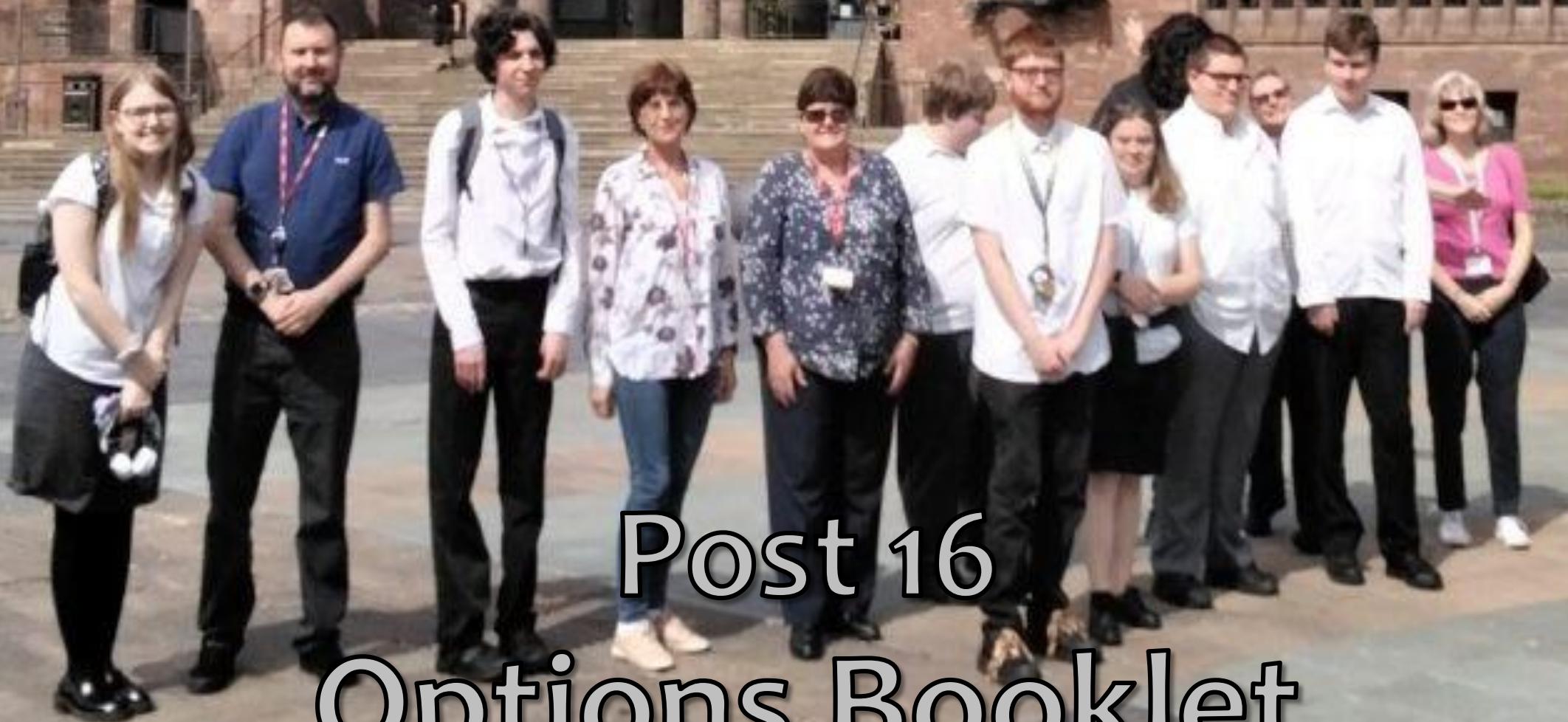




Alderman Knight School



Post 16
Options Booklet
September 2024

The Option Subjects

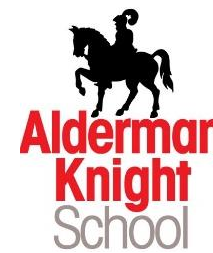
Alongside the Core Curriculum, there is also the opportunity for all students to choose three 'option subjects'. Following significant analysis of the expressions of interest, we are delighted to share with you the options for September.

