



Year 10

Name: \_\_\_\_\_ Tutor Set: \_\_\_\_\_

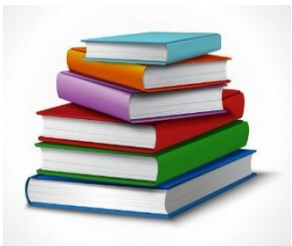
# Knowledge Organiser KS4 Course Overview



**“The best advice I ever got was that knowledge is power  
and to keep reading”**

David Bailey

English Fashion and Portrait Photographer



# English

## Language and Literature

Exam Board:  
Specification:

	<b>Unit 1</b> Macbeth	<b>Unit 2</b> A Christmas Carol	<b>Unit 3</b> Lord of the Flies
Unit Overview	Paper 1 Literature Shakespeare	Paper 1 Literature 19 <sup>th</sup> century novel	Paper 2 Literature Modern text
Intended Term of study	Autumn Term 1	Autumn Term 2 Spring Term 1	Spring Term 2
KOs on school website to use	Macbeth	A Christmas Carol	Lord of the Flies
Essential knowledge to learn	Characters and their key traits through the novel. The key themes of the novel. The key quotes. Key order of events within the novel. Context	Characters and their key traits through the novel. The key themes of the novel. The key quotes. Key order of events within the novel. Context	Characters and their key traits through the novel. The key themes of the novel. The key quotes. Key order of events within the novel. Context
Extended knowledge to research and learn	Learn as many quotes as you can and make sure you can analyse them Research extra contextual knowledge and read around the text	Learn as many quotes as you can and make sure you can analyse them Research extra contextual knowledge and read around the text	Learn as many quotes as you can and make sure you can analyse them Research extra contextual knowledge and read around the text
Tips for learning the knowledge	Create clocks of the characters, we have created you a template on the website. Create a mind map of the themes in the novel, show how they link together. Produce a time line of events.	Create clocks of the characters, we have created you a template on the website. Create a mind map of the themes in the novel, show how they link together. Produce a time line of events.	Create clocks of the characters, we have created you a template on the website. Create a mind map of the themes in the novel, show how they link together. Produce a time line of events.

	<b>Unit 4</b> Paper 2 Language	<b>Unit 4</b> Poetry	<b>Unit 5</b> Paper 1 Language
Unit Overview	Unseen non-fiction extracts (two) and writing for a purpose	Power and Conflict and unseen poetry	Unseen fiction extract and writing to narrate or describe
Intended Term of study	Spring Term 2	Summer 1	Summer 2
KOs on school website to use	Language Paper 2 – Section B	Power and Conflict 1 Power and Conflict 2 Unseen	Language Paper 1
Essential knowledge to learn	Techniques and methods used by writers eg word types, structure, tone What each question requires of you. How to structure your own writing Spelling, punctuation and grammar.	What is each poem about? Including themes. Structure and language use in each poem Context of each poem Links between poems	Techniques and methods used by writers eg word types, structure, tone What each question requires of you. How to structure your own writing Spelling, punctuation and grammar.
Extended knowledge to research and learn	Read as much non-fiction as you can Practise writing non-fiction texts	Read other poems by the same poets Research more about context	Read as much fiction as you can Practise descriptive and narrative writing
Tips for learning the knowledge	Test yourself on knowing language devices	Create large mind map which links all of the 15 poems together – use colours etc to show the different ways they compare and contrast	Test yourself on knowing language devices

## Our weekly homework routines...


- 1 You will always be set at least one homework a week by your teacher.
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  - i) watch the video + take notes;
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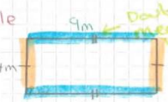
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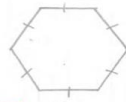
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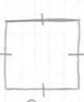
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VIDEO NOTES  
Hegarty maths: Perimeter (2) 14<sup>th</sup> July 2016

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 Perimeter =  $7+7+7+7$   
 $= 4 \times 7$   
 $= 28 \text{ mm}$

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**Key Words:**  
 • Length  
 • Units  
 • Distance

**Don't forget units!**

**Regular means all sides are same length**

**Double dash means same length but not same as single dash**

**Doesn't matter which method you use, they all work!**

**Here is an example of a great homework!**

**Work out the perimeter of an equilateral triangle with side length 4.1mm.**

**Work out the perimeter of a square with side length 5cm.**

**Work out the perimeter of a regular hexagon with side length 9m.**

**Use algebraic law of multiplication**

You will **always** produce a set of well-written notes of all the modelled examples in the video as we want you to be an expert note-taker and to revise before you try the quiz. **If you know the material, you still have to take the notes as sometimes you have to revise topics you already know and it's good for your long-term maths memory.**

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# Maths

## Foundation

Exam Board:  
Specification:

	<b>Unit 14</b> Volume and Surface Area of Prisms	<b>Unit 15</b> Linear Equations	<b>Unit 16</b> Percentages and Compound Measures	<b>Unit 17</b> Percentages and Variation
Overview of Unit	3D shapes Volume and surface area of a cuboid Volume and surface area of a prism Volume and surface area of cylinders	Solving linear equations Solving equations with brackets Solving equations with the variable on both sides	Equivalent percentages, fractions and decimals Calculating a percentage of a quantity Increasing and decreasing quantities by a percentage Expressing one quantity as a percentage of another Compound measures	Compound interest and repeated percentage change Reverse percentage Direct proportion Inverse proportion
Intended Term of study	Autumn 1	Autumn 1	Autumn 1	Autumn 1
Recommended Hegarty Clips	3D shapes – 829, 830 Cuboids – 568, 569, 584 Prisms – 570, 571, 585 Cylinder – 572, 573, 586	Solving equations – 177-185	Percentage of amounts - 84 – 87 Percentage inc/dec - 88 – 90 Percentage problems - 98 Density - 725 – 733 Pressure - 734 - 737	Percentage change - 97 Reverse percentage - 96 Simple interest - 93 Compound interest - 94 Proportion - 339 -342
Essential knowledge to learn	Formula to memorise; - volume of a prism - volume of a cylinder		$Density = \frac{mass}{volume}$  $Pressure = \frac{force}{area}$	Formula to memorise; - Percentage change - Simple interest - Compound Interest

	<b>Unit 18</b> Representation and Interpretation	<b>Unit 19</b> Construction and Loci	<b>Unit 20</b> Curved Shapes and Pyramids	<b>Unit 21</b> Number and Sequences
Overview of Unit	Sampling Pie charts Scatter diagrams Grouped data and averages	Constructing triangles Bisectors Defining a locus Loci problems	Sectors Pyramids Cones Spheres	Patterns in number Number sequences Finding the nth term of a linear sequence Special sequences General rules from given patterns
Intended Term of study	Autumn 2	Autumn 2	Spring 1	Spring 1
Recommended Hegarty Clips	Types of data - 392, 393 Time series - 450, 451, 452 Scatter graphs - 453, 454 Mean from grouped frequency tables - 418 Averages problems - 421	Constructions – 660 to 669 Loci - 674, 675, 676, 677, 678, 679	Circumference - 537, 538 Circle area - 542, 543 Surface area - 587, 588, 589, 590, 591 Volume - 576, 577, 579, 580, 581, 582 Arc length - 544, 545 Sector area - 546, 547 Volume: Problem solving - 583	Linear sequences - 196, 197, 198 Other sequences - 261
Essential knowledge to learn	How to find the mean from a small set of data, a table and a grouped data table	Learn the step by step instructions for each construction	Formula for: - Length of an arc - Area of a sector  You will be given the formulae for cones and spheres, however ensure you are able to substitute into them and rearrange them	Memorise: - First 15 square numbers 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225 - First 6 Cube numbers 1, 8, 27, 64, 125, 216  Be able to recognise: - Triangular numbers 1, 3, 6, 10, 15, 21, 28, ... - Fibonacci Sequence 1, 1, 2, 3, 5, 8, 13, ...

