Overview

All pupils at Ark Academy have started their GCSE studies in the summer term of Year 9. They will now continue that course of study and have been divided into GCSE Combined Science: Trilogy (which is the same as the old Double Science) and Triple Science (GCSE Biology, GCSE Chemistry & GCSE Physics).

If your child is doing GCSE Combined Science: Trilogy they will follow a pathway similar to those doing GCSE Triple Science and complete a total of 24 topics across the 3 science disciples. If your child is following the Triple Science route, they will cover the same topics however they will explore some of those topics in more depth. The subject content topics are listed further down this guide.

New GCSE AQA curriculum pathway

**Biology**
- Paper 1
- Paper 2

**Chemistry**
- Paper 1
- Paper 2

**Physics**
- Paper 1
- Paper 2

**GCSE Combined: Trilogy**
- 6 exam papers: each 1 hour 15 min
- 70 marks = 2 GCSEs

**GCSE TRIPLE:****
- 6 exam papers: each 1 hour 45 min
- 100 marks = 3 GCSEs
When will they be taught?

Regardless of what pathway they are following all pupils will study all 3 Sciences – Biology, Chemistry and Physics. Triple and Combined science students have 2 lessons of Biology, 2 lessons of Chemistry and 2 lessons of Physics (a total of 6 lessons, and will often be taught by subject specialist teachers) every week and single science students have three lessons per week.

The aim is to cover all 24 topics within the course of Y11, while still being assessed internally half termly as well as termly MOCK exams. Students will revisit some of the topics throughout Y10 and 11, however will aim to complete the course half way into Y11, preferably beginning of Spring term. After which we will focus on revision, MOCKS and exam preparation until May 2019, when GCSE Examination begin.

The New Curriculum: What are the changes?

... OUT with OLD! What has been scrapped?

1. There is no longer Controlled Assessments in the new curriculum.

However students will still expected to develop their Scientific enquiry skills and will be expected to have completed specific required practical experiments for each of the Science; Biology, Chemistry and Physics. They will be examined on their understanding and knowledge of these experiments in the exam papers at the end of their GCSE course. In addition to completing these required practical experiments in the classroom, they will be expected to keep a clear record as evidence of having completed them.

2. There is no longer QWC (Quality of Written Communication) questions

However students will still be expected to demonstrate their extended writing skills as they will be exposed to a variation of structured, closed short answer and open response questions in both papers of their GCSE exams.

... IN with the NEW! What has been introduced?

1. Multiple Choice questions (MCQ)
2. Open response questions – this involves extended writing

Subject Content

- The new GCSE will cover some new topics while having scrapped some of the old topics.
- Those studying Triple Science will follow the same trajectory as the Combined Science pupils; however will be moving at a slightly faster pace at some points to ensure that they are covering the additional topics.
- All pupils should note that the work gets noticeably more difficult as you progress through the year and builds on the work done in prior.
- It is very important to note that all topics are all assessed at the end of Year 11 - May 2020. There is no early entry in Science GCSE at ARK Academy.
GCSE Combined Science: Trilogy

AQA: http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464

### How will they be assessed?

- **Combined Science: Trilogy** pupils will sit SIX GCSE exam papers (two in each Science) in May 2020.
- Each exam will be 75min, worth 70 marks and count towards 16.7% of the GCSE.
- Students will be awarded two grades using the 9-1 grading system. For example, 5/5, 7/6, 4/3, 9/8.

### Topics

<table>
<thead>
<tr>
<th>Biology 7 topics</th>
<th>Chemistry 10 topics</th>
<th>Physics 7 topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cell Biology</td>
<td>8 Atomic structure and the periodic table</td>
<td>18 Forces</td>
</tr>
<tr>
<td>2 Organisation</td>
<td>9 Bonding, structure and the properties of matter</td>
<td>19 Energy</td>
</tr>
<tr>
<td>3 Infection and Response</td>
<td>10 Quantitative Chemistry</td>
<td>20 Waves</td>
</tr>
<tr>
<td>4 Bioenergetics</td>
<td>11 Chemical Changes</td>
<td>21 Electricity</td>
</tr>
<tr>
<td>5 Homeostasis and response</td>
<td>12 Energy changes</td>
<td>22 Magnetism and electromagnetism</td>
</tr>
<tr>
<td>6 Inheritance, variation and evolution</td>
<td>13 The rate and extent of chemical change</td>
<td>23 Particle model of matter</td>
</tr>
<tr>
<td>7 Ecology</td>
<td>14 Organic chemistry</td>
<td>24 Atomic structure</td>
</tr>
<tr>
<td></td>
<td>15 Chemical analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 Chemistry of the atmosphere</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17 Using resources</td>
<td></td>
</tr>
</tbody>
</table>

### Paper Breakdown

<table>
<thead>
<tr>
<th>Biology</th>
<th>Chemistry</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1</td>
<td>Topics 1-4</td>
<td>Paper 1 Topics 8-12</td>
</tr>
<tr>
<td>Paper 2</td>
<td>Topics 5-7</td>
<td>Paper 2 Topics 13-17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paper 1 Topics 18-21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paper 2 Topics 22-24</td>
</tr>
</tbody>
</table>
GCSE Triple Science


Triple scientist will cover the same topics as the Combined Scientist’s (Physics will cover 1 extra topic); however will cover some of the topics in more depth (highlighted below)

### Biology
- 7 topics +
  1. Cell Biology - Culturing microorganisms
  2. Organisation
  3. Infection and Response - Monoclonal antibodies - Plant diseases
  4. Bioenergetics
  5. Homeostasis and response - The brain & The eye - Body Temp, Ni balance - Plant hormones
  6. Inheritance, variation and evolution - DNA structure & Cloning - Theory of Evolution, Speciation & Genetics
  7. Ecology - Decomposition - Trophic levels & food production

### Chemistry
- 10 topics
  1. Atomic structure and the periodic table - Transition metals
  2. Bonding, structure and the properties of matter - Nanoparticles
  3. Quantitative Chemistry - Yield & atom economy - Standard forms
  4. Chemical Changes - Titrations
  5. Energy Changes - Chemical & fuel cells
  6. The Rate and Extent of Chemical Change
  7. Organic Chemistry - Reactions of alkenes & alcohols - Polymers
  8. Chemical Analysis - Identification of ions
  9. Chemistry of the Atmosphere
  10. Using Resources

### Physics
- 8 topics
  1. Energy
  2. Electricity
  3. Particle model of matter
  4. Atomic structure - Hazards of radiation - Nuclear Fission & Fusion
  5. Forces - Moments, levers & gears - Pressure - Changes in momentum
  7. Magnetism and electromagnetism - Loudspeakers - National grid
  8. Space Physics

How will they be assessed?

- **Triple science** pupils will sit six GCSE exam papers (two in each Science) in May 2020.
- Each exam will be 1hr 45min, worth 100 marks and count towards 50% of the GCSE. These exams are longer than the combined award as they are assessing extra content.
- Students will be awarded grades using the 9-1 grading system for each subject. For example: Biology – 8, Chemistry – 7, Physics – 6.
Homework and Revision

Science students will be set one thirty minute homework in each Science each week. Homework booklets are issued at the beginning of the term. Homework will be fact recall and practising of exam questions. Additional to this as we approach exams, students will be set a revision homework (covering year 10 content) each week. The format for this work is specification questions and related practise exam questions. All homework will be issued in class and followed up with replacement sheets on ‘Show my homework’.

Independent Learning

All students are encouraged to become independent learners and take an active role in extending their learning beyond the classroom. Students have all had a lesson outlining the expectations of using a revision folder and we will continue to teach students how to make notes.

