



Curriculum Overview 2025-26

Design Technology Department

Department	Design Technology
Head of Faculty & Subject Lead	Mrs L Relf
Department Members	Mr S. Bendon, Mrs L. Bird Mr E. Smith
Accommodation and Resources	<p>Y1 - Tool board (hand tools such as junior hacksaws, coping saws, hand files, tin snips, etc), X computers, band saw, pillar drill, fret saw, circular sander, chisel sharpener</p> <p>Y2 – Tool board (hand tools such as junior hacksaws, coping saws, hand files, tin snips, etc), X computers, pillar drill, fret saw, polisher</p> <p>Y3 - Tool board (hand tools such as junior hacksaws, coping saws, hand files, tin snips, etc), 25 Computers, spindle sander, pillar drill</p>

<u>Curriculum Intent</u>	<p>The Design Technology curriculum helps students develop the creative, technical, and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p> <p>Students are to build and apply a repertoire of knowledge, understanding, and skills in order to design, develop, and make high-quality prototypes and products for a wide range of users. Students should show their ability to improve and adapt their work through critical conversation, where they can articulate and communicate ideas and processes through refinement and evaluation.</p>
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Curriculum Implementation

Key Stage 3:

What my child will learn in Year 7

Year 7	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit Title	Puzzle Project		CAD CAM Puzzle	Memphis Clock		
Previous knowledge recalled	KS2 Curriculum Design purposeful products for themselves and other users based on design criteria Generate ideas through drawing, and mock-ups		Key properties, attributes and examples of manufactured boards Students can design and make a piece of packaging, learn what a 'net' is, that will hold their puzzle pieces.	Health and safety in the DT workshop Working with a range of materials Types of hand tools and their uses		



			Evaluation
New Knowledge	<p>Health and Safety in the DT workshop</p> <p>The safe use of craft knives</p> <p>Material properties, attributes, examples of card.</p> <p>Key properties, attributes and examples of polymers, Aluminium and Plywood.</p> <p>Students learn how to mark out, cut, shape and polish Acrylic, Aluminium and Plywood.</p> <p>Abrading – Scrape or wear away by friction</p> <p>Evaluation</p> <p>Students to design and make a piece of packaging, learn what a 'net' is, that will hold their puzzle pieces.</p>	<p>How to self-evaluate own work</p> <p>Single Item and One-off Production</p> <p>Batch production</p> <p>How to write a specification based on existing product research</p> <p>CAD – 2D design</p> <p>Key properties, attributes and examples of another manufactured board – MDF</p> <p>Understand how we can batch produce a Puzzle, instead of hand making a one off.</p> <p>Use of the laser cutter -CAM</p>	<p>The importance of focussed research to help design thinking as a design strategy</p> <p>An appreciation of <i>ICONIC design</i> and how it can help you as a designer, as a design strategy.</p> <p>Design Movements: why did they introduce such an unconventional style, where did it come from, what's it all about?</p> <p>Basic existing product analysis</p> <p>Standard Components</p> <p>Design realisation</p> <p>How to produce a detailed and annotated design sheet to help them to develop and realise their ideas.</p> <p>To produce a detailed and annotated design sheet (2D) to help them to develop and realise their ideas within project constraints</p> <p>Joining materials that are not the same</p>
Key Knowledge Assessment	<p>Health and safety</p> <p>Hand tools, what are they used for and why</p> <p>Knowledge of key properties, attributes and examples of card</p> <p>Knowledge of key properties,</p>	<p>The difference between one off and batch production</p> <p>Knowledge of a specification</p> <p>Written specification based on analysis of existing products</p>	<p>Memphis Group</p> <p>Memphis requirements/ constraints using the brief</p> <p>Design Ideas based on brief and constraints</p> <p>How well students are able to mark out, cut, shape and polish Acrylic, Aluminium and Plywood</p>