	<b>Unit 22</b> Right Angled Triangles	<b>Unit 23</b> Congruency and Similarity	<b>Unit 24</b> Combined Events
Overview of Unit	Pythagoras theorem Calculating the length of a shorter side Applying Pythagoras' theorem in real life Pythagoras theorem in isosceles triangles Trigonometric ratios Calculating length using trigonometry Calculating angles using trigonometry Trigonometry without a calculator Solving problems using trigonometry Trigonometry and bearings Trigonometry and isosceles triangles	Congruent triangles Similarity	Combined events Two-Way tables Probability and Venn diagrams Tree diagrams
Intended Term of study	Spring 2	Spring 2	Spring 2
Recommended Hegarty Clips	Pythagoras' Theorem - 497, 498, 499, 501, 502 Trigonometry - 508, 509, 510, 511, 512, 513, 514, 515	Congruent triangles 680 - 686 Similarity – polygons 608 – 610 – triangles 611 - 613	Combined events - 358, 359 Two-way tables - 422, 423, 424 Probability and Venn diagrams - 383 Tree diagrams - 361 -363 Frequency trees - 368, 369
Essential knowledge to learn	Memorise: Pythagoras' Theorem $a^2 + b^2 = c^2$ SOH CAH TOA $\sin x = \frac{opp}{hyp}$ $\cos x = \frac{adj}{hyp}$ $\tan x = \frac{opp}{adj}$ Trig ratios of 0, 30, 45, 60 and 90 degrees	Congruency rules - SAS, SSS, ASA, RHS Angles in parallel lines - alternate angles are equal; corresponding angles are equal; allied or co-interior angles add to 180°. Vertically opposite angles are equal.	Probability has value between 0 and 1 and must be given as a fraction, decimal or percentage ( <b>Never in a ratio form</b> ).  $P(A \text{ and } B) = P(A) \times P(B)$  $P(A \text{ or } B) = P(A) + P(B)$  Regions of a Venn diagram

	<b>Unit 25</b> Powers and Standard Form	<b>Unit 26</b> Simultaneous Equations	<b>Unit 27</b> Non Linear Graphs
Overview of Unit	Powers (indices) Rules for multiplying and dividing powers Standard form	Distance-time graphs Plotting quadratic graphs Solving quadratic equations by factorisation The significant points on a quadratic curve Cubic and reciprocal graphs	Distance-time graphs Plotting quadratic graphs Solving quadratic equations by factorisation The significant points on a quadratic curve Cubic and reciprocal graphs
Intended Term of study	Summer 1	Summer 1	Summer 2
Recommended Hegarty Clips	Laws of indices – 102-107, 173-175 Changing numbers into and out of standard form – 122 -124 Multiplying and dividing with standard form – 125, 126 Adding and subtracting standard form – 127 Using a calculator with standard form – 128	Simultaneous Equations – 190 – 195 Representing inequalities – 265 – 268 Solving linear inequalities – 269 - 272	Distance-time graphs – 874 – 879 Drawing Quadratics – 251 Solve Quadratics by factorising – 230 Cubic and Reciprocal Graphs – 298, 299, 300
Essential knowledge to learn	All numbers in standard form must be in the following form $A \times 10^n$ where $1 \leq A < 10$		Memorise the formula for average speed  The important features of a quadratic curve  The shape of a cubic and reciprocal graph



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# Maths Higher

Exam Board:  
Specification:

	<b>Unit 16</b> Counting, accuracy, powers and surds	<b>Unit 17</b> Quadratic Equations	<b>Unit 18</b> Sampling and more complex diagrams
Overview of Unit	Rational numbers, reciprocals, terminating and recurring decimals Estimating powers and roots Negative and fractional powers Surds Limits of accuracy Problems involving limits of accuracy Choices and outcomes	Plotting quadratic graphs Solving quadratic equations by: factorisation, using the formula, completing the square, method of intersection The significant points of a quadratic curve Solving one linear and one non-linear equation using graphs and algebraically Quadratic inequalities	Collecting data Frequency polygons Cumulative frequency graphs Box plots Histograms
Intended Term of study	Autumn 1	Autumn 1	Autumn 2
Recommended Hegarty Clips	Convert recurring decimals to fractions – 53,54 Fractional powers – 108, 109 Surds - 115-119 Upper and lower bounds – 137-139	Solving Quadratics – 230 – 234, 238, 239 241,242 Plotting quadratics – 251 Simultaneous equations – 246 Quadratic inequalities - 277	Mean from a grouped frequency table – 418 Averages problems – 421 Quartiles and interquartile range – 411,412 Frequency polygons – 441 Cumulative frequency diagrams – 437-439 Box Plots – 434-436, 440 Histograms- 442-449
Essential knowledge to learn	How to check if a fraction is terminating or recurring Negative and fractional powers rules $a^{-x} = \frac{1}{a^x}$ $a^{\frac{x}{y}} = (\sqrt[y]{a})^x$ Surds rules $\sqrt{a} \times \sqrt{b} = \sqrt{ab}$ $\frac{\sqrt{a}}{\sqrt{b}} = \sqrt{\frac{a}{b}}$	Memorise the quadratic formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ Rules for the discriminant.	Median value $\frac{1}{2}(n + 1)$ th value Lower Quartile $\frac{3}{4}(n + 1)$ th value Upper Quartile $\frac{3}{4}(n + 1)$ th value Interquartile Range = upper quartile-lower quartile Frequency density = $\frac{\text{frequency}}{\text{width of class interval}}$

	<b>Unit 19</b> Probability	<b>Unit 20</b> Properties of Circles	<b>Unit 21</b> Variation	<b>Unit 16</b> Triangles
Overview of Unit	Addition rules for outcomes of events Combined events Tree diagrams Independent events Conditional probability	Circle theorems Cyclic quadrilaterals Tangents and chords Alternate segment theorem Proof of Circle Theorems	Direct proportion Inverse Proportion	Further 2d problems Further 3d problems Trigonometric ratios of angles between 0° and 360° Solving any triangle (Sine and Cosine rule) Using sine to calculate the area of a triangle
Intended Term of study	Autumn 2	Spring 1	Spring 2	Spring 2
Recommended Hegarty Clips	Independent events and probability trees - 361, 362, 363 Conditional probability - 364, 365, 366, 367, 389, 390	Circle theorems Angles inside a circle – 593-597 Circle Theorems tangents and chords - 598-601 Circle Theorems multi step – 603-606 Prove circle theorems – 816-820	Algebraic direct proportion – 343 - 345 Algebraic inverse proportion – 346, 347 Graphs and algebraic proportion - 348	Pythagoras' Theorem – 497-502 Trigonometry (Right angled) – 508-515 Trigonometry Problem solving – 513-514 3D Pythagoras – 505-507 3D trig – 854- 863 Sine rule – 521-525 Cosine Rule – 527-530 Sine rule (Area) – 517-519 Non right angled trig problem solving – 532, 533 Bearings sine and cosine rule - 531
Essential knowledge to learn	$P(A \text{ AND } B) = P(A) \times P(B)$ $P(A \text{ OR } B) = P(A) + P(B)$	Memorise all 8 circle theorems.  Ensure you can write a sentence to describe the circle theorem.	Direct Proportion $y = kx$ $y = kx^2$  Inverse Proportion $y = \frac{k}{x}$ $y = \frac{k}{x^2}$	SOH CAH TOA formulae  Sine rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ or $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$  Cosine rule $a^2 = b^2 + c^2 - 2bccosA$ or $CosA = \frac{b^2+c^2-a^2}{2bc}$  Area of a triangle = $\frac{1}{2} absinC$

	<b>Unit 17</b> Graphs	<b>Unit 20</b> Algebraic Fractions and Functions	<b>Unit 21</b> Vector Geomtry
Overview of Unit	Distance-time graphs Velocity-time graphs Estimating the area under a curve Rates of change Equation of a circle Other graphs Transformations of the graph $y=fx$ Gradients	Circle theorems Cyclic quadrilaterals Tangents and chords Alternate segment theorem Proof of Circle Theorems	Direct proportion Inverse Proportion
Intended Term of study	Spring 2	Spring 1	Spring 2
Recommended Hegarty Clips	Speed time graphs – 881-883 Area under a curve – 891-893 Rate of change using tangent – 890 Equation of a circle – 778-779 Circles and straight lines – 318-320 Reciprocal, cubic and exponential graphs – 298-302 Graph Transformations – 307-313	Algebraic fractions – 172, 187, 229 Change the subject of the formula – 285-286 Function notation – 288-289 Composite functions – 293,294 Inverse functions – 295-296 Functions problem solving – 297 Iteration - 322	Vectors – 625-636
Essential knowledge to learn	$velocity = \frac{displacement}{time}$ $acceleration = \frac{difference\ in\ velocity}{difference\ in\ time}$ <p>Gradient of tangent = rate of change Equation of a circle <math>x^2 + y^2 = r^2</math> Radius and tangent are perpendicular</p> <p>Shape of a cubic, reciprocal and exponential graph.</p> <p>Rules for function transformations.</p>		<p>Vectors show direction and speed and are moveable. Vectors going in the same direction are parallel. A vector that is double the magnitude is still parallel. If three or more points lie on the same line then they are collinear.</p>

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# Science

## Biology, Chemistry and Physics

Exam Board:  
Specification:

	<b>Biology Unit:</b> Infection and response	<b>Chemistry Unit:</b> Quantitative chemistry	<b>Physics Unit:</b> Forces 1
Unit Overview	<i>Understanding how we can avoid diseases and how our body uses barriers against pathogens.</i>	<i>Calculations &amp; analysis to determine the formula of compounds and equations for reactions</i>	<i>Understanding the differences between vectors, scalars, work done and energy transfers &amp; Hooke's law</i>
Intended Term of study	Autumn term 1	Autumn term 1	Autumn term 1
Kos on school website to use	Infection and response	Quantitative chemistry	Forces 1
Essential knowledge to learn	<ul style="list-style-type: none"> <li>- Human defence and preventing infections</li> <li>- White blood cells</li> <li>- Vaccines and clinical trials</li> <li>- Resistant bacteria</li> <li>- Monoclonal antibodies</li> </ul>	<ul style="list-style-type: none"> <li>- Moles = mass/Mr</li> <li>- Percentage yield equation</li> <li>- Atom economy equations</li> <li>- Titration calculation</li> <li>- Titration method</li> </ul>	<ul style="list-style-type: none"> <li>- Contact and non contact forces</li> <li>- Resultant forces</li> <li>- Work done</li> <li>- Hooke's law method</li> </ul>
Recommended Seneca tasks	Section 3 Infection and response	Section 3 Quantitative chemistry	Section 5.2 Forces

	<b>Biology Unit:</b> Homeostasis	<b>Chemistry Unit:</b> Energy changes	<b>Physics Unit:</b> Forces 2
Unit Overview	<i>Exploring the structure and function of the nervous system works &amp; how it can bring about fast responses. The role of hormones in reproduction and in plants</i>	<i>Exploring exothermic &amp; endothermic reactions and the transfer of energy due to bond being broken and made.</i>	<i>Newtons laws, forces and braking Velocity-time and distance-time graphs Acceleration, momentum</i>
Intended Term of study	Autumn term 2 and Spring 1	Autumn term 2	Autumn term 2 and Spring 1
Kos on school website to use	Homeostasis	Energy changes	Forces 2
Essential knowledge to learn	<ul style="list-style-type: none"> <li>- The central nervous system</li> <li>- The brain and eye</li> <li>- Controlling body temperature</li> <li>- Endocrine system</li> <li>- Kidneys</li> <li>- Menstrual cycle and hormones</li> <li>- Plant hormones and response</li> </ul>	<ul style="list-style-type: none"> <li>- Exothermic and endothermic reactions</li> <li>- Reaction profiles</li> <li>- Bond energy calculations</li> <li>- Cells, batteries and fuel cells</li> </ul>	<ul style="list-style-type: none"> <li>- Distance time graphs</li> <li>- Velocity time graphs</li> <li>- Newtons law</li> <li>- Momentum</li> <li>- Collisions and explosions</li> </ul>
Recommended Seneca tasks	Section 5 Homeostasis & response	Section 5 Energy changes	Section 5.1 and 5.3 Basics of motion Effects of forces

	<b>Chemistry Unit:</b> Rate of chemical change	<b>Biology Unit:</b> Ecology	<b>Physics Unit:</b> Forces 3
Unit Overview	<i>Factors affecting the rate and extent of chemical reactions. Equilibrium reactions, the conditions affecting it and knowing how to maximise yield</i>	<i>Understanding how materials are recycled, being released and decomposed. How humans are threatening biodiversity as well as the natural systems that support it.</i>	<i>Moments, levers and gears, pressure in fluids</i>
Intended Term of study	Spring 1 and 2	Spring 2 and Summer 1 and 2	Spring 2
Kos on school website to use	Rate of chemical change	Ecology	Forces 3
Essential knowledge to learn	<ul style="list-style-type: none"> <li>- Measuring rate</li> <li>- Describing how temperature, concentration, pressure and surface area affect the rate of reaction</li> <li>- Catalysts and rate</li> <li>- Drawing and calculating gradient of tangents</li> <li>- Reversible reactions</li> <li>- Equilibrium</li> </ul>	<ul style="list-style-type: none"> <li>- Adaptations and competition</li> <li>- Food chains</li> <li>- Sampling techniques</li> <li>- Water cycle and carbon cycle</li> <li>- Decay</li> <li>- Biodiversity, food security and sustainable fishing</li> <li>- Biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>- moments, levers and gears</li> <li>- Pressure in fluids</li> </ul>
Recommended Seneca tasks	Section 6 Rate of chemical change	Section 7 Ecology	Section 5.4 Pressure