All students are encouraged to:

- Buy a revision folder
- Make a revision plan and revision timetable
- Buy a Revision guide – we have these in stock and are available on ParentPay
- Log on to ShowMyHomework www.showmyhomework.co.uk
- Set themselves weekly work from their Independent Learning sheet
- Self-audit and vary their weekly revision using the revision strategies sheet
- Print out some past papers
- Log onto TheDay and read/print Science articles or read journal

Useful Resources:

- The Ark Academy Learning centre
- http://www.bbc.co.uk/schools/gcsebitesize/science/ - Please ensure you choose the AQA Option!
- CGP revision guides – are available in the library and will be on sale later in the year.

Getting in touch…
If you have any questions – please email Ms McGrath (Head of Science) at s.mcgrath@arkacademy.org.
Overview

All pupils entered for the entry level qualification have the opportunity to gain two certificates in science. All pupils will cover modules in all three sciences, Biology, Chemistry and Physics.

This is a route for pupils not entered for GCSE science, but could act as a bridging qualification which will allow them to go on to progress to GCSE at a later date.

All pupils completing the ELQ route in Ark Academy will have three lessons of science every week.

The Pathway Layout

The course consists of six modules. In order to gain two ELQ certificates the pupil must pass all six of these modules, which is assessed in class and also includes an assessment of their practical skills.

If the pupil does not pass all of the in class modules, they can still gain one ELQ certificate, if they have passed three of the modules, one from each science, Biology, Chemistry and Physics.

The Content:

Biology
Component 1: Keeping Healthy
Component 2: Inheritance, Evolution and the Environment

Chemistry
Component 3: Materials from the Earth
Component 4: Oils, Earth and Atmosphere

Physics
Component 5: Energy Transfer and Efficiency
Component 6: Electricity and Waves

Homework

Pupils will be given one piece of homework per week. This will be available to view each week on show my homework.

www.showmyhomework.co.uk

Getting in touch…

If you have any questions – please email Ms McGrath (Head of Science) at s.mcgrath@arkacademy.org
Course Overview

The Art and Design GCSE allows you to explore your creativity through personal responses to a theme set by the exam board.

You will undertake 4 projects across the GCSE course which will allow you to experiment using a variety of art materials, processes and techniques; painting, drawing, sculpture, digital manipulation and printmaking.

Over the course you will be expected to meet all the Assessment Objectives set out by our Exam Board (AQA).

In addition to meeting the Assessment Objectives you will develop skills in:

- Expressing your ideas
- Journaling your journey of exploration through the use of materials and your ideas
- Work on your mastery in drawing and working with basic art techniques
- Explore your imagination
- Analyse the work of other artist, designers and crafts people
- Working independently and collaboratively
- As well as practicing your problem solving, communication and interpersonal skills

Course Structure and Assessment

40% Externally set Assessment

Independent creation of a personal project which explore a variety of materials and all the Assessment Objectives

Independent classroom based time to develop work which hits all the Assessment Objectives and culminates in a 10 hour practical exam in which you create a final outcome.

60% Personal Portfolio Assessment

Independent creation of a personal portfolio which explore a variety of materials and all the Assessment Objectives

Final Assessment of all work is carried out by the Art Department, then an externally moderated by a visiting moderator.

There will be an exhibition of all the work created by each students at the end of the course.

Routes of Progression

The course will enable students to develop a full and coherent body of work presented in sketchbooks and portfolios of work which will allow them to progress too Higher and Further Education pathways in:

- Art and Design
- Photography, Photo Journalism
- Digital Art and Animation
- Graphic and Product Design
- Art History
- Fashion and Textiles Design
- Interior and Industrial Design
- Architecture
- Advertising and Marketing
- Film Making
- Costume and Set Design
- Illustration
- Web and Software Design
- Car and Aeronautical Design
- Furniture design
- Medical photography and Illustration
Overview

In Years 10 and 11 in Business Studies students work towards gaining one single GCSE. In this course, students study the breadth of the subject from Setting up a Business to Growing as a Business.

