

HIGHCLARE SCHOOL

U4 Curriculum Plan

U4 Curriculum Plan

This curriculum plan includes an outline of the topics and themes studied in each subject throughout the year. In addition to this U4 pupils have two half hour session a week on Skills and Values, covering a variety of co-curricular content, such as Character Education and British Values.

The table below shows the time allocated to each subject per week.

Subject	Hours	Subject	Hours	Subject	Hours	Subject	Hours
Art	1	MFL	2	Music	1	Science:	
Design & Technology	1	Geography	1	Physical Education	2.5	Biology	
Drama	1	History	1	PSHCE	0.5	Chemistry	3
English	4	ICT / Computing	1	Religious Studies	1	Physics	
Food & Nutrition	1	Mathematics	4				

All KS3 pupils have internal school examinations in all subjects (except Drama, PSHCE and PE) in the week before half term in the summer term.

In the case where a student has a clear aptitude for MFL, we also offer a second language using some of the flexibility in our Period 7 on the timetable, without impacting on their other subjects.

We hope that you find the plan informative and useful.

Mr M Coles Deputy Head of Senior School: Academic

Art

Autumn term

Introduction to the theme 'About Face' and exploration of portraiture: How to accurately draw and shade eyes Drawing with pen and ink Using mixed-media techniques Assessed work Mixed media eye with tear drips

Begin exploration of abstract and surreal portraits Experimentation with techniques and materials including: Collage, Splicing & Photomontage

Spring term

Continued exploration of surrealism, including photographic techniques & Photoshop

Proportions of the human face, and further exploration of drawing realistic facial features

Assessed work Half realistic celebrity drawing

Summer term

Manga drawing mini project Proportions of the human skull, and exploration of the skull in Art and Culture – including the Day of the Dead festival

Assessed

Day of the Dead inspired Skull design (End of year examination)

Design & Technology

Autumn term

<u>Mechanical devices</u> Linkages, pulleys and gears

Wood, textiles, plastics

Moving toys Designing and making a moving toy Making a moving toy. Workshop skills Complete toy task

Spring term

Plastics Structures and 3d Printing

Jewellery

CAD/CAM

Summer term

Sketching and designing

Drawing for a purpose – revision. Free hand, isometric and orthographic drawing.

Drama

English

Autumn term	Spring term	Summer term	
Melodramatic technique and how to structure a pantomime.	Pantomime and touring theatre	Pantomime and touring theatre cont.	
Revising acting skills in a workshop context	Devising a 20 minute pantomime in groups that will be taken to local primary schools in the Summer term	Final rehearsals, costume and theatre make up. Performing at local feeder schools.	
Autumn term Baseline spelling and reading assessment.	Spring term GCSE Language Skills: Fight For Freedom paper 2 skills. Range of non-fiction and argumentative writing.	Summer term GCSE paper 1 skills: creative reading and writing skills.	
Creative writing: dystopian fiction: eg: 1984, Fahrenheit 451, Examination Day, Sound of Thunder. Studying and writing a short story.	Macbeth by William Shakespeare	AQA GCSE Power and Conflict poetry – <i>Ozymandias, Exposure, The</i> <i>Emigree.</i>	
House poetry competition		Spoken presentation to the class linked to the poems studied.	

Class novel: Of Mice and Men

Weekly spelling test of 10 spellings and grammar task. Independent reading skills and writing challenges.

Food & Nutrition

Autumn term

Nutrients for good health Meal planning Macro - nutrients – Protein Meat Vegetarians Alternative proteins Macro – nutrients – Fat Pastry making Christmas cookery

Spring term

Macro – nutrients – Carbohydrates How flour is made Sauce making Fibre Bread making Start of Food hygiene certificate

Summer term

Practical examination – 3 star chef award Completion of Food Hygiene certificate

Practical demonstrations and practical skills lessons throughout the year

French

Autumn term TV/cinema/reading Activities online Module on Paris **Spring term** Relationships Clothes Hobbies Summer term Holidays Tourist attractions

Film study – Les Choristes

German

Autumn term

Present Tense Imperfect Tense Places in Town Holiday accommodation Weather Perfect tense activities Forms of transport

Spring term

TV habits Films Books Film Study - Das Wunder von Bern Opinions Music

Summer term

Breakfast Traditional German food Healthy lifestyles Food Exercise

Geography

Autumn term

Earth's processes Plate tectonics Volcanoes Earthquakes Tsunami Managing risks.