	<p>attributes and examples of polymers, aluminium and plywood</p> <p>How well students are able to mark out, cut, shape and polish Acrylic, Aluminium and Plywood</p> <p>Does each piece fit in the go-no-go-gauge</p> <p>Evaluation</p>	<p>Key properties, attributes and examples of MDF</p> <p>What CAD CAM is and what it is used for</p> <p>Use and ability to use 2D Design</p> <p>Final rendered product against the specification</p> <p>Evaluation</p>	<p>Evaluation</p>
<p>Links to literacy and numeracy</p>	<p>Literacy</p> <p>Cutting - Junior hacksaws are the small variant of mechanical normal sized hacksaws and are used to cut small working pieces</p> <p>Filing - A small particle rubbed off by a file when smoothing or shaping something</p> <p>Acrylic - made from polymers of acrylic acid or acrylates</p> <p>Aluminium - A light silvery-grey soft metal</p> <p>Plywood - A manufactured board made from layers of ply</p> <p>Abrading – Scrape or wear away by friction</p> <p>Wet and dry - Using Wet and Dry Paper wet will prolong its life and</p>	<p>Literacy:</p> <p>2D design - 2D Design is the Art of producing flat images and drawings that serve specific purposes.</p> <p>Laser cutter: Laser cutting is a technology that uses a laser to vaporize materials, resulting in a cut edge. While typically used for industrial manufacturing applications, it is now used by schools, small businesses, architecture, and hobbyists.</p> <p>MDF - A Manufactured board, stands for Medium Density Fibreboard</p> <p>One off/ Single item production - One off production is the manufacture of a</p>	<p>Literacy:</p> <p>Design - The creation of new products/things</p> <p>Composition - Composition is the way the objects are placed next to each other.</p> <p>Ideas - A thought or suggestion to a possible cause of action</p> <p>Measurement - The size, length, or amount of something.</p> <p>Development - Development is a process that creates growth, progress, positive change or the addition of components</p> <p>Pattern - A repetitive decorative design</p> <p>Front View - What your design should look like from the front.</p> <p>Design Brief - <u>Goal</u> – what is the aim of the project?</p>



	<p>makes for a better finish.</p> <p>Numeracy:</p> <p>Measuring</p> <p>Angular measurements</p>	<p>single product/item: This can include large scale projects, such as a bridge, ship, stadium, multi-storey building or tower, as well as specialist jewellery, made to measure clothing, bespoke furniture and many more</p> <p>Batch Production - Batch production is a method of manufacturing where the products are made in groups or batches, rather than in a continuous fashion. The same machinery is used to make different batches of products.</p> <p>Numeracy:</p> <p>Visualise and represent 2D and 3D forms including two dimensional representations of 3D objects</p>	<p><u>Context</u> – relevant information that will help inform the design</p> <p><u>Constraints</u> – things the design must or must not do</p> <p><u>Criteria</u> – other things that may make the design more successful but are not essential</p> <p>Numeracy:</p> <p>Measuring</p> <p>Radius and diameter of a circle</p> <p>Visualise and represent 2D and 3D forms including two dimensional representations of 3D objects</p>
<p>Extra-Curricular opportunities</p>	<p>Reading:</p> <p>The graphic Design idea book- inspiration from 50 masters - Artwork Memphis - Bigitte Fitoussi The fundamentals of product design- Richard Morris</p> <p>Watch:</p> <p>The repair shop- https://www.bbc.co.uk/programmes/b081581p</p> <p>Inside the Factory - https://www.bbc.co.uk/programmes/b07mddgk</p> <p>Listen:</p> <p>Honest Designers podcasts- https://www.designcuts.com/learning-hub/podcasts/honest-designers/</p> <p>Places to visit:</p> <p>The V&A Museum- London The Design Museum- London Ikea</p>		
<p>Links to careers/</p>	<p>Graphic Designer</p>		



aspirations	Prop maker
Links to our Fulston FAMILY values	<p>Fortitude to advocate their own ideas in front of their peers</p> <p>Ambitious to work through tough materials and to solve problems with complexity</p> <p>Mindful of others and the workspace around them in a dangerous DT workshop</p> <p>Integrity when evaluating their own work and being critical</p> <p>Leadership when leading by example using tools and equipment</p> <p>Young Citizens solve problems relating to their own culture</p>

What my child will learn in Year 8

Year 8	Term 1 - 3 or Term 4-6	Term 1 - 3 or Term 4-6
Unit Title	Moving train	Maze Project
Previous knowledge recalled	<p>The environmental impact of product design</p> <p>Working to a in depth brief</p> <p>Understanding mechanisms</p> <p>Expanding knowledge on paper and card</p> <p>Evaluation</p>	<p>The environmental impact of product design</p> <p>Working to a in depth brief</p> <p>Building on CAD knowledge (2D Design)</p> <p>Expanding knowledge on paper and card</p> <p>Evaluation</p>
New Knowledge	<ul style="list-style-type: none"> - Contextual Challenge - User centred design - The work of others and why this knowledge is important to our own designing. - Mechanisms 	<p>Importance of creating a cutting list</p> <p>Manufacturing Specification</p> <p>Creating a cutting list</p> <p>Adding a graphic element</p> <p>How to file acrylic (Cross file, draw file)</p> <p>Using a bench hook to cut timber</p>



		How to use Wet and Dry paper
Key Knowledge Assessment	<p><u>Questions asked during lessons:</u></p> <p>Why are we doing this project?</p> <p>What is the brief outlining for you?</p> <p>Name the 4 types of motion</p> <p>Evaluation</p>	<p><u>Questions asked during lessons:</u></p> <p>Why are we doing this project?</p> <p>What is the brief outlining for you?</p> <p>Are you able to use CAD confidently (2D Design)</p> <p>Cutting lists – Why are they important?</p> <p>How to know when a piece of material has been cut and filed accurately</p> <p>Evaluation</p>
Links to literacy and numeracy	<p><u>Literacy:</u></p> <p>Linear- Linear motion is movement in a straight line and in one direction. One of the best examples of this is a train. When a train runs along a track, it is in a straight line and heading in one direction.</p> <p>Rotary- This is movement following a circular path, around a fixed point. A very good example of this is a bicycle wheel. The wheel rotates around a centre point.</p> <p>Reciprocating- Reciprocating motion is a repetitive movement left to right OR up and down. A good example of this type or motion is a piston, such as found in an engine.</p> <p>Oscillating- Oscillating motion occurs when an object swings left and then right (or vise-versa), from a fixed point. A very good example of this is a classic pendulum clock</p>	<p><u>Literacy:</u></p> <p>Modelling - The activity of making three-dimensional models.</p> <p>Prototype - A first or preliminary version of a product.</p> <p>Design constraints - Design constraints are limitations on a design.</p> <p>Dimensions - The measurements of a product i.e., Height, width, depth.</p> <p>Scale drawings - Scale drawings is a product drawn to size.</p> <p><u>Numeracy:</u></p> <p>Use angular measure in degrees</p>



	<p>CAD- Computer Aided design</p> <p>CAM- Computer Aided Manufacturing</p> <p>Moving Mechanism- Moving mechanism is a system of connected parts that work together to transmit or modify motion and force</p> <p>Numeracy:</p> <p>Calculation of quantities</p> <p>Determining the quantity of materials required</p> <p>Measuring</p>	<p>Measurement and marking out creating tessellated patterns</p> <p>Visualise and represent 2D and 3D forms including two dimensional representations of 3D objects</p>
<p>Extra-Curricular opportunities</p>	<p>Reading:</p> <p>Everything they teach in design school- Smith Ali Drawing For Designers - Alan Pipes Designed for Kids - Phyllis Richardson</p> <p>Watch:</p> <p>Inside the Factory - https://www.bbc.co.uk/programmes/b07mddqk</p> <p>Building sights- https://www.bbc.co.uk/programmes/p01q0kmk</p> <p>Listen:</p> <p>Design better podcasts- https://www.designbetter.co/podcast</p> <p>Places to visit:</p> <p>Sky Garden London Design District London</p>	
<p>Links to careers/aspirations</p>	<p>Engineer</p> <p>Toy designer</p> <p>Product designer</p>	
<p>Links to our Fulston FAMILY values</p>	<p>Fortitude to advocate their own ideas in front of their peers</p> <p>Ambitious to work through tough materials and to solve problems with complexity</p> <p>Mindful of others and the workspace around them in a dangerous DT workshop</p> <p>Integrity when evaluating their own work and being critical</p> <p>Leadership when leading by example using tools and equipment</p>	



	Young Citizens solve problems relating to their own culture
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What my child will learn in Year 9

Year 9	Term 1 - 3 or Term 4-6	Term 1 - 3 or Term 4-6	
Unit Title	Grabber	Electric Buggy	Mobile Phone Stands (Extension project if needed)
Previous knowledge recalled	<p>Designing for others using empathy</p> <p>Cutting of wood using a range of tools and equipment</p> <p>Manufactured boards</p>	<p>Working to brief</p> <p>Sketching and communicating design ideas</p> <p>Nets</p> <p>Evaluating and testing work</p>	<p>Working to a brief</p> <p>User centred design</p> <p>Timber theory</p> <p>Evaluation</p>
New Knowledge	<p>Ergonomics means making the product fit the user</p> <p>Anthropometrics is the measurements of humans</p> <p>Be able to design with ergonomics and anthropometrics</p> <p>ACCESS FM</p> <p>Using Levers in products</p> <p>Writing a comprehensive brief using goal, context, constraints and the criteria</p> <p>A housing joint</p> <p>Testing and Evaluation</p>	<p>Gain knowledge on electronic symbols</p> <p>Gain knowledge on electronic circuits</p> <p>To be able to learn the process of soldering by joining two metals together.</p> <p>Gain knowledge on belt drives and pulleys</p> <p>Gain Knowledge on timing gates</p>	<p>Contextual challenge</p> <p>Mechanisms</p> <p>Cams</p> <p>Forms of motion</p> <p>Stock forms</p>
Key Knowledge Assessment	<p><u>Evidenced through written work:</u></p> <p>Able to explain what ergonomics</p>	<p><u>The ability to:</u></p> <p>Able to explain and recognise</p>	<p><u>The ability to:</u></p> <p>Able to apply research to existing knowledge to</p>



	<p>and anthropometric data is</p> <p>Comprehensive analysis of existing products using ACCESS FM</p> <p>Comprehensive brief</p> <p>Design ideas</p> <p>Final outcome</p> <p>Evaluation</p>	<p>each electronic symbol.</p> <p>Able to create their own electronic circuit based on their research findings of electronic symbols and circuits.</p> <p>The capability to solder their components together to build a functioning electric buggy.</p> <p>capable of designing a belt drive and pulley system to manoeuvre their electric buggy.</p> <p>The ability to test their electric buggy by measuring the time intervals.</p>	<p>expand on ideas</p> <p>Understanding the difference between natural wood and manufactured boards</p> <p>Ability to identify and complete profile on client making them relevant to the contextual challenge</p> <p>Design Ideas</p> <p>Ability to name and give examples of motions</p> <p>Designs including mechanism</p> <p>Chassis outcome and measurements</p> <p>Mechanism outcome (final)</p> <p>Evaluation</p>
<p>Links to literacy and numeracy</p>	<p><u>Literacy –</u></p> <p>Ergonomics - <i>Ergonomics</i> means making the product <i>fit the user</i>.</p> <p>Anthropometric data - <i>Anthropometric Data</i> are <i>measurements of humans</i></p> <p>Grabber - Mechanical device for clutching, lifting, and moving things especially materials in bulk</p> <p>Housing joint - Simple cut slot in one piece of wood to increase the glueing area</p> <p><u>Numeracy:</u></p>	<p><u>Literacy:</u></p> <p>Chassis- The base frame of a car, carriage or other wheeled vehicles.</p> <p>Wheel- A wheel is a circular component that is tended to rotate on an axle bearing.</p> <p>Axel- A rod spindle (either fixed or rotating) passing through the centre of a wheel or a group of wheels.</p> <p>Battery- is a source of electric power consisting of one or more electrochemical cells with external connections for powering electrical devices.</p> <p>Bulb- A device used to convert</p>	<p><u>Literacy:</u></p> <p>Mechanisms</p> <p>Fluted board</p> <p>MDF</p> <p>Rotary</p> <p>Reciprocating</p> <p>Linear</p> <p><u>Numeracy:</u></p> <p>Measurements</p>



	<p>Measurements</p> <p>Hand sizes</p> <p>Average</p>	<p>electricity into light</p> <p>Motor- An electric motor is an electrical machine that converts electrical energy into mechanical energy.</p> <p>Switch- An electric switch is an electrical component that breaks or closes an electric circuit.</p> <p>Numeracy:</p> <p>Measurements</p> <p>The time taken to cross the gates is computed as the difference of $t_1 - t_0$. By dividing the distance between the gates by the duration, we get the speed of the car!</p>	<p>Calculations of quantities</p> <p>Radius of (Wheels) circles and diameter_</p>
<p>Extra-Curricular opportunities</p>	<p>Reading:</p> <p>The design of everyday things- Don Norman The design thinking playbook- Michael Lwerick, Patrick Link, Larry Leifer</p> <p>Watch:</p> <p>Inside the Factory - https://www.bbc.co.uk/programmes/b07mddqk</p> <p>How to build- https://www.bbc.co.uk/programmes/b017lyld</p> <p>Listen:</p> <p>World Wise web (pioneering inventors)- https://www.bbc.co.uk/programmes/w13xttz/episodes/player</p> <p>Places to visit:</p> <p>London's Design Museum in Kensington</p>		
<p>Links to careers/</p>	<p>Game artist</p>		



aspirations	Architectural designer Architect
Links to our Fulston FAMILY values	Fortitude to communicate design ideas through annotations Ambitious to meet deadlines and finish all work on time to a high-quality standard Mindful of materials being used Integrity when evaluating existing products to improve own outcomes Leadership when taking control of their own learning and driving their creativeness forward Young Citizens ensuring safety is restored when packing away and returning the workshop to its original state before the lesson

Extended Learning Opportunities for Key Stage 3	<p>Watch:</p> <p>The Product Designer Maker – Youtube</p> <p>Practice sketches and communicating ideas</p> <p>Research designers and gather images of their work</p> <p>KS3 after school workshop</p>
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Key Stage 4:

What my child will learn in Year 10

Year 10	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit Title	Skills Building		Development: Tealight Holder Project Investigation: Start of sustained project		Component 1 development	
Previous knowledge recalled	Working properties of materials Basic understanding of CAD Basic understanding of evaluation		Iteration as a design strategy Communicating ideas through different types of drawing Develop primary research skills Develop secondary research skills		Previous project used as a model and prior knowledge Students to build upon previous course experiences as they respond to their component one starting points, covering all Assessment Objectives as project develops	



		<p>Meaningful evaluation skills</p> <p>Use CAD/CAM to manufacture students own design.</p>	
New Knowledge	<p>Iteration as a design strategy</p> <p>Communicating ideas through different types of drawing</p> <p>Develop primary research skills</p> <p>Develop secondary research skills</p> <p>Meaningful evaluation skills</p> <p>Use CAD/CAM to manufacture students own design</p>	<p>Physical properties of materials</p> <p>Understanding of CAD/CAM</p> <p>Historical knowledge of the work of others</p>	<p>How to use skills learnt to develop a sustained project</p> <p>To explore and experiment using a range of materials and techniques</p>
Key Knowledge Assessment	<p>Coverage of assessment objectives 1-4</p> <p>Development of Ideas</p> <p>AO1 Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding</p> <p>AO2 Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops</p> <p>AO3 Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress</p> <p>AO4 Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements</p>		
Links to literacy and numeracy	<p><u>Literacy:</u></p> <p>Colour</p> <p>Line</p> <p>Form</p> <p>Tone</p> <p>Texture</p>	<p><u>Literacy:</u></p> <p>Present research on designers using tier 3 language</p> <p>Annotate work</p> <p>Colour</p> <p>Line</p>	<p><u>Literacy:</u></p> <p>Present research on designers using tier 3 language</p> <p>Annotate work</p> <p>Colour</p> <p>Line</p>



	<p>Space</p> <p>Proportion</p> <p>Decoration</p> <p>Scale</p> <p>Structure</p> <p>Shape</p> <p>Pattern</p> <p><u>Numeracy:</u></p> <p>Scale</p> <p>Measurements</p> <p>Developing previous numeracy skills learnt in KS3 and 4</p>	<p>Form</p> <p>Tone</p> <p>Texture</p> <p>Space</p> <p>Proportion</p> <p>Decoration</p> <p>Scale</p> <p>Structure</p> <p>Shape</p> <p>Pattern</p> <p><u>Numeracy:</u></p> <p>Scale</p> <p>Measurements</p> <p>Developing previous numeracy skills learnt in KS3 and 4</p>	<p>Form</p> <p>Tone</p> <p>Texture</p> <p>Space</p> <p>Proportion</p> <p>Decoration</p> <p>Scale</p> <p>Structure</p> <p>Shape</p> <p>Pattern</p> <p><u>Numeracy:</u></p> <p>Scale</p> <p>Measurements</p> <p>Developing previous numeracy skills learnt in KS3 and 4</p>
<p>Extra-Curricular opportunities</p>	<p>After school workshops</p> <p>The Product Designer Maker – Youtube</p> <p>Practice sketches and communicating ideas</p> <p>Research designers and gather images of their work</p>		
<p>Links to careers/aspirations</p>	<p>Designer</p> <p>Architect</p> <p>Teacher</p> <p>Carpenter</p>		
<p>Links to our Fulston FAMILY values</p>	<p>Fortitude to show resilience during problem solving</p> <p>Ambitious to achieve the best of their ability to secure good grades which lead to their chosen jobs</p> <p>Mindful of which processes are best when designing</p> <p>Integrity when being critical about their work and how they could develop their ideas moving forward</p> <p>Leadership when leading by example using tools and equipment</p>		



Young Citizens solve problems relating to their own culture

What my child will learn in Year 11

Year 11	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit Title	Investigation: Start of sustained project (Component 1)		Exam unit: (Component 2)			
Previous knowledge recalled	Students to build upon previous course experiences as they respond to their component one starting points, covering all Assessment Objectives as project develops		Students to use prior knowledge and Component 1 knowledge to complete the Examination unit.		Students plan for the 10 hour examination through drawing, media exploration and design ideas	
New Knowledge	Developing work for the sustained project. Exploration and experimentation of media, techniques and processes Contextual research and critical annotations	Continuation from term 1 PPE based on chosen theme Exploration and experimentation of media and techniques Contextual research and critical annotations Design ideas	Planning and preparing for the GCSE exam. Students to choose an exam question as their starting point to their Externally set exam Students work independently with 1: 1 discussion to make sure that all assessment objectives are covered			
Key Knowledge Assessment	Coverage of assessment objectives 1-4 Development of Ideas AO1 Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding AO2 Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops AO3 Record ideas , observations and insights relevant to intentions, reflecting critically on work and progress AO4 Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements					



<p>Links to literacy and numeracy</p>	<p>Literacy:</p> <p>Colour Line Form Tone Texture Space Decoration Structure Pattern</p> <p>Numeracy:</p> <p>Proportion Scale Shape</p>	
<p>Extra-Curricular opportunities</p>	<p>After school workshops Half term workshops Revision guides Work experience</p>	
<p>Links to careers/aspirations</p>	<p>CAD technician Interior designer Project manager</p>	
<p>Links to our Fulston FAMILY values</p>	<p>Fortitude to show resilience during problem solving Ambitious to achieve the best of their ability to secure good grades which lead to their chosen jobs Mindful of which designers and artists inspire them to improve designs Integrity when being critical about their work and the work of others Leadership and taking control of the route in which their work goes down Young Citizens exploring the work of others</p>	

<p>Extended Learning Opportunities for Key Stage 4</p>	<p>Reading:</p> <p>The graphic Design idea book- inspiration from 50 masters - Artwork Memphis - Bigitte Fitoussi The fundamentals of product design- Richard Morris Other design books</p> <p>Watch:</p> <p>The repair shop- https://www.bbc.co.uk/programmes/b08l581p Inside the Factory - https://www.bbc.co.uk/programmes/b07mddqk</p>
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	<p><u>Listen:</u></p> <p>Honest Designers podcasts- https://www.designcuts.com/learning-hub/podcasts/honest-designers/</p> <p>And other podcasts</p> <p><u>Places to visit:</u></p> <p>The V&A Museum- London The Design Museum- London</p>
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Key Stage 5:

What my child will learn in Year 12

Year 12	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit Title	Skills, Knowledge, Media and Techniques			Component 1		
Previous knowledge recalled	<p>Themes of advanced study will enhance students' theoretical and practical skill set and enable them to understand and address the assessment objectives of exam board moderated Components 1 and 2.</p> <p>The intentions of the assignments are to enable learners to develop:</p> <ul style="list-style-type: none"> ● Intellectual, imaginative and creative skills ● Investigative, analytical, experimental, practical technical and expressive skills, aesthetic understanding, and critical judgement ● Independence of mind in developing, refining, and communicating their own ideas, their own intentions and their own personal outcomes 			<p>Students are required to conduct a practical investigation into an idea, issue, concept or theme, supported by written material which will be presented as passages of continuous prose incorporated within the practical work. The focus of the investigation must be identified independently by the student and must lead to a finished manufactured outcome or a series of related finished outcomes.</p> <p>It is intended that learners will be able to evidence that they have:</p> <ul style="list-style-type: none"> -Independently developed ideas through sustained and focused investigations in response to a given starting point -Produced material informed by contextual and other sources that informs the development of their practical work -Explored ideas, techniques or processes appropriate to their chosen specialism(s) -Record observations from sources relevant to intentions -Critically reviewed and refined their work as it progresses <p>It is the intent that teachers will encourage these skills to develop throughout Component 1, that skill development will be evident in their outcomes and in their confident and independent approach into Component 2.</p>		
New Knowledge	The experience of working with a broad range of media			Extended writing development 1 - 3000 words.	Lessons become more independent as students develop work for their personal investigation.	



	<p>It is also the intent that teachers will encourage skills to develop throughout this preparatory phase</p>	<p>This can be in the form of an essay or included in a student's portfolio of work.</p>	<p>One to one discussion will take place.</p>
<p>Key Knowledge Assessment</p>	<p>Relevant designer research</p> <p>Outcomes and use of tools and equipment in chess board project, trolley project and Pinball project</p> <p>Ability to design for a user</p> <p>Ability to design for themselves and explore interests</p>	<p>Coverage of assessment objectives 1-4</p> <p>Development of Ideas</p> <p>AO1 Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding</p> <p>AO2 Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops</p> <p>AO3 Record ideas, observations and insights relevant to intentions, reflecting critically on work and progress</p> <p>AO4 Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements</p>	
<p>Links to literacy and numeracy</p>	<p><u>Literacy:</u></p> <p>Colour Line Form Tone Texture Space Decoration Structure Pattern</p> <p><u>Numeracy:</u></p> <p>Proportion Scale Shape</p>		
<p>Extra-Curricular opportunities</p>	<p>After school workshops</p> <p>Workshops in half term</p> <p>Workshops in independent study periods</p> <p>Work experience</p>		
<p>Links to careers/aspirations</p>	<p>Digital designer</p> <p>Creative designer</p>		



Links to our Fulston FAMILY values	<p>Fortitude to show resilience and driving own learning and exploration</p> <p>Ambitious to achieve outcomes relevant to students interests</p> <p>Mindful of the journey in which their Component 1 and 2 takes, does it make sense?</p> <p>Integrity when being critical about their work and the work of others</p> <p>Leadership and taking control of the route in which their work goes down</p> <p>Young Citizens exploring the work of others</p>
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What my child will learn in Year 13

Year 13	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit Title	Component 1		Finish NEA Component 1 PPE exam Start ESA Feb 1st Component 2	Component 2		
Previous knowledge recalled	Continuation of prior knowledge to complete project		Continuation of prior knowledge to complete project	Continuation of prior knowledge to complete project		
New Knowledge	Students work independently with 1 on 1 discussion		To plan and prepare for the PPE exam. Students to choose an exam question as their starting point to their ESA (Component 2)	Students work independently with 1 on 1 discussion	Student to plan for the 15 hour examination time	
Key Knowledge Assessment	Coverage of assessment objectives 1-4 Development of Ideas AO1 Develop ideas through sustained and focused investigations informed by contextual and other sources, demonstrating analytical and critical understanding AO2 Explore and select appropriate resources, media, materials, techniques and processes, reviewing and refining ideas as work develops AO3 Record ideas , observations and insights relevant to intentions, reflecting critically on work and progress AO4 Present a personal and meaningful response that realises intentions and, where appropriate, makes connections between visual and other elements					
Links to literacy and	Literacy: Colour					



<p>numeracy</p>	<p>Line Form Tone Texture Space Decoration Structure Pattern</p> <p>Numeracy:</p> <p>Proportion Scale Shape</p>	
<p>Extra-Curricular opportunities</p>	<p>After school workshops Workshops in half term Workshops in independent study periods Work experience</p>	
<p>Links to careers/aspirations</p>	<p>Multimedia artist and animator Advertising and promotions manager</p>	
<p>Links to our Fulston FAMILY values</p>	<p>Fortitude to show resilience and driving own learning and exploration Ambitious to achieve outcomes relevant to students interests Mindful of the journey in which their Component 1 and 2 takes, does it make sense? Integrity when being critical about their work and the work of others Leadership and taking control of the route in which their work goes down Young Citizens exploring the work of others</p>	

<p>Extended Learning Opportunities for Key Stage 5</p>	<p>Work experience Volunteering within DT with lower year groups Visiting Design museum, the Natural History museum Watching tutorials on sketching and developing drawing skills</p>
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<p><u>Curriculum Impact</u></p>	<p>Our DT curriculum is designed to develop student's creativity, encourage them to take risks and become more resourceful, innovative, and capable.</p> <p>Students will develop a critical understanding of the impact of design and technology on daily life and the wider</p>
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world.

Pupils will design functional and appealing products. They will be encouraged to use appropriate tools and equipment when working with a range of materials. Students will be able to critically evaluate their products against a design brief and/or specification.

As designers, students will develop skills and attributes they can use beyond school and be able to participate in a rapidly changing world.