*The course breaks down as follows:*

<table>
<thead>
<tr>
<th>Studied in Year 10</th>
<th>Studied in Year 11</th>
</tr>
</thead>
</table>

### Edexcel GCSE Business Pathway

<table>
<thead>
<tr>
<th>Theme</th>
<th>1: Investigating Small Business</th>
<th>2: Building a business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief overview of assessment</td>
<td>Compulsory paper</td>
<td>Compulsory paper</td>
</tr>
<tr>
<td></td>
<td>1 hour 30 minutes</td>
<td>1 hour 30 minutes</td>
</tr>
<tr>
<td></td>
<td>Multiple choice, short and extended answer (90 marks)</td>
<td>Multiple choice, short and extended answer (90 marks)</td>
</tr>
<tr>
<td></td>
<td>Questions will relate to the content that appears in Theme 1 and students may draw on underpinning knowledge and understanding developed through Theme 2 as appropriate.</td>
<td>Questions will relate to the content that appears in Theme 2 and students may draw on underpinning knowledge and understanding developed through Theme 1 as appropriate.</td>
</tr>
<tr>
<td>% of Overall Grade</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Assessment Method</td>
<td>Written Exam Paper</td>
<td>Written exam paper</td>
</tr>
<tr>
<td>Time for Assessment</td>
<td>1hr 30 mins</td>
<td>1hr 30 mins</td>
</tr>
<tr>
<td>Assessed by:</td>
<td>Externally Assessed by Edexcel</td>
<td>Externally Assessed by Edexcel</td>
</tr>
</tbody>
</table>

### Homework

Students will receive homework every other week, these will vary and include keyword/glossary definitions to research, exam style questions, revision from their Business revision guide as well as completing questions from this guide, creating revision resources in preparation for their half termly and end of year assessments. Each piece of homework will centre around one of the elements of their exams for Unit 1 or Unit 2. Students are set the homework for completing in 7 days in most cases.
Students are expected to do further revision on top of this and keep up to date with business trends and news articles.

These will be used to track the knowledge and understanding of students to identify where they are at the time, where they need to go next and how they will get there. Intervention will be targets at times to support the progress of students to ensure they stay on track to achieve their very best possible outcome.

Independent learning, revision and support outside the classroom:

<table>
<thead>
<tr>
<th>Year 10</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept - Dec</td>
<td></td>
</tr>
<tr>
<td>1.1 Enterprise and entrepreneurship</td>
<td>14 weeks</td>
</tr>
<tr>
<td>1.2 Spotting a business opportunity</td>
<td></td>
</tr>
<tr>
<td>1.3 Putting a business idea into practice</td>
<td></td>
</tr>
<tr>
<td>Jan - April</td>
<td></td>
</tr>
<tr>
<td>1.4 Making the business effective</td>
<td>10 weeks</td>
</tr>
<tr>
<td>1.5 Understanding external influences on businesses</td>
<td></td>
</tr>
<tr>
<td>April - July</td>
<td></td>
</tr>
<tr>
<td>1.5 Understanding external influences on businesses (cont.)</td>
<td></td>
</tr>
<tr>
<td>2.1 Growing the business</td>
<td></td>
</tr>
<tr>
<td>2.2 Making marketing decisions</td>
<td>12 weeks</td>
</tr>
<tr>
<td>2.3 Making operational decisions</td>
<td></td>
</tr>
<tr>
<td>2.4 Making financial decisions</td>
<td></td>
</tr>
<tr>
<td>Jan - April</td>
<td></td>
</tr>
<tr>
<td>2.5 Making human resource decisions</td>
<td>14 weeks</td>
</tr>
<tr>
<td>Revision and practice assessment</td>
<td></td>
</tr>
<tr>
<td>April - July</td>
<td></td>
</tr>
<tr>
<td>Revision and final exams</td>
<td>10 weeks</td>
</tr>
</tbody>
</table>

- GCSE Bitesize Business Studies: [http://www.bbc.co.uk/schools/gcsebitesize/business/](http://www.bbc.co.uk/schools/gcsebitesize/business/)
- BBC Business News: [http://www.bbc.co.uk/schools/gcsebitesize/business/](http://www.bbc.co.uk/schools/gcsebitesize/business/)

Recommended reading

Pearson’s brand-new resources* for Edexcel GCSE (9-1)
GCSE Design & Technology

Overview: GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise.

