination: 1 hour 25% of qualification

For Autumn mock examinations there will be a selection of philosophy topics covered as students will not yet have completed the full course. Spring mock examinations will cover all three components.

Any changes to the way in which subject will be examined in 2021 (If applicable):

No changes to 2021 examinations.

Topics covered this academic year (GCSE examinations will however cover content covered in Y9- Y11):

The final two philosophy topics will be covered in Autumn term:

- Theme 4: Issues of Human Rights
- Theme 2: Issues of Life and Death

(This is in addition to the Relationships, Good and Evil, Christianity beliefs and practices and Islamic beliefs and practices units already covered from year 9-10)

How you can help your child at home:

- Official revision guides and textbooks will be provided for revision
- Paper revision guides for all topics will also be provided, which have tasks for students to complete throughout.
- Revision cards note taking and mind maps are key to remembering content.
- Quiz them on key concepts and specialist terminology from knowledge organisers.

Subject: Science

How your child will be assessed:

In the science department at Ark Charter Academy we follow a carefully designed curriculum to inspire and challenge students and teach them a wide variety of scientific knowledge and skills, many of which are relevant to understanding life and how the world around them works, whilst preparing them for GCSE examinations set by the awarding body **AQA**.

There are two pathways available to our students at Charter; **combined science trilogy** and **separate sciences**. Each pathway can be studied at **foundation level** (maximum grade 5-5 or 5, 5, 5) or **higher level** (maximum grade 9-9 or 9, 9, 9). Regardless of which pathway students study, they will experience a broad science curriculum covering biology, chemistry and physics, including a significant number of practical experiments. The separate sciences curriculum covers a handful of extra topics and practical experiments and a few areas of the shared topics in additional depth.

If following the combined science trilogy route, students will receive a **double award GCSE** (shown as a dual grade and worth two GCSEs e.g. 5-5), calculated as a mean of the raw exam paper marks in each subject. In the separate sciences route students will receive **three separate GCSEs**, one each for biology, chemistry and physics. It is worth noting that the separate sciences GCSEs are substantially more challenging due to the amount of content studied and more competitive as separate sciences tend to be studied at independent institutes and by only the highest achieving students in state schools, but offer an opportunity for exceptionally motivated science students to gain an additional GCSE which are sometimes (but not always) useful in college and university applications if the GCSEs attained are at high grades.

Nature of assessments:

Combined trilogy – Two 1hour 30minute written papers in formal exam conditions **for each of biology, chemistry and physics** (total of 6 examinations). Each exam is equally weighted to be worth 16.7% of the combined double GCSE grade.

Biology Paper 1 = Cell biology; Organisation; Infection & response and Bioenergetics

Biology Paper 2 = Homeostasis & response; Inheritance; Variation & evolution and Ecology.

Chemistry Paper 1 = Atomic structure & the periodic table; Bonding, structure & properties of matter; Quantitative chemistry; Chemical changes and Energy changes

Chemistry Paper 2 = The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere and Using resources

Physics Paper 1 = Energy; Electricity; Particle model of matter; Atomic structure

Physics Paper 2 = Forces; Waves and Magnetism & electromagnetism

Separate sciences – Two 1 hour 45minute written papers in exam conditions **for each of biology, chemistry and physics** (total of 6 examinations), each exam is equally weighted and worth 50% of its subject's final grade.

In addition to the above (though in greater depth in several topics), students following the separate sciences pathway also study **Space physics**, which is assessed on **Physics Paper 2**.

Mock exams

In autumn (9th – 25th November) mock examinations will be sat in classrooms, but otherwise as close to normal exam conditions as possible. These will be a series of paper 1 examinations only (3 total, 1 each for biology, chemistry and physics). These mocks are very important as they serve multiple purposes:

- Identifying knowledge gaps from Y10 content for re-teaching and intervention,
- Confirm decisions regarding (or allow a final chance to amend) student's science education pathways (combined trilogy or separate) and tiers (foundation or higher) before the academy submits its entries to AQA
- Inform any teacher predictions or Centre Assessed Grades if needed this academic year.

In spring (22nd February – 16th March) mock examinations will be sat in full exam conditions. These will be a full series of examinations (6 total, 2 each for biology, chemistry and physics). These mocks are even more important than the ones in autumn as they underpin the final teacher predictions or Centre Assessed Grades if needed this academic year.

Topics covered this academic year (GCSE examinations will however cover content covered in Y10 -Y11):

In the 2020-2021 academic year, year 11 combined students will study:

Biology

Hormonal coordination, genetics & evolution, ecology: organising an ecosystem, biodiversity & ecosystems

Chemistry

Crude oil & fuels, chemical analysis, our atmosphere, the Earth's resources

Physics

Motion, force & motion, wave properties, electromagnetic waves, magnetism & electromagnetism

In the 2020-2021 academic year, year 11 separate science students will study:

Biology

Hormonal coordination, homeostasis in action, genetics & evolution, ecology: organising an ecosystem, biodiversity & ecosystems

Chemistry

Crude oil & fuels, organic reactions, polymers, chemical analysis, our atmosphere, the Earth's resources, using resources

Physics

Force & motion, force & pressure, wave properties, electromagnetic waves, waves: light, magnetism & electromagnetism, space physics

How you can help your child at home:

- Students have been provided revision guides, which you could help them to remember to bring to school and use at home for their revision, as these are comprehensive guides appropriate to their examinations.
- Ensure that your child is keeping up with the expectation of completing 100 correct Tassomai questions each week (we have evidence from previous years that students who complete more Tassomai make considerable progress in terms of grades, as it supports their recall of the wide array of knowledge points needed for success in science examinations)
- Use knowledge organisers to quiz your child on the definitions of key terms used in their science lessons early in new topics, so that they are able to take on board new information more easily.
- Ensure that your child is able and encouraged to attend as many intervention sessions as we are able to offer when the situation empowers us to invite students for additional time with their teachers (usually after normal academy hours, and/or at weekends or during school holidays)

- produce three well-presented practical outcomes demonstrating a range of skills within a three hour period
- suggest improvements to their work
- include their own personal viewpoint about what they have learned from doing the task
- complete a photographic journal of practical work
- produce accurate analysis and evaluation of results.

The evidence that the students need to produce will be written evidence of how they have planned, executed and evaluated the preparation, cooking and presentation of the two dishes within the time allowed. Photographs can be included.

Changes to examinations in 2020-21:

Should any changes be made to the running of this qualification, this information will be shared with students and parents as soon as possible.

How you can help your child at home:

Allow your child to cook meals with you and try out different recipes that meet different dietary needs such as vegetarian and vegan and using different cooking equipment.

Quiz them on subject specific vocabulary.

Watch food preparation programmes on the television such as Master Chef, Jamie Oliver – Keep Cooking and Carry On, Meat Free Meals, Nadiya Hussein -Time to Eat, British Food Adventure and The Great British Bake Off.

Explore these websites there are lots of recipe ideas including nutritional analysis <http://www.foodafactoflife.org.uk> and <http://www.bbcgoodfood.com>