	<b>Chemistry Unit:</b> Chemical analysis	<b>Physics Unit:</b> Waves	
Unit Overview	<i>Chemical testing and its advantages and disadvantages</i>	<i>Understanding the properties of waves. Electromagnetic spectrum properties and applications. Lenses and black body radiation</i>	
Intended Term of study	Summer 1 and 2	Summer 1 and 2	
Kos on school website to use	Chemical analysis	Waves	
Essential knowledge to learn	<ul style="list-style-type: none"> <li>- Chromatography method</li> <li>- Test for gases</li> <li>- Tests for ions</li> <li>- Flame emissions spectroscopy</li> </ul>	<ul style="list-style-type: none"> <li>- Transverse and longitudinal waves</li> <li>- Waves in water method</li> <li>- Waves on a string method</li> <li>- Reflection and refraction method</li> <li>- Electromagnetic spectrum</li> <li>- Concave and convex lenses</li> <li>- Black body radiation</li> </ul>	
Recommended Seneca tasks	Section 8 Chemical analysis	Section 6 Waves	



# Spanish

Exam Board:  
Specification:

	<b>Unit:</b> Hobbies & Interests	<b>Unit:</b> Cities
Module Overview	Free-time activities TV programmes and films Sports fanatics & trending topics Different types of entertainment Role Models	What is your area like? What will we do tomorrow? Shopping The pros & cons of living in a city Arequipa, Peru
Intended Term of study	Autumn Term 1	Autumn Term 2 / Spring Term 1
KOs on school website to use	KO 4 Free Time Foundation: <a href="https://quizlet.com/_8dhbxs">https://quizlet.com/_8dhbxs</a> Higher: <a href="https://quizlet.com/_5kxgvb">https://quizlet.com/_5kxgvb</a>	KO 5 Cities Foundation: <a href="https://quizlet.com/_8db3hc">https://quizlet.com/_8db3hc</a> Higher: <a href="https://quizlet.com/_5kmmnr">https://quizlet.com/_5kmmnr</a>
Essential knowledge to learn	KO 4 & Quizlet vocabulary (see links in your vocabulary booklet)	KO 5 & Quizlet vocabulary (see links in your vocabulary booklet)
Extended knowledge to research and learn	-Read about some more famous sportspeople in Spain & Latin America -Research some inspirational people from Spain & Latin America -Watch some Spanish films/series on Netflix	-Read about some Latin American cities -Research some Latin American typical dishes -Explore the history of the Incas/Aztecs
Tips for learning the knowledge	-Quizlet practice every day -Make flash cards of the hardest ones -Ask friends/family to test you -Cover up the words & write or say them from memory -Practise little & often – repetition is key	-Quizlet practice every day -Make flash cards of the hardest ones -Ask friends/family to test you -Cover up the words & write or say them from memory -Practise little & often – repetition is key

	<b>Unit:</b> Customs & Festivals	<b>Unit:</b> Future work & Aspirations
Module Overview	Illnesses & injuries Foods of the world Festivals & special celebrations Ordering & eating out Music festivals	What do you do to earn money? Work experience Why learn languages? Applying for a job A gap year & the future
Intended Term of study	Spring Term 2 / Summer Term 1	Summer Term
KOs on school website to use	KO 6 Customs & Festivals Foundation: <a href="https://quizlet.com/_8db56u">https://quizlet.com/_8db56u</a> Higher: <a href="https://quizlet.com/_5kxfry">https://quizlet.com/_5kxfry</a>	KO 7 Future work Foundation: <a href="https://quizlet.com/_6ugco5">https://quizlet.com/_6ugco5</a> Higher: <a href="https://quizlet.com/_5kxeok">https://quizlet.com/_5kxeok</a>
Essential knowledge to learn	KO 6 & Quizlet vocabulary (see links in your vocabulary booklet)	KO 7 & Quizlet vocabulary (see links in your vocabulary booklet)
Extended knowledge to research and learn	-Read about some other Latin American festivals that we haven't covered -Research some other Spanish music festivals	-Read about youth employment in Spain & Latin America -Research careers in which you can use languages
Tips for learning the knowledge	Quizlet practice every day -Make flash cards of the hardest ones -Ask friends/family to test you -Cover up the words & write or say them from memory -Practise little & often – repetition is key	Quizlet practice every day -Make flash cards of the hardest ones -Ask friends/family to test you -Cover up the words & write or say them from memory -Practise little & often – repetition is key



# Geography

Exam Board:  
Specification:

	<b>Unit 1</b> Coasts + Rivers	<b>Unit 2</b> Hazards Part 1	<b>Unit 3</b> Hazards Part 2
Intended Term of study	Autumn Term 1	Autumn Term 2	Spring Term 1
Kos on school website to use	Unit 3 – Coasts and Rivers	Unit 1 – Hazards	Unit 1 – Hazards
Essential knowledge to learn	<ul style="list-style-type: none"> <li>• How different landforms are created</li> <li>• Coast and River processes</li> <li>• Hard and soft engineering methods for Coasts and Rivers</li> <li>• The case study examples from the Coast and River units</li> </ul>	<ul style="list-style-type: none"> <li>• Describe the processes associated with tectonic hazards.</li> <li>• Assess the effects, responses and management of tectonic hazards.</li> <li>• Explain the processes that influence weather, climate and tropical storms.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe the weather hazards and extreme weather events found in the UK</li> <li>• Explain the issues surrounding climate change.</li> </ul>
Extended knowledge to research and learn	<a href="https://www.bbc.co.uk/bitesize/topics/zs3ptyc">https://www.bbc.co.uk/bitesize/topics/zs3ptyc</a> <a href="https://www.bbc.co.uk/bitesize/topics/zpypgdm">https://www.bbc.co.uk/bitesize/topics/zpypgdm</a>	<a href="https://www.bbc.co.uk/bitesize/topics/zcdrbk7">https://www.bbc.co.uk/bitesize/topics/zcdrbk7</a>	<a href="https://www.bbc.co.uk/bitesize/topics/zcdrbk7">https://www.bbc.co.uk/bitesize/topics/zcdrbk7</a>
Tips for learning the knowledge	<ul style="list-style-type: none"> <li>• Flashcards for the engineering methods</li> <li>• Mind maps that inter link for the case study examples</li> </ul>	<ul style="list-style-type: none"> <li>• Flow diagram of how a tropical storm is created</li> <li>• Posters of the tectonic hazard case studies</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure you know the difference between causes of climate change and the evidence of climate change. Put them on different coloured flashcards or paper for example.</li> </ul>

	<b>Unit 4</b> Economic World 1	<b>Unit 5</b> Cold Environments	<b>Unit 6</b> Field Work
Intended Term of study	Spring Term 2	Summer Term 1	Summer Term 2
KOs on school website to use	Human Geography KO	Unit 2 – Ecosystems	Fieldwork - Castleton
Essential knowledge to learn	<ul style="list-style-type: none"> <li>Assess the impact of major changes in the economy of the UK.</li> <li>Discuss the impact of major changes in the economy of the UK.</li> <li>To what extent can we measure development?</li> </ul>	<ul style="list-style-type: none"> <li>Explain how a cold environment has a range of distinctive features.</li> <li>To know the characteristics and adaptations of plants and animals in cold environments.</li> <li>To make a reasoned judgement to the issues caused by developing fragile environments.</li> </ul>	<ul style="list-style-type: none"> <li>To plan, collect data, present data, analyse data and evaluate our enquiry in the town of Castleton.</li> <li>Be able to write and understand a conclusion to the investigation</li> <li>Be able to write and understand a evaluation to the investigation</li> </ul>
Extended knowledge to research and learn	<a href="https://www.bbc.co.uk/bitesize/topics/zg93ycw">https://www.bbc.co.uk/bitesize/topics/zg93ycw</a>	<a href="https://www.bbc.co.uk/bitesize/topics/z2tqwxs">https://www.bbc.co.uk/bitesize/topics/z2tqwxs</a>	<a href="https://www.bbc.co.uk/bitesize/topics/zpf6mnb">https://www.bbc.co.uk/bitesize/topics/zpf6mnb</a>
Tips for learning the knowledge	<ul style="list-style-type: none"> <li>Create timelines for the events that have effected the UK economy over time</li> </ul>	<ul style="list-style-type: none"> <li>Create a form of Top Trumps for the plants and animals in our Cold Environment case study</li> <li>Write a debate (in the style of a court case) for the positives and negatives of developing Cold Environments</li> </ul>	<ul style="list-style-type: none"> <li>Flashcard the different sections of the enquiry</li> <li>It is imperative you know the results of the enquiry and how it effects the outcome of our conclusion</li> </ul>



# History

Exam Board:  
Specification:

	<b>Normans Unit 3</b> The Norman Church	<b>Germany Unit 1</b> The Kaiser Years and WWI	<b>Germany Unit 2</b> The Weimar Government in 1920s
Unit Overview	The unit examines why the Church was important to the lives of ordinary people and the politics of Norman rule	The unit examines the structure and priorities of the Kaiser's government and how the German people were affected by WWI.	The unit examines the rocky foundations of the Weimar government and why it faced opposition
Intended Term of study	Autumn 1	Autumn 2	Autumn 2
Kos on school website to use	Unit 3 – The Norman Church	Unit 1 – Kaiser Years and WWI	Unit 2 – 1920s Weimar Germany
Essential knowledge to learn	Why was the Medieval Church important; papal relations; the role of the archbishops; monasticism; language and education	The reasons why 'Prussian Militarism' dominated the Kaiser's government and policies; the different social effects of WWI; the reasons for the Kaiser's abdication; the impact of WWI	The Treaty of Versailles; the Weimar constitution and structure; opposition from the Spartacists, the Kapp Putsch, and the Munich Putsch; the problems caused in the Crisis Year of 1923; recover under Stresemann; 1920s culture
Extended knowledge to research and learn	History AQA: GCSE Norman England 3.1 The Anglo-Saxon Church before 1066 3.2 Archbishop Lanfranc & Church Reform 3.3 Church Organisation 3.4 Monasticism: Reforms	History AQA: Germany 1890-1945 1.1 Germany under Kaiser Wilhelm 1.2 The Impact of WWI	History AQA: Germany 1890-1945 1.3 Weimar Democracy
Tips for learning the knowledge	Comparison tables between Anglo-Saxon and Norman Church; living graph that shows strength of relationship between Kings and Popes.	Use flashcards to learn key terms; create a mind-map that colour-codes the political, economic and social effects of WWI	Use the pneumonic 'LAMB' to learn the Terms of Versailles; draw a 'right to left wing' continuum and map out political beliefs on one side and opposition on the other

	<b>Germany Unit 3</b> Nazi Rise to Power	<b>Germany Unit 4</b> Nazi Germany	<b>Germany Unit 4</b> Nazi Germany
Unit Overview	The unit examines 1930-1933 with the economic and political effects of the Wall Street Crash and how this led to the Nazis rise to power	This unit examines life under the Nazi regime. The first half will examine the Nazi economic policy and the social policies for youth, women, the Church and persecution of minorities	The second half examines the Nazi police state and how the Nazis used propaganda and culture to gain support from the German people; it also examines opposition groups
Intended Term of study	Spring Term 1	Spring Term 2	Summer Terms 1 and 2
KOs on school website to use	Germany Unit 3 – Nazis Rise to Power	Germany Unit 4 – Nazi Germany	Germany Unit 4 – Nazi Germany
Essential knowledge to learn	The economic impact of the Wall Street Crash/Great Depression; the weaknesses of the Weimar government in their response to this crisis; reasons why different social groups voted for Nazis; the steps Hitler took to seize control; the Night of the Long Knives	Nazi economic policies, including the programs the Nazis put in place to improve workers lives and the economy during WW2; Nazi social policies for women; policies for the youth, including the school curriculum and Hitler Youth; policies for the Church, incl Reich Church; the treatment of minorities and timeline of Jewish persecution	The structure of the Nazi police state, including role of the SS and Gestapo; the methods of censorship and control; the use of culture, incl arts, literature and music; the different opposition groups, incl youth, religious and military; why resistance failed
Extended knowledge to research and learn	History AQA: Germany 1890-1945 2. Germany & the Great Depression 2.1 The Impact of the Depression 2.2 The Failure of Weimar Democracy 2.3 Hitler's Dictatorship	History AQA: Germany 1890-1945 3 Experiences of Germans under the Nazis 3.1 Economic changes 3.2 Social Policy & Practice	History AQA: Germany 1890-1945 3 Experiences of Germans under the Nazis 3.3 Control
Tips for learning the knowledge	Watch the BBC Bitesize video on Wall Street Crash, then create a flow chart to show how it led to problems in Germany. Create flash cards for different social groups who voted for Hitler. Create a timeline of 1933-34 of events that led Hitler from being Chancellor to becoming Fuhrer.	Create a mindmap of the different economic policies; create flash cards for the different Hitler Youth groups; create a comparison table of how Hitler dealt with the Catholic and Protestant Churches and their leaders. Create a timeline of persecution of the Jews from 1933-1945.	Create a mindmap of the different methods that the Nazis control the people – divide the sheet in two, with FEAR on one side and SUPPORT on the other. Focus on cultural and propaganda aspects for the SUPPORT, and focus on methods of the Police State for FEAR.



# Philosophy and Ethics

## Full course and short course

Exam Board:  
Specification:

	<b>Unit 1</b> Christian Beliefs and Teachings	<b>Unit 2</b> Religion Relationships and Families	<b>Unit 3</b> Christian Beliefs and Teachings
Unit Overview	Creeds Denominations Trinity Nature of God Evil and Suffering Creation	Sexual ethics Contraception Marriage Homosexuality Divorce Families and Gender Roles	Life after death Incarnation Crucifixion Resurrection Ascension Salvation and Grace
Intended Term of study	Autumn Term	Spring Term	Summer Term
Kos on school website to use	Christian Beliefs and Teachings	Religion Relationships and the family	Christian Beliefs and Teachings
Essential knowledge to learn	Key Terms Teachings How beliefs influence the individual	Key Terms Teachings Contrasting views on sex before marriage, contraception, marriage, Same sex marriage, divorce, remarriage, gender roles in families.	Key Terms Teachings How beliefs influence the individual
Extended knowledge to research and learn	Seneca AQA Religious Studies Religions Christianity: All sections in 2.1 Key Beliefs	Seneca AQA Religious Studies Thematic Studies, Relationships and families: all sections	Seneca AQA Religious Studies Religions Christianity: All sections in 2.2 Jesus Christ and Salvation
Tips for learning the knowledge	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.