Spring term

Resource and Trade Earth as a natural resource Rocks and soils Sustainable use of natural resources International relations Place study: Middle East trade and resources. Population Population recap Population pyramids The DTM model Urban study methods.

Summer term

Place Study: China Human Geography of China Globalisation of China Culture of China Population study of China Rural and urban contrasts Physical Geography of China including tectonic hazards.

History

Autumn term

The First World War The causes of World War One Trench warfare The Battle of the Somme The end of the war in 1918

Spring term

The Inter-war years The Treaty of Versailles Democracy and dictatorships The Depression The rise of Adolf Hitler

Summer term

The Second World War The causes and events of World War II including: Appeasement The Battle of Britain D-Day Hiroshima

Two assessed essays

Assessed group work

ICT & Computing

Autumn term

Website Design Project using Dreamweaver CC, HTML & JavaScript Animation techniques

Spring term

Adobe Animate CC Animation project Binary Numbers

Summer term

End of year examination

Microsoft Access Movie Database Project Advanced Python programming challenge

Mathematics

Autumn term

Decimal places and significant figures for estimations Upper and lower bounds Reciprocals, recurring decimals Probability: addition rule OR, multiplication rule AND, tree diagrams, two way tables, Venn diagrams Percentages: Increase, decrease, multiplier method, VAT/Tax Simple interest, compound interest Ratio and proportion: Simplifying ratio, division in a given ratio, direct and inverse proportion Algebra: expanding and simplifying brackets

Spring term

Area and volume including: Trapezium, arcs and sectors, prisms Pythagoras theorem Algebra: The subject of a formula, substitution, forming and solving equations, nth term, simultaneous equations, inequalities Straight line graphs Graphical representation of inequalities

Summer term

Solving quadratic equations Transformations: reflections, rotations, translations and enlargements

Music

Autumn term

Film Music (elements of music, instruments of the orchestra, diegetic & non-diegetic music) Music for a purpose Sending a Message – BandAid!

Spring term

Music in Media – Jingles, musical influence, compositional skills and word setting.

Summer term

Songwriting Free composition project to a selection of set briefs

Physical Education

Autumn term

Netball Hockey Football Rugby Badminton Basketball

Spring term

BadmintonHVolleyballFHealth and fitnessRNetballB

Hockey Football Rugby Basketball

Summer term

Athletics - track and field Rounders Cricket Softball Tennis

PSHCE

Autumn Term Dressing appropriately

Body image and healthy living nutrition and what makes a healthy diet?

Gangs and violence

E-safety

Spring Term

Politics and parliament in the United Kingdom.

Exploring human rights - looking at identity; immigration; race and prejudice; asylum seekers and associated legal implications

Prejudice and discrimination

Human rights – the Equality Act and the rights of the child

Summer Term

Appropriate behaviour

The age of consent - arranged marriage; FGM and CSE; control in relationships

Contraception and STI's

Careers morning – pupils take part in an information morning with visiting speakers.

Career stereotypes challenged

Cascaid Kudos – an introduction to the computer based programme focussing on careers.

Religious Studies

Autumn term	Spring term
History of Christianity	Ethics 1
How did Christianity begin?	What is ethics? Is it easy to mal
Who is Constantine and the	decisions?
council of	Is there any law that should not
Nicea?	be broken?
What is the Great Schism?	The sanctity of life
What happened during the	Why does Nietzsche say that G
reformation?	is dead?
Who are the Quaker and the	How should we make decision of
Amish?	what is right and wrong?
How and why are some Christians	Key word assessment and what
persecuted?	should
End-of-topic assessment	we do with the runaway train?
Christianity 3	Ethics 2
Why do Christians have eggs at	Should we treat animals as
Easter?	equals?
What do Christians believe about	Is pacifism possible in today's
life after death?	world?
Ecumenical movement.	How should we treat the poor?
The authority of the Bible.	Should the death penalty be
The Gospels	allowed?
Christian places of worship	The environment and
Key word assessment and public	stewardship.
worship	End-of-topic assessment

pring term thics 1 What is ethics? Is it easy to make lecisions? s there any law that should not e broken? The sanctity of life Why does Nietzsche say that God dead? How should we make decision on hat is right and wrong? Key word assessment and what nould ve do with the runaway train? thics 2 Should we treat animals as

Summer term

Philosophy 1 The argument from design. The argument from first cause Why did Descartes doubt everything? What did the Masters of Suspicion believe about religion? Key word assessment and are the New Atheists right about faith?

Philosophy 2 What do people in the UK believe? Can evil exist in a universe created by God? ICT paired task and presentation (2-3 lessons)

Science

Autumn term

Biology

Cell Biology: Students learn about the structures of eukaryotic and prokaryotic cells, Cell specialisation and differentiation and develop their procedural knowledge of microscopy.

Organisation: This unit looks at the human digestive and respiratory systems and link these to the composition of blood and associated non-communicable disorders including Coronary Heart disease. Students will be introduced to plant tissues for the first time also.

Spring term

Communicable diseases: This unit builds on the unit of cell biology and examines the diseases caused by bacteria, viruses, fungi and protists and their core method of control. The human defence system is also covered as well as the way vaccines work to increase immunity.

Bioenergetics (Photosynthesis):

Students build on their KS3 understanding of this topic by looking at the factors that control photosynthesis and methods of investigation.

Chemistry Ato

Atomic structure, elements and the Periodic Table: This crucially important unit explores the fundamental nature of matter in relation to atomic structure and builds on KS3 learning by explaining trends in the periodic table by linking to differences between elements in a group. Understanding how ideas regarding the periodic table are important in this unit also.

Chemical bonding (pt 1): Students learn about ionic bonding.

Quantitative chemistry: Using and advancing their understanding of atomic and molecular structure, students look at atomic and formula mass, the conservation of mass during chemical reactions and finally learn about the 'mole' as a quantity.

Energy changes: This unit looks at exothermic and endothermic reactions

Chemical bonding (pt 2): Unit consolidates learning on ionic bonding and study covalent and metallic bonding.

Summer term

Bioenergetics (Respiration): This unit makes links to photosynthesis but looks at the differences between aerobic and anaerobic respiration and how exercise causes changes to the body as a result of the impact on metabolic reactions.

Human coordination and response; Students are introduced to

homeostasis in relation to both chemical (hormones) and electrical (nervous system) responses.

Chemical changes: This expansive unit allows students to study chemical reactions in terms of oxidation, reduction, displacement and the reactivity series. Students also look at reactions involving acids and bases (neutralisation) before looking at the role of electrolysis as a method of separation.

Physics

Energy: A unit that lays the foundations for the rest of physics, students will learn about energy stores, transfers and conservation. The unit advances students beyond their prior knowledge by looking at energy as a quantity that can be calculated depending on its store – gravitational, kinetic and elastical.

Electricity: Students learn about current in a circuit in relation to the rate of charge flow and how resistance reduces this flow. Students investigate different resistors and their affects on a circuit.

Some GCSE Science topics are covered in the U4 and where appropriate GCSE required practicals will be completed. **Particle model of matter:** Building on the topic of energy and KS3 forces, students learn about density and changes of state and internal energy of molecules.

Atomic structure: In this topic, students look at ionising radiation types of alpha, beta and gamma. Students learn about their relative ionising abilities and their penetrative properties. How particles cause contamination and how unstable atoms decay is also covered.

Forces: This unit examines contact and non-contact forces in relation to vector and scalar properties and students learn how to resolve forces acting on an object. **Waves:** Students will learn about differences and examples of transverse and longitudinal waves as well as their general properties. They will then progress to learn about the electromagnetic spectrum, considering the uses and dangers of the different regions.

Spanish

Autumn term

My life

Opinions about activities Describing friends Nationalities Places in a town Using near future tense

Free time

TV programmes Types of films

Spring term

Free time Complex, justified opinions about films

> Making arrangements to go out Making excuses Technology (comparatives)

Holidays

Describing a past holiday (where went/ activities/weather/ accommodation) Preterite tense & imperfect tense Booking a hotel room Making a complaint Spanish festivals

Summer term

Healthy living Body parts Illnesses Food & healthy eating Giving advice on lifestyle Issues facing young people (preterite & conditional tense) Our planet Environment Global problems – local solutions Global citizenship Homelessness

Film studies – Voces Innocentes