




Curriculum Information

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What I learn about in the curriculum...

Year		Topics	 How does this build on from previous learning?	The key concepts we cover
7	Rotation	<p>Design – Block Bot project</p> <p>We learn about Timbers and their origin and how to use them within a design criteria. Design concepts are taught such as isometric drawings and these skills are used to create a final piece made out of timber. We also learn how to use tools and equipment appropriate to the material being used.</p> <p>Textiles -Day of the dead project</p> <p>We learn about the south American holiday 'Day of the dead' and use this knowledge to create a piece of soft material work. We learn about a wide range of fibres and fabrics and how they are used in design.</p>	<p>Students can generate, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge

8	Rotation	<p>Design- Designer clock project</p> <p>We learn about timbers and polymers, how to use them within a practical setting, and the impact these materials have on the environment.</p> <p>We focus our research on design movements such as Memphis design so that you can use this research to create your own clock in the style of your chosen movement. We also learn how to use tools and equipment appropriate to the material being used.</p> <p>Textiles – Under the sea, Cushion project</p> <p>We learn about the impact that fast fashion and industry has on the environment, this project has an emphasis on using recycled products. We learn about a wide range of fibres and fabrics and how they are used in design.</p>	<p>We move on from year 7 too incorporate new materials. We start to build students knowledge on design movements, we cover 4 different ones and then focus on Memphis designs. Students are introduced to new tools and equipment that link to the new materials that they use.</p> <p>We use the knowledge from year 7 of materials to create a fully functioning product. The material knowledge is built upon to a wider variety however there is a big focus on sustainability and the impact that the textile industry has on the world. Students are introduced to new tools and equipment that link to the new materials that they use.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
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9	Rotation	<p>Design – Lamp project</p> <p>We learn about timbers and polymers, how to use them within a design criteria and the impact they have on the environment. We want to understand how materials impact the world we live in, and what positive choices you can make as a designer.</p> <p>We also learn how to use tools and equipment appropriate to the material being used.</p> <p>Textiles – Smart material bag project</p> <p>We learn about new and emerging technologies and the impact this has on the world around us.</p> <p>We learn about a wide range of fibres and fabrics and how they are used in design and how smart and modern materials improve day to day living.</p>	<p>We use the knowledge from year 8 to improve our skills when working to a design context. Students build knowledge about all the material areas as well as the tools and equipment. Students start to consider how products are made within industry.</p> <p>Students continue to build their knowledge about fibres and fabrics with an emphasis on smart and modern materials. Students learn how these new and emerging technologies can have a positive impact on the world. Students will focus on British designers as their theme and design in their style.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
10	Autumn 1	<p>ECO Building Project</p> <p>Students learn about the material paper and board. This involves recognising different types of paper and board as well as understanding the working and physical properties.</p>	<p>Students will be introduced to the material paper and board in much more detail at GCSE. They then use this knowledge to help them in their project of making a successful prototype. Students learn about sustainable living and how designers play a huge part of that.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
10	Autumn 2	<p>Timber Box Project</p> <p>Students learn about the material timber. This involves recognising different types of paper and board as well as understanding the working and physical properties.</p>	<p>Students will build on their knowledge from KS3. The focus of this project is for students to understand how to join and shape timber to create a desired outcome.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge

	Spring 1	Students learn about the material Polymers. This involves recognising different types of paper and board as well as understanding the working and physical properties.	Students will build on their knowledge from KS3. The focus of this project is for students to understand how to use specialist equipment for CAD/CAM to further expand their knowledge.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
	Spring 2	Hoodie Project Students learn about the material Fibres and fabrics. This involves recognising different types of paper and board as well as understanding the working and physical properties.	Students will build on their knowledge from KS3. The focus of this project is for students to understand how to work with fibres and fabrics with an emphasis on pattern cutting.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
	Summer 1	Mock NEA Brief TBC	Students will use their knowledge to answer a design concept. This will prepare the students for their NEA.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
	Summer 2	Students to start their NEA.	Independent work linking to the design concepts set out by OCR.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
11	Autumn 1	Students Continue with their NEA.	Independent work linking to the design concepts set out by OCR.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
	Autumn 2	Students Continue with their NEA.	Independent work linking to the design concepts set out by OCR.	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge

	Spring 1 & 2	<ol style="list-style-type: none"> 1. Identifying requirements 2. Learning from existing products and practice 3. Implications of wider issues 4. Design thinking and communication 5. Material considerations 6. Technical understanding 7. Manufacturing processes and techniques 8. Viability of design solutions. 	<p>We recall and revisit the knowledge from year KS3 and year 10.</p> <p>We develop a better and in depth understanding of the components needed for the exam content.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge
	Summer 1	Revision techniques and how best to answer exam questions.	<p>Command words are considered</p> <p>Key words and their meanings.</p> <p>How to approach the long answer questions</p> <p>Students will look at mock exams and know what their weaknesses are and have work targeted for them.</p>	<ul style="list-style-type: none"> • Explore • Create • Evaluate • Technical Knowledge

Information	
Personal Development within the Curriculum	<ul style="list-style-type: none"> • Communication • Team work • Organisation • Leadership • Initiative • Essential practical skill set • Cultural and moral purpose • British values • Creativity
Extra Curricular Opportunities	<p>Young Enterprise club</p> <p>London Trip</p> <p>Careers talks</p>

Assessment	<p>Key Stage 3 Practical skill set and knowledge. Low stakes quiz Last few weeks of the rotation. Homework</p> <p>Key stage 4</p> <p>GCSE OCR Design and technology</p> <p>50% NEA 50% Exam</p> <p>Students will use the assessment criteria through the two years in prep for their NEA. Students will have mock exams every term to help prepare them for the exam and how it is set out as well as see where the gaps in knowledge are.</p>
Qualification Information	<p>Specification.pdf</p> <p>https://www.ocr.org.uk/qualifications/gcse/design-and-technology-j310-from-2017/</p>
Ways to Support your Child in this subject	<p>Key stage 3</p> <ul style="list-style-type: none"> • Check homework is completed. • Encourage students to download Tinker CAD online so they can practice at home. <p>Key Stage 4</p> <ul style="list-style-type: none"> • Check homework is completