



ASPIRE • BELIEVE • ACHIEVE



Curriculum Overview: Year 7 DT / Computing

Year 7 Autumn Term 1		
<p>What are we learning? <u>Design & Technology - Textiles</u></p>	<p>What knowledge, understanding and skills will we gain?</p> <p>Knowledge</p> <ul style="list-style-type: none">• Learn about the following stitch types and their features:<ol style="list-style-type: none">1. <i>Running stitch</i>2. <i>Back stitch</i>3. <i>Over stitch</i>4. <i>Cross stitch</i>5. <i>Blanket stitch</i>• Learn about the applique process and how it is used in the textile industry for embellishment.• Learn about the unique properties of different fabrics. <p>Understanding</p> <ul style="list-style-type: none">• Understand how different stitch types have different strengths, function' and aesthetics and identify common uses. <p>Skills</p> <ul style="list-style-type: none">• Learn how to thread and knot a needle• Learn how to create the 5 different stitch types.	<p>What does excellence look like?</p> <ul style="list-style-type: none">• Students will create a sample of each stitch type, but also have a go at using them to create their stuffed toy.• Students will critically evaluate their own work and that of others, identifying ways forward.• Students will learn to select fabrics and stitches independently – ensuring they are fit for purpose.• Students will show confidence comparing different ways for embellishing textile products (applique / fabric paint / surface embroidery)• As an extension task / additional homework – some students may research alternative / advanced methods of embellishment: CNC embroidery, Batik, Tie Die, Screen Printing.

	<ul style="list-style-type: none"> • Learn how to use the applique process to create shapes and embellishment on textile surfaces. • Learn how to be reflective about practical work and identify ways to develop work further. 	
<p>Year 7 Autumn Term 2</p>		
<p>What are we learning? <u>Design and computing.</u></p>	<p>What knowledge, understanding and skills will we gain?</p> <p>Knowledge</p> <ul style="list-style-type: none"> • Consider the possible benefits and risks of sharing information online. • Recognize the importance of context in posting or viewing online images. • Understand what choices they need to make to protect the privacy of others online. <p>Understanding</p> <ul style="list-style-type: none"> • Understand which kinds of websites have privacy policies, and why. • Practice checking websites they visit for privacy policies and privacy seals of approvals. • Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. • Understand how instructions are stored and executed within a computer system; 	<p>What does excellence look like?</p> <ul style="list-style-type: none"> • Identify the legal and ethical considerations involved in using the creative work of others. • Understand an individual's rights and responsibilities as a creator and consumer of content. • Practice critical thinking and ethical decision making about the use of creative works.

	<p>understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits.</p> <p>Skills</p> <ul style="list-style-type: none"> • Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. • Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability 	
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Curriculum Overview: Year 8 DT / Computing

Year 8 Autumn Term 1		
<p>What are we learning? <u>Design and computing.</u></p>	<p>What knowledge, understanding and skills will we gain?</p> <p>Knowledge</p> <ul style="list-style-type: none"> • Consider the possible benefits and risks of sharing information online. • Recognize the importance of context in posting or viewing online images. • Understand what choices they need to make to protect the privacy of others online. <p>Understanding</p> <ul style="list-style-type: none"> • Understand which kinds of websites have privacy policies, and why. 	<p>What does excellence look like?</p> <p>Identify the legal and ethical considerations involved in using the creative work of others. Understand an individual's rights and responsibilities as a creator and consumer of content.</p> <p>Practice critical thinking and ethical decision making about the use of creative works.</p>

	<ul style="list-style-type: none"> Practice checking websites they visit for privacy policies and privacy seals of approvals. Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits. <p>Skills</p> <ul style="list-style-type: none"> Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability 	
Year 8 Autumn Term 2		
<p>What are we learning? Pewter Casting – Key rings/ Jewellery</p>	<p>What knowledge, understanding and skills will we gain? Knowledge</p> <ul style="list-style-type: none"> Investigate examples of existing pewter jewellery. 	<p>What does excellence look like? Design</p> <ul style="list-style-type: none"> To produce a range of feasible design ideas - all annotated and explained thoroughly.

	<ul style="list-style-type: none"> • Design a range of ideas with attention to the process. • How to cast pewter metal safely. PPE and H&S • How to put a finish on jewellery product. • How to make a jewellery presentation box. <p>Understanding</p> <ul style="list-style-type: none"> • To be able to sketch an idea using CAD drawing programme. • To carry out the process of casting independently and safely. • To understand the hardening, tempering and quenching techniques. • How to refine and make improvements to finished outcome. <p>Skills</p> <ul style="list-style-type: none"> • Make use of the controls on CAD drawing programme. • To use the hand tools independently. • To cast a mould using pewter metal. • To use buffer machine independently. 	<ul style="list-style-type: none"> • To develop an idea further and explain why changes are better for the user. • Written at least eight design criteria with thorough explanations why they are relevant. • To take the final outcome and rigorously tested against the eight design criteria. <p>Making</p> <ul style="list-style-type: none"> • Evidence of a well finished product which has a high degree of challenge • An explanation of how the product has been modified during the construction stage and why these changes were made. <p>Evaluation</p> <ul style="list-style-type: none"> • Analysis of existing products and their impact on society, their impact on the environment and interested groups • The ability to refine the finished product on account of the evaluation. • To describe in detail the physical properties of the materials used in the making of the product.
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