Assessment:

<table>
<thead>
<tr>
<th>What’s assessed</th>
<th>How it’s assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core technical principles</td>
<td>Written exam: 2 hours</td>
</tr>
<tr>
<td>Specialist technical principles</td>
<td>100 marks</td>
</tr>
<tr>
<td>Designing and making principles</td>
<td>50% of GCSE</td>
</tr>
</tbody>
</table>

Questions

Section A – Core technical principles (20 marks)
A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.

Section B – Specialist technical principles (30 marks)
Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles.

Section C – Designing and making principles (50 marks)
A mixture of short answer and extended response questions.

Non-exam assessment (NEA)

<table>
<thead>
<tr>
<th>Practical application of:</th>
<th>How it’s assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core technical principles</td>
<td>100 marks</td>
</tr>
<tr>
<td>Specialist technical principles</td>
<td>50% of GCSE</td>
</tr>
<tr>
<td>Designing and making principles</td>
<td>Non-exam assessment (NEA): 30–35 hours</td>
</tr>
</tbody>
</table>

Task(s) Substantial design and make task:
- Students will produce a prototype and a portfolio of evidence
- Assessment criteria:
  - Identifying and investigating design possibilities
  - Producing a design brief and specification
  - Generating design ideas
  - Developing design ideas
  - Realising design ideas
  - Analysing & evaluating

Routes of progression:
- Aerospace engineer
- Animator
- Architect
- Carpenter
- Machinist
- Model maker
- Design Technician
- Costume designer
- Electrician
- Lighting technician
- Graphic and Product Design
- Personal shopper
- Interior and industrial design
- Quantity surveyor
- Set designer
- Engineer
- Fashion and textiles design
- Car and aeronautical design

Contacts:
Mr Paton — d.paton@arkacademy.org  Head of Art, Design & Technology
Mr Asare – d.asare@arkacademy.org  AHoy Yr8
Overview:

Drama is an exciting, creative and challenging course. It can be very demanding at times and requires a high level of commitment, maturity and respect.

Drama GCSE is not an easy subject!

You will be required to work outside of your normal lesson times. In addition to research work you will also be required to attend at least one live theatre performance, take part in workshops at school by visiting practitioners and be at rehearsals after school or at lunch time. Therefore, you must commit to high attendance, excellent behaviour and hard work!

The AQA Drama course consists of:

- **Component 1**- Understanding Drama (Written Exam) 40%
- **Component 2**- Devising Drama (Practical & Logbook) 40%
- **Component 3**- Texts in Practice (Scripted performances) 20%

The topics we will cover across year 11 will be within the following areas from the Drama syllabus:

### Term 1

**Devising Drama:** focus on completing the 2,500 word logbook by October half term 2019.

**Texts in Practice:** Students have been introduced their play text and groups. Students are expected to learn and perform a group extract from their given play lasting between 15 to 40 minutes and perform a monologue, duologue or another group performance from the same play to a live audience and visiting examiner.

**Understanding Drama:** Students will receive seminar based lessons and have the opportunity to attend a study clinic open to all students on a Tuesday 3.35pm to 4.35pm focusing on section B and C of the written paper.

### Term 2

**Texts in Practice:** Students will continue to stage the group extract from their given play lasting between 15 to 40 minutes and monologue or duologue from the same play. This will be assessed to a live audience and visiting examiner within this term.

**Understanding Drama:** Students will continue to receive seminar based lessons on section B and C of the written paper.

### Term 3

**Understanding Drama:** Students will focus only on the written paper sections A, B and C.
Homework:

Students have one piece of homework each week. This may be a practical homework (to rehearse before the next lesson with their group), line learning a practice paper or variety of practice questions for the written paper.

Useful Resources:

- The Ark Academy Learning centre
- Show my homework
- http://www.bbc.co.uk/schools/gcsebitesize/drama/