# Philosophy and Ethics

## Full course only

	<b>Unit 1</b> Christian Beliefs and Teachings	<b>Unit 2</b> Religion Relationships and Families	<b>Unit 3</b> Christian Beliefs and Teachings
Unit Overview	Creeds Denominations Trinity Nature of God Evil and Suffering Creation	Sexual ethics Contraception Marriage Homosexuality Divorce Families and Gender Roles	Life after death Incarnation Crucifixion Resurrection Ascension Salvation and Grace
Intended Term of study	Autumn Term	Spring Term	Summer Term
Kos on school website to use	Christian Beliefs and Teachings	Religion Relationships and the family	Christian Beliefs and Teachings
Essential knowledge to learn	Key Terms Teachings How beliefs influence the individual	Key Terms Teachings Contrasting views on sex before marriage, contraception, marriage, Same sex marriage, divorce, remarriage, gender roles in families.	Key Terms Teachings How beliefs influence the individual
Extended knowledge to research and learn	Seneca AQA Religious Studies Religions Christianity: All sections in 2.1 Key Beliefs	Seneca AQA Religious Studies Thematic Studies, Relationships and families: all sections	Seneca AQA Religious Studies Religions Christianity: All sections in 2.2 Jesus Christ and Salvation
Tips for learning the knowledge	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.

	<b>Unit 4</b> Religion and Life	<b>Unit 5</b> Religion and Life	<b>Unit 6</b> Religion and Life
Unit Overview	Sanctity of life Abortion Euthanasia	Hospice Life After Death Animal Testing	Creation Big Bang Evolution Environment
Intended Term of study	Spring Term 2	Summer Term 1	Summer Term 2
KOs on school website to use	Religion and Life	Religion and Life	Religion and Life
Essential knowledge to learn	Key Terms Teachings Contrasting views on abortion and euthanasia	Key Terms Teachings Contrasting views on animal testing and life after death	Key Terms Teachings Contrasting views about creation and scientific theories
Extended knowledge to research and learn	Seneca AQA Religious Studies Thematic Studies, Religion and Life: Sections 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5 Research Dignitas	Seneca AQA Religious Studies Thematic Studies, Religion and Life: Sections 2.2.5, 2.2.6, 2.2.7, 2.2.8 Research animal testing	Seneca AQA Religious Studies Thematic Studies, Religion and Life: Sections 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7. Research environmental issues
Tips for learning the knowledge	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.	Flashcards, Key Terms, Key Teachings, and contrasting/different opinions.



# Drama

Exam Board:  
Specification:

	<b>Component 1 Section A</b> Understanding Drama	<b>Component 2</b> Devising	<b>Component 1 Section B</b> Set Text – Blood Brothers
Unit Overview	Know how theatre is developed and performed.	Create, perform and evaluate a piece of original theatre.	Develop an in depth understanding of the set text Blood Brothers.
Intended Term of study	Autumn 1 and Autumn 2	Spring 1 and Spring 2	Summer 1 and Summer 2
Kos on school website to use	Understanding Drama 1 KO Understanding Drama 2 KO Physical Theatre – Brecht and Berkoff KO	Devising KO	Blood Brothers KO
Essential knowledge to learn	Key terminology and vocabulary Areas of the stage Stage configurations Roles and responsibilities in the theatre	How to respond to a stimulus Rehearsal techniques Character creation/development Writing a dramatic aim and intention Writing the devising log Evaluating your own work and the work of others.	Characters and plot Social/historical/economic context Key themes Key extracts
Extended knowledge to research and learn	Performance styles and practitioners Stanislavski, Brecht, Artuad, Berkoff, DV8, Frantic Assembly, Paper Birds.	Performance styles; naturalism, physical theatre (DV8, Frantic Assembly, Paper Birds.)	Margaret Thatcher – who was she and what did she do to traditional industries? Liverpool in the 1980's
Tips for learning the knowledge	Mind maps, flashcards, Quizlet	Flashcards, mind maps	Mind maps, flashcards, Quizlet



Exam Board:  
Specification:

	<b>Half Term 1</b> J587/02	<b>Half Term 2</b> J587/02	<b>Half Term 3</b> J587/02
Kos on school website to use	Participation Rates + Trends Encouraging Participation Commercialisation Sportsmanship, Gamesmanship & Deviance	Sportsmanship, Gamesmanship & Deviance Performance Enhancing Drugs Skill (Classification & Characteristics)	Skill (Classification & Characteristics) Goal setting Mental Preparation Feedback
Essential knowledge to learn	<ul style="list-style-type: none"> <li>Varying participation rates in different social groups</li> <li>Commercialisation of sport and its impacts</li> <li>Ethics within sport and why people behave the way they do.</li> </ul>	<ul style="list-style-type: none"> <li>Reasons for the differing behaviours in sport</li> <li>The different performance enhancing drugs and their effects</li> <li>Characteristics of skilful movement</li> </ul>	<ul style="list-style-type: none"> <li>How skills can be classified</li> <li>Different types of goal setting and the benefits to a performer</li> <li>How to psychologically prepare for an event</li> <li>How to use feedback to teach</li> </ul>
Extended knowledge to research and learn	<ul style="list-style-type: none"> <li>Different real world examples of commercialisation within sport</li> <li>Current initiatives to increase sport participation</li> <li>Real world examples of extreme behaviours in sport</li> </ul>	<ul style="list-style-type: none"> <li>Case studies of athletes who have used performance enhancing drugs</li> <li>Case studies of player violence</li> </ul>	<ul style="list-style-type: none"> <li>Case studies of different athletes mental preparations</li> <li>Classify different sports on the two continua</li> </ul>
Tips for learning the knowledge	Mind map of trends, barriers and systems to encourage participation to show links Seneca Learning GERM FACED DOT mnemonic	Look, cover, write, check specific examples of each type of behaviour. Recreate Skill KO	Seneca learning Acronym of SMART

	<b>Half Term 4</b> J587/02	<b>Half Term 5</b> J587/02 + J587/01	<b>Half Term 6</b> J587/01
KOs on school website to use	Guidance Physical, Social and Emotional Benefits of Exercise	Diet + Hydration Components of Fitness Fitness Testing	Risks, Hazards & Injury Prevention Principles of Training, Methods of Training & Warm Ups.
Essential knowledge to learn	<ul style="list-style-type: none"> <li>How to use guidance when teaching a skill; the positives and negatives of each type</li> <li>The benefits of exercise to the overall health of an individual</li> </ul>	<ul style="list-style-type: none"> <li>The key components of a balanced diet</li> <li>Dietary intake for different types of athletes</li> <li>The skill and health related components of fitness and the relevant tests</li> </ul>	<ul style="list-style-type: none"> <li>Key hazards in sporting areas</li> <li>The different principles to training (SPOR)</li> <li>Different types of training + 5 stages of a warm up</li> </ul>
Extended knowledge to research and learn	<ul style="list-style-type: none"> <li>Government guidelines to physical activity</li> <li>How activity affects different age groups</li> </ul>	<ul style="list-style-type: none"> <li>Research typical diets for your sport</li> <li>Normative values for the fitness tests.</li> </ul>	<ul style="list-style-type: none"> <li>Practical application of principles of training for your sport.</li> <li>Benefits of warming up to each body system</li> </ul>
Tips for learning the knowledge	Mind map Chunking	Apply diet knowledge to favourite foods. Seneca learning CGP revision cards to test knowledge	SPOR Acronym Chunking



# Computer Science

Exam Board:  
Specification:

	<b>Unit 1</b> 1.1 Systems Architecture	<b>Unit 2</b> 1.2 Memory Storage	<b>Unit 3</b> 1.3 Networks
Unit Overview	What makes up a computer system	The different type of storage used by a computer. How data is represented and stored on a computer	Networks and topologies
Intended Term of study	Autumn	Autumn	Spring
Kos on school website to use	1.1 Systems Architecture	1.2 Memory Storage 1.2 Data Storage	1.3 Networks and Network Topologies
Essential knowledge to learn	Purpose of CPU CPU Components Performance of the CPU The FDE Embedded systems	The purpose of RAM and ROM The Need for Virtual Memory Secondary Storage Common types of storage Considerations for the Most Suitable Storage Device Typical Uses Data units and Conversions Operations and Characters Examples of Character Sets Images and Compression	Types of Networks Factors affecting performance of a network Network Types Internet Modes of Connection Wireless Encryption Common Protocols Standards Layers
Extended knowledge to research and learn	Craig and Dave 1.1 videos on Systems Architecture ( 5 in total)	Craig and Dave 1.2 videos on Storage ( 13 in total)	Craig and Dave 1.3 videos on Networks ( 13 in total)
Tips for learning the knowledge	Create a set of flash cards on the CPU and its different components	Create a set of flash cards on the different types of storage Make a mind map of the types of secondary storage Create a set of flash cards on how to the different data storage units Create flash cards on how to do the conversions	Create some flash cards of the different types of networks Create a mind map of factors affecting a network Create some flash cards of the different types of connection and protocols

	<b>Unit 4</b> 1.4 Network Security	<b>Unit 5</b> 1.5 Systems Software	<b>Unit 6</b> 1.6 Ethical and Legal
Unit Overview	What is a network and the different types	Common protocols used in computing	The wider aspects to do with computing
Intended Term of study	Spring	Summer	Summer
KOs on school website to use	1.4 network Security	1.5 Systems Software	1.6 Ethical and legal
Essential knowledge to learn	Forms of Attack Threats posed to Networks Identifying and Preventing Vulnerabilities	Definitions The Function of Operating Systems Features Often Provided by an Operating System Examples of Utility Software	Privacy Issues Cultural Issues Environmental Impact Impacts of Digital Technology on Wider Society Legislation Open Source vs Proprietary Source
Extended knowledge to research and learn	Craig and Dave 1.4 videos on Network Security ( 3 in total)	Craig and Dave 1.5 videos on Systems Software ( 4 in total)	Craig and Dave 1.6 videos on ethical and legal ( 7 in total)
Tips for learning the knowledge	Create a set of flash cards on the forms of attack Create a mind map on the threats to a network	Create some flash cards of the functions of the operating system Create flash cards on the features of operating systems	Create a mind map of cultural and environmental issues Create some flash cards on the legislation



# ICT

Exam Board:  
Specification:

	<b>Unit 1</b> LO1 Mood board	<b>Unit 2</b> LO1 Mind maps	<b>Unit 3</b> LO1 Visualisation
Unit Overview	Understand the purpose and features of mood boards	Understand the purpose and features of mind maps	Understand the purpose and features of Visualisation Diagrams
Intended Term of study	Autumn Term	Autumn Term	Spring Term
Kos on school website to use	Mood boards	Mind maps	Visualisation
Essential knowledge to learn	Purpose of a mood board What to include on a mood board How to get the marks	Purpose of a mind maps What to include on a mind maps and how to use them How to get the marks	Purpose of a Visualisation Diagrams What to include on a Visualisation Diagrams and how to use them How to get the marks
Extended knowledge to research and learn	Research a range of mood board to see the different types and what are included on them	Research a range of mind maps to see the different types and what are included on them	Research a range of Visualisation Diagrams to see the different types and what are included on them
Tips for learning the knowledge	Create a mood board for a theme park and look at the how to get the marks section. Create a mind map of what a mood board should include	Create a mind map for a theme park and look at the how to get the marks section	Create a Visualisation Diagrams for a theme parks homepage and look at the how to get the marks section. Create flash cards of what to include on VDs



	<b>Unit 4</b> LO1 Script	<b>Unit 5</b> LO1 Storyboard	<b>Unit 6</b> LO 2 Target Audience
Unit Overview	Understand the purpose and features of mind scripts	Understand the purpose and features of story boards	To understand a range of audiences
Intended Term of study	Spring Term	Summer Term	Summer Term
KOs on school website to use	Script	Storyboard	Target Audience
Essential knowledge to learn	Purpose of a Script What to include on a Script How to get the marks	Purpose of a Storyboard What to include on a Storyboard How to get the marks	What is it Why it is important What can they effect
Extended knowledge to research and learn	Research a range of scripts to see the different types and what are included on them	Research a range of storyboard to see the different types and what are included on them	Research a range of target audiences and ages and find out how to attract that audience when making a product
Tips for learning the knowledge	Create a script for a theme park radio advert and look at the how to get the marks section . Create a mind map on what to include in a script.	Create a storyboard for a theme park TV advert and look at the how to get the marks section . Create a mind map on what to include in a storyboard	Write who the target audience would be for a theme park and why. Create a mind map on different types of audiences



# Engineering

Exam Board:  
Specification:

	<b>Unit 1</b> <b>R105: Design briefs, design specifications and user requirements</b>	<b>Unit 2</b> <b>R106: Product analysis research</b>
Unit Overview	On completion of this unit, learners will understand the design cycle, the requirements for a design brief and design specification for the development of a new product and how effective research data is necessary to inform the development of a design solution.	On completion of this unit, learners will understand how to perform effective product analysis and evaluation through research and product assembly and disassembly procedures to appreciate product design features.
Intended Term of study	Autumn Term 1 and 2	Spring Term 1
Kos on school website to use	<b>R105: Design briefs, design specifications and user requirements</b>	<b>R105: Design briefs, design specifications and user requirements</b> <b>R106: Product analysis and research</b>
Essential knowledge to learn	<ul style="list-style-type: none"> <li>Understand the design cycle and the relationship between design briefs and design specifications</li> <li>Understand the requirements of design specifications for the development of a new product</li> <li>Know about the wider influences on the design of new products</li> </ul>	<ul style="list-style-type: none"> <li>Know how commercial production methods, quality and legislation impact on the design of products and components</li> <li>Be able to research existing products</li> <li>Be able to analyse an existing product through disassembly</li> </ul>
Extended knowledge to research and learn	Research products which are designed for maintenance. Explain how they are sustainable.	Disassemble a simple product at home.
Tips for learning the knowledge	Use past papers to test yourself	Mind maps and flash cards

	<b>Unit 3 R106: Product Analysis NEA</b>	<b>Unit 4 R107: Developing and presenting engineering designs</b>
Unit Overview	<b>Complete section R106 NEA</b>	On completion of this unit, learners will have developed knowledge and understanding of how to communicate design ideas through hand rendering and computer-based techniques.
Intended Term of study	Spring Term 2 and Summer Term 1	Summer Term 2
Kos on school website to use	<b>R105: Design briefs, design specifications and user requirements</b> <b>R106: Product analysis and research</b>	R107: Developing and presenting engineering designs
Essential knowledge to learn	<ul style="list-style-type: none"> <li>• Know how commercial production methods, quality and legislation impact on the design of products and components</li> <li>• Be able to research existing products</li> <li>• Be able to analyse an existing product through disassembly</li> </ul>	<ul style="list-style-type: none"> <li>• Be able to generate design proposals using a range of techniques</li> <li>• Know how to develop designs using engineering drawing techniques and annotation</li> </ul>
Extended knowledge to research and learn	Research and learn the different legislation requirements for products being made	Research one of the following designers and practice drawing in their style -Alessi -Charles Rennie Macintosh -Philippe Stark - William Morris - Marcel Breuer
Tips for learning the knowledge	Use all KO knowledge learnt so far to apply this to the NEA	Practice each drawing technique often to refine your drawing skills



# Food

Exam Board:  
Specification:

	<b>Unit 1</b> Balanced Diets	<b>Unit 2</b> Dietary related illness	<b>Unit 3</b> Food Science
Unit Overview	Recap of the Eatwell guide and healthy eating.  Special diets	Dietary related illnesses:  Obesity, diabetes, anaemia, tooth decay  Allergies	Food Science: protein denaturation, coagulation, aeration, emulsification, plasticity.
Intended Term of study	Autumn 1	Autumn 2	Spring 1
Kos on school website to use	Special diets Making informed choices	Food allergies	Food science part 1 Food science part 2
Essential knowledge to learn	What is a classified as a special diet? How are meals adapted to meet the needs of someone following a special diet? How do we maintain a balanced diet using the Eatwell guide?	Foods that can cause allergies What foods need to be avoided if following a special diet How food can impact on illness	The process of denaturation, coagulation, aeration, emulsification, plasticity, enzymic browning and how these take place in food products.
Extended knowledge to research and learn	Working with gluten free products, especially how to have a successful bake.	The impact of allergies on lifestyle. Learn to make dishes that are suitable for people with allergies.	Apply all the food science processes to a recipe, make the recipe and identify when the process takes place. E.g when making a white sauce denaturation happens at 80 degrees.
Tips for learning the knowledge	Flashcards with each special diet.	Clock learning with each dietary related illness/ allergy in a different section of the clock.	Produce a step by step or use diagrams to show how the different processes take place.

	<b>Unit 4</b> Food safety and food poisoning	<b>Unit 5</b> Environmental issues	<b>Unit 6</b> NEA 1 Mock
Unit Overview	Food safety and food poisoning.  The 4C's linking to food safety  The role of the EHO	Environmental issues related with food.  -climate change  -Greenhouse gases  -Carbon footprint  -sustainability of food	NEA 1 Mock: Science investigation (15%) Primary and secondary processing of ingredients
Intended Term of study	Spring 2	Summer 1	Summer 2
KOs on school website to use	Food safety	Food choice and farming	Food science part 1 Food science part 2
Essential knowledge to learn	Definition of the 4C's and how all 4 need to be managed. At least 4 different types of food poisoning, what foods they come from, signs and symptoms. Key temperatures. What is the role an environmental health officer	What are food miles How are food miles calculated The four seasons in the UK and the food that grow best in each season Food waste and how to prevent it The benefits of eating organic foods	Recap on unit 3 to aid in the mock examination. Applying the different food science processes to your chosen brief. You must understand the food science to have a successful mock examination.
Extended knowledge to research and learn	Food poisoning onset times Penalties for not meeting the EHO standards Criteria that needs to be met for each food hygiene rating	Advantages and disadvantages of genetically modified foods (GM) Treatments used on different crops to reduce pests and rotting.	How can the process be applied to your mock examination. Deep research on the one process that you are focusing on for your exam. How does it happen? When does it happen? Why does it happen?
Tips for learning the knowledge	Flashcards for key temperatures and food poisoning. Notes on the EHO mind map 4C's	Poster of foods in season Note taking Flashcards	Use storyboards or diagrams to explain the scientific processes.



# Music

Exam Board:  
Specification:

	<b>Unit 1</b> Area of Study 3 – Music for Stage and Screen - Star Wars Set Work Musical Theory	<b>Unit 2</b> Area of Study 3 – Music for Stage and Screen – Defying Gravity Set Work Free Brief composition practice	<b>Unit 3</b> Area of Study 1 – Instrumental Music – Brandenburg Concerto Set Work Set brief composition practice.
Unit Overview	Learn basic music theory in order to understand how to compose and how to read music. Learn about the history of film music and composers and analyse Star Wars set work.	Recap how to use Sibelius and compose using a free brief. Learn about the history of musicals and composers and analyse Defying Gravity set work.	Compose to a set brief and understand how the music needs to meet the brief. Learn about Western classical music with a focus on Baroque music and analyse Brandenburg Concerto set work.
Intended Term of study	Autumn Term 1	Autumn Term 2	Spring Term 1
Kos on school website to use	The Basics Set Work 6	Dynamics, Rhythm and Structure Set Work 5	Melody, Instrumentation and Tempo Set Work 1
Essential knowledge to learn	Star Wars DRSMITTTH History of Film Music Staff Notation	Defying Gravity DRSMITTTH History of Musical Writing music on Sibelius	Brandenburg Concerto DRSMITTTH History of Western Classical Music Writing to a set brief.
Extended knowledge to research and learn	Star Wars Detailed Score Analysis Listen to unfamiliar film music pieces and compare with star wars.	Defying Gravity Detailed Score Analysis Listen to unfamiliar music from musicals and compare them with Defying gravity.	Brandenburg Concerto Detailed Score Analysis Listen to unfamiliar music from the Baroque period and compare them with Brandenburg Concerto
Tips for learning the knowledge	Complete Look, Cover, Say, Write, Check for DRSMITTTH. Create a mind map to learn the history of film music.	Complete Look, Cover, Say, Write, Check for DRSMITTTH. Create a timeline to see how musicals have changed over time.	Complete Look, Cover, Say, Write, Check for DRSMITTTH. Create clock learning based around the different musical periods and composers.

	<b>Unit 4</b> Area of Study 1 – Instrumental Music – Pathetique Sonata set work Set Brief practice	<b>Unit 5</b> Area of Study 2 – Vocal Music – Music for a While set work Free Brief Coursework Submission	<b>Unit 6</b> Area of Study 2 – Vocal Music – Killer Queen set work Free Brief Coursework Submission
Unit Overview	Continue to compose to a set brief. Learn about Western classical music with a focus on Classical and Romantic music and analyse Pathetique Sonata set work.	Plan to create a free brief composition. <b>This will be submitted for coursework in Year 11.</b> Learn about Vocal music with a focus on Baroque vocal music and analyse Music for while set work.	Continue to work on free brief composition. <b>Deadline will be in this half term.</b> Learn about vocal music with a focus on popular vocal music and analyse Killer Queen set work.
Intended Term of study	Spring Term 2	Summer Term 1	Summer Term 2
KOs on school website to use	Texture, Tonality and Harmony Set Work 2	Any of the terminology KO's Set Work 4	Any of the terminology KO's Set Work 3
Essential knowledge to learn	Pathetique Sonata DRSMITTH History of Western Classical Music Writing to a set brief	Music for a While DRSMITTH History of Vocal Music Planning and writing a free brief composition	Killer Queen DRSMITTH History of Vocal Music Writing a free brief composition.
Extended knowledge to research and learn	Pathetique Sonata Detailed Score Analysis Listen to unfamiliar music from the Classical and Romantic period and compare them with Pathetique Sonata.	Music for a while Detailed Score Analysis Listen to unfamiliar vocal music and compare them with Music for a while.	Killer Queen Detailed Score Analysis Listen to unfamiliar vocal music and compare them with Killer Queen
Tips for learning the knowledge	Complete Look, Cover, Say, Write, Check for DRSMITTH. Create clock learning based around the different musical periods and composers.	Complete Look, Cover, Say, Write, Check for DRSMITTH. Create a timeline to see how vocal music has changed over time.	Complete Look, Cover, Say, Write, Check for DRSMITTH. Create clock learning based around the different vocal ranges and artists with these vocal ranges.

Out of lessons, you should be working on your solo and ensemble performance coursework.  
Deadlines will be given to you at the start of the year.











BE KIND

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HARD

WORK