Below are the 6 subjects, in three option blocks. Each pupil should choose one subject from Block A, one subject from Block B and one subject from Block C.

Block A	Block B	Block C
Chemistry Business Studies	Design Technology Computer Science	Geography Art & Design

Please add choices to the option selection sheet at the back of this booklet or complete online via the QR code, also on the Option Sheet.

Making Your Choices



It can help, when choosing subjects for Post 16, to try and think about what you might do after Key Stage 5.

Your options decisions are important to you. You should make sure that you get all the advice and guidance that you feel you need before making your decisions.

It is important that you are happy with your choices as then you will hopefully enjoy your learning in Key Stage 5! Talking with your parents / carers, subject teachers, other members of staff, friends and older students are all valuable ways to help you decide what you would like to do.

We know some of you will be disappointed that you cannot study more subjects. However don't forget you can always choose to do some of these subjects at a later date or even outside school!

Here are some ideas to support you in making your decisions:

- Talk to current Year 12 and 13 students and to the people who'll be teaching it.
- Try and choose courses that suit the way you like to learn. The descriptions of subjects let you know what the course will be like. Choosing a new subject like Chemistry may seem like a good idea, but it is important you understand how it will be taught and what it will include.
- Please do not choose a subject because your friend is choosing it. Your friends may have different interests, ambitions, strengths or talents to you.
- It is not a good idea to choose a subject because you like the teacher teaching it this year. They may not be teaching it next year!

In summary, please do not worry if you are finding it difficult to choose. We will chat things through with you and do our best to help make sure you have chosen subjects that will suit you.

Qualification levels explained

All of the qualifications we offer at Post-16, KS5 are at Level 2 (GCSE or equivalent).

The table below provides an overview of the different levels of qualification and how they relate to each other.

Qualification Level	Equivalent GCSE Grade	Vocational Awards, Certificates
Level 2	9	GCSEs Grades 4-9 (C to A*) BTEC Level 2 Functional Skills Level 2 NCFE Level 2
	8	
	7	
	6	
	5	
Level 1	4	GCSEs Grades 1-3 (G to D) BTEC Level 1 Functional Skills Level 1 NCFE Level 1
	3	
	2	
Entry Level	1	1, 2 or 3 (Entry Level 3 is the highest) Entry Level Awards
	EL3	
	EL2	

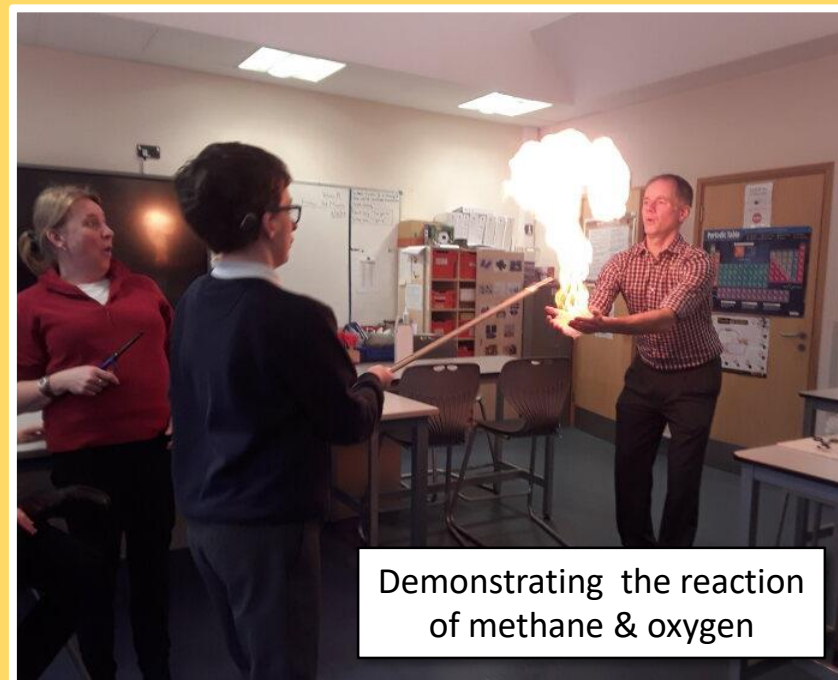
Each of the option subject pages will provide a brief overview for each qualification. The table below provides specific information about the type of qualification in each subject.

Subject	Level of Qualification
Art & Design	GCSE
Business Studies	Level 2
Chemistry	GCSE
Computer Science	GCSE
Design Technology	GCSE
Geography	GCSE

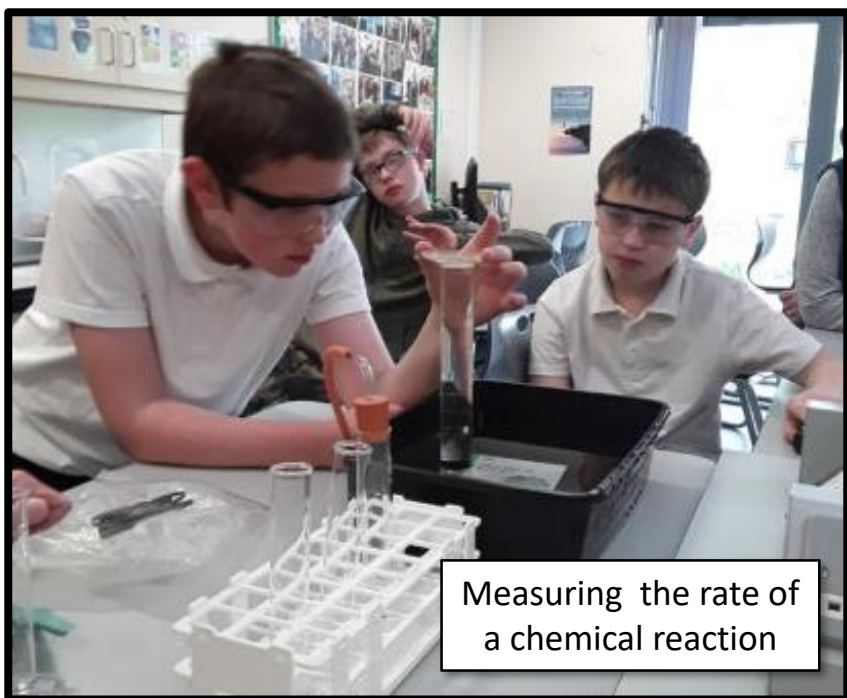
Chemistry GCSE

Block A

Chemistry is the study of materials. This means learning about the fundamental concepts in chemistry, including the structure of atoms, elements, compounds, and the periodic table. This allows us to understand chemical reactions, how atoms bond to form molecules, the types of chemical bonds (ionic and covalent) which leads on to understand the properties of different types of substances. This will include learning about acids and bases and grasping the energy changes in reactions.



Demonstrating the reaction of methane & oxygen

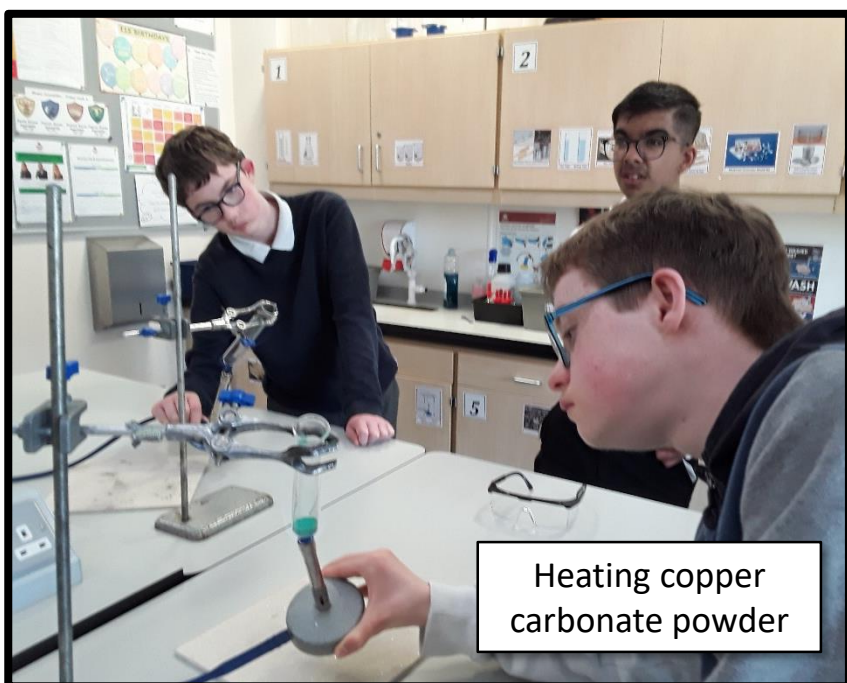


Measuring the rate of a chemical reaction

What lessons will look like

In Chemistry you will learn through a variety of teaching methods such as:

- practical work. You will do lots of experiments
- Demonstrations. These can be the experiments that a teacher is only allowed to do such as reacting methane with oxygen shown in the phot above.
- modelling idea and concepts such as how chemicals bond, the particles in the three states of matter and the factors that speed up reactions such as concentration, temperature and surface area.
- using computers to research topics.
- watching videos and animations, using computer simulations and power point presentations to help grasp the ideas and concepts being studied.



Heating copper carbonate powder

Homework

Students will be provided with a revision guide and workbook. Homework will often be to complete the questions in the workbook using the information in the revision guide. This will reinforce what has been learnt in lessons. Homework will be set weekly and will usually take 30 minutes to complete.

Course Information

Students have the opportunity to gain a GCSE grade from 1-9. This will be based on two 1h 45min final exams in Y11. 30% of the questions will require the use of maths skills so having maths as a strength will be an advantage.

Next Steps

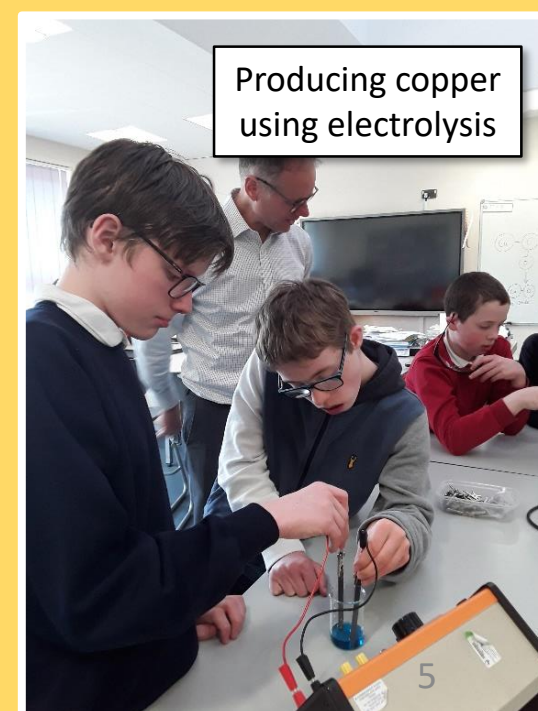
A GCSE in Chemistry will allow progression to either a Level 2 or Level 3 science related course depending on the grade you get. It is also very useful if you are thinking about careers such as environmental or analytical science, or the pharmaceutical industry.

Trips & Visits

In Year 12 In year 10 we will visit the Cheltenham Science Festival to attend a talk, take part in interactive experiments and have the opportunity to see what careers involve science and chemistry.



Filtering to purify a salt solution



Producing copper using electrolysis



Business and Enterprise

Level 2 – Block A



Overview

This qualification is designed for students who want an introduction to business and enterprise that includes a vocational and project-based element. It differs from GCSE Business Studies, as it encourages students to use knowledge and practical enterprise tools to prepare them for business.



What you will learn about

- ✓ The characteristics needed by entrepreneurs
- ✓ How businesses are organised
- ✓ The different market types and market research
- ✓ How to run and grow a business
- ✓ Sources of funding and business finance
- ✓ The impact of the external environment on business and enterprise

What your lessons might look like?

- ✓ Lessons will be varied and based almost entirely around real life businesses
- ✓ Role plays based around different business scenarios
- ✓ Case studies
 - ✓ Local small businesses
 - ✓ Car manufactures and retailers
 - ✓ Practical tasks such as market research
- ✓ **Offsite Visits and Business Talks**
- ✓ There will be lots of opportunities to interact with local business owners and leaders both at school and out in the community



SUPERMARKET



Course Structure

- ✓ 2 Units
 - ✓ 1 Non examined element – portfolio of evidence (60%)
 - ✓ 1 written exam (40%)



Design Technology

Block B



Overview

GCSE in Design Technology

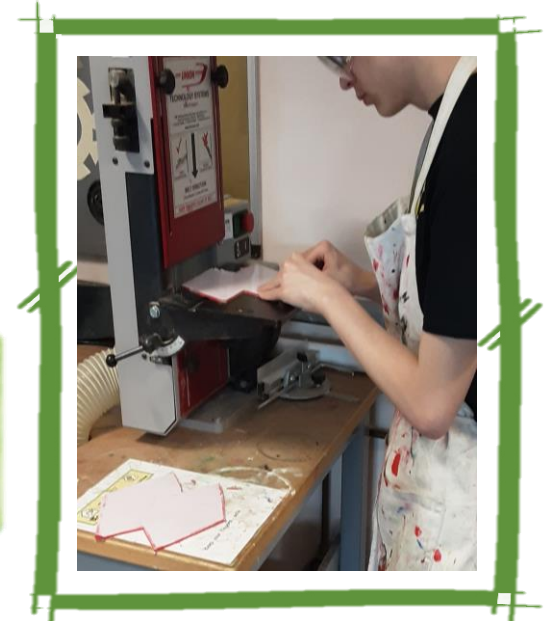
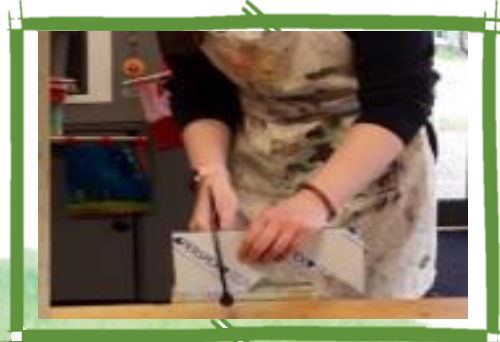
Looking for a course that is creative and informative. You will extend your knowledge of materials, tools and processes as well as developing your designing and making skills.

What current students have said

"In DT you really get to feel creative and use your skills to make products for a client."

Why choose Design Technology?

Use a range of skills from other subjects to recreate and design innovative products built for function and purpose.

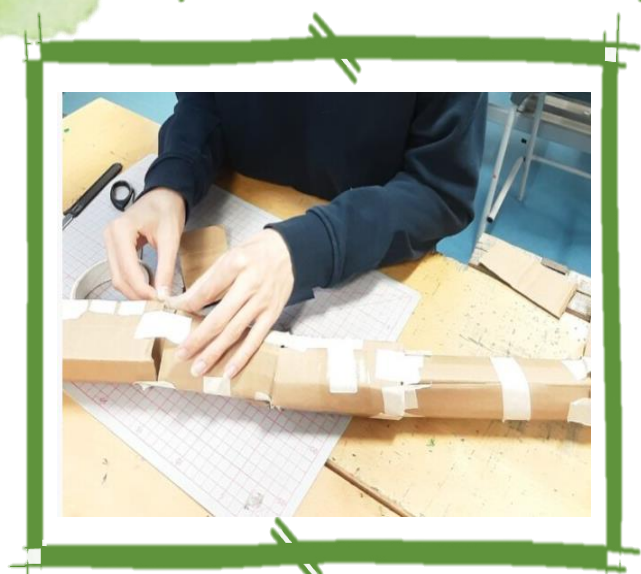


What you will learn about...

Designing, creating, and evaluating products or systems. It integrates principles from various topics such as engineering, aesthetics, and usability, focusing on problem-solving, innovation, and the application of technology to meet human needs and improve functionality in everyday life.

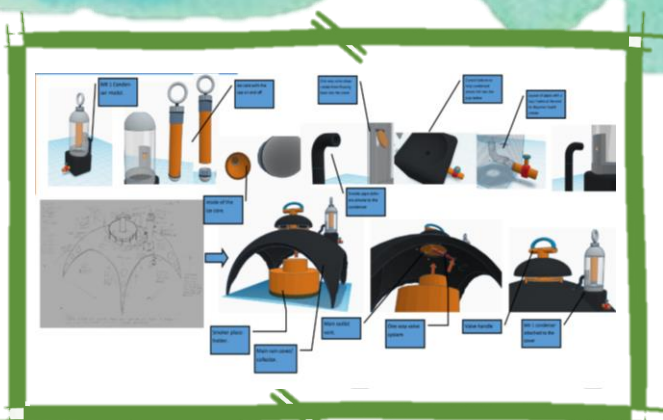
Skills

- ✓ Develop confidence in a range of hand tools and machinery
- ✓ Problem Solving
- ✓ Developing products through modelling and prototyping
- ✓ Understanding the needs of a client
- ✓ CAD – Computer aided design
- ✓ Properties of materials



What you could do next?

Design Technology provides a route to a wide range of careers in creative, engineering and manufacturing industries. A Levels and courses at colleges to study further in creative subjects or trades. Apprenticeship in mechanics, building and trades.



Course Structure

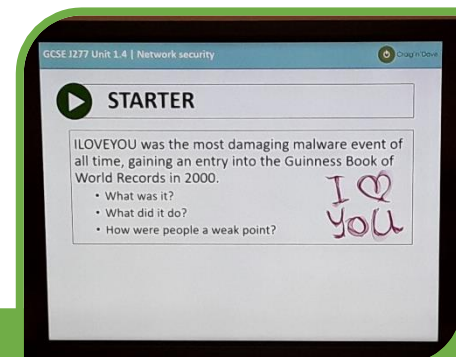
50% Coursework

50% Written exam

Year 1 – Developing skills and completing a mock coursework alongside developing theory skills.

Year 2 – Coursework and final written exam.

Computer Science GCSE – Block B



Overview

GCSE Computer Science helps you think about how technology is created. This GCSE gives you an excellent opportunity to investigate how computers work and to develop computer programming and problem-solving skills. Students will be required to analyse problems in computational terms through practical experience, including designing, writing and debugging programs, through to hacking simulations. We use a flip learning approach, where students watch a video and take notes before a lesson so we can then further dig deeper into the topics.

Homework?

You will be required to watch a **video** on the next topic before the start of a lesson, these vary between 5 and 15 minutes. This enables us to use our lesson time for practical tasks.

Why choose Computer Science?.....

Technology is embedded in every aspect of our lives.

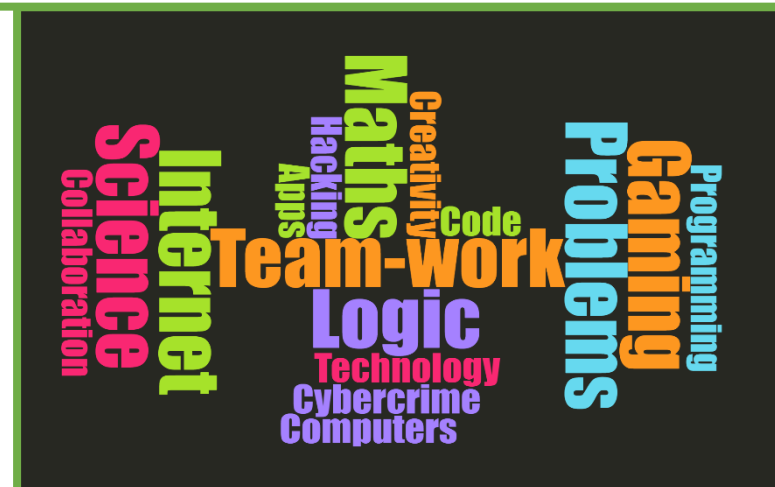
Computer Science is being used help solve many of the world's biggest problems.

If you wish to have a career in Computers and IT, this could be for you, opening doorways to apprenticeships and further education courses at college.

What you will learn about...

- Internal computer components
- Cyber security
- Data representation

- Effect of digital technology on society
- Programming
- Networking and the Internet
- Software development



Skills you will develop...

Not only will you develop your computational thinking skills, Computer Science teaches you to apply the problem-solving skills and creativity to other subjects and real-life situations.

Possible Trips...

IT Schools for Africa
Quintec IT Solutions

What you could do next?

- Speak to your Computing teacher and ask about the course visit the course website <https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/>
- Talk to some of the current year 10 or Post 16 Computer Scientists and ask them about the course



Course Assessment

	Component 1: Computer systems	Component 2: Computational thinking, algorithms and programming	Practical programming experience
How is it assessed	Written exam 1 hour 30 minutes	Written exam 1 hour 30 minutes	Not formally assessed
How much is it worth	80 marks Worth 50%	80 marks Worth 50%	Not formally assessed

Geography

Block C



Overview

Studying GCSE Geography offers students a valuable opportunity to develop a well-rounded understanding of the world around them. This subject encompasses a wide range of topics, including physical landscapes, human societies, and the intricate connections between them. By engaging with GCSE Geography, students can enhance their critical thinking skills, spatial awareness, and analytical abilities.

What current students have said:

I like learning about the world and how things are changing

Fieldwork

Geography fieldwork is a crucial component of geographical education, offering students the opportunity to apply theoretical knowledge in real-world settings.

What you will learn about...

Physical Geography including Rivers and the Coastline

Human Geography including why humans settle and work where they do

The Environment and how our interactions with wildlife and our natural surroundings are evolving.

Skills you will develop...

Map Reading, Problem Solving

Fieldwork, Real world challenges

Environmental Impact, ICT

Geographical systems (Ordnance Survey & GIS)

Location and Place knowledge



What you could do next?

After completing your Geography studies, a whole new world of opportunities awaits.

Leisure and Tourism

GIS/ Data

Environmental / Conservation work

Town admin / planning

Customer Service

Volunteering



Courses offered

GCSE Geography (OCR A)

Assessed by:

3 x 60-minute written exam papers

Fieldtrip opportunities





Art and Design - Block C

You will notice that there is now one option for Art & Design which encompasses the elements of both Fine Art and Graphics. We have made this decision due to the large numbers of students who expressed an interest for both courses. By running one combined Art course, all students who wish to, can now study the subject as well as other options choices.



Overview

If you enjoy being creative, learning about using new materials and techniques, and like the freedom to create your own artwork inspired by other artists, then one of these GCSE courses are for you! In AKS Post 16, you could combine **Fine Art (Art)** and **Graphic Communication (Graphics)** to continue with your creative journey.

"Art gives people the opportunity to express themselves how they want and when they want."

Fine Art

Course offered:
AQA GCSE Art and Design: Fine Art

Fine Art is all about the traditional methods of creating art, like drawing and painting. In Fine Art, you will have the freedom to express yourself, make your own creative decisions, and produce excellent pieces of artwork inspired by your ideas and researched artists!

Fine Art Skills

- ✓ As a **Fine Artist**, you will specialise and develop skills in:
- ✓ Using a variety materials, methods and techniques to develop **drawing and painting** skills
- ✓ Crafting and sculpting with paper, clay and other materials
- ✓ **Printmaking** using lino, collagraphs and monoprints
- ✓ **Photography and editing** software to enhance images

"In Graphics, I get to be creative, by using my drawing and computer skills together."

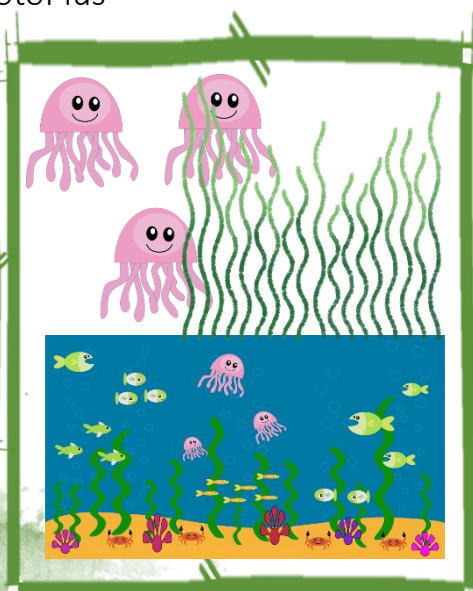
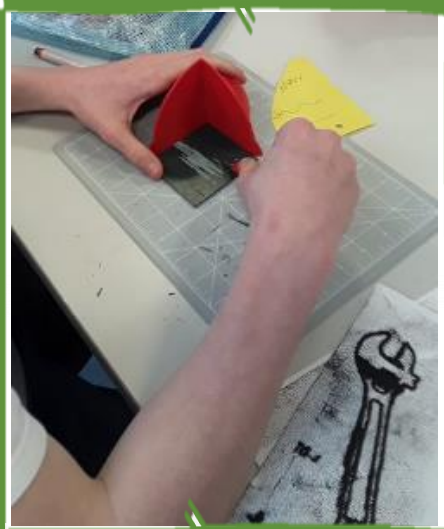
Graphic Communication

Course offered:
AQA GCSE Art and Design: Graphic Communication

Graphic Communication is all about communication with consumers, clients and customers. Graphics assesses the aesthetics of products and packaging, looking at poster design and typography, and exploring how designers the world over have effectively communicated using images, words, illustration and colour.

Graphic Communication Skills

- ✓ As a **graphics designer**, you will specialise and develop skills in:
- ✓ **Analysing designs** of logos and brand identities, products and packaging
- ✓ **Thumbnail sketching** of ideas
- ✓ Practical uses of **photography and illustration**
- ✓ **Editing and design software** such as Serif DrawPlus and Serif PhotoPlus



What you will learn about

Students will develop their creativity and begin to think outside of the box in both Fine Art and Graphic Communication. They will be able to communicate their ideas visually and effectively through various mediums and processes relevant to the specialist choice they make. They will have the freedom to explore their own ideas and express themselves in a creative way, using projects and prompts to inspire them.

Students studying each GCSE will work towards 4 assessment objectives which look at research, experimenting, explaining ideas, and creating meaningful artwork and designs.

What could you do next?

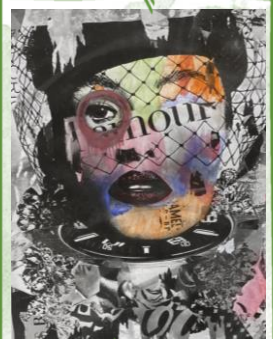
Art and Design can provide a route to a variety of further courses and/or employment opportunities in creative and design industries. College courses can provide further specialism into these areas at A Level and BTEC.

Course Structure

Non-Examination Assessment (NEA) - 100% coursework

Year 1 – Portfolio – **60%** towards GCSE Skill building, learning how to annotate, learning how to research artists and designers.

Year 2 – Externally Set Assignment – **40%** towards GCSE with 10 hour supervised time Choosing a new project theme provided by AQA, and creating a product or piece of artwork in response.



Timeline of important dates

Once all Year 11 pupils have made their option choices, we will be able to confirm which option subjects have been allocated to each pupil.

If we have any queries about the choices a pupil has made, a member of staff will discuss the situation with that student. All pupils will receive a letter confirming their option choices on the 20th March.

Later in the academic year, each pupil will also receive an individualised options booklet which will outline the core subject accreditations that pupils will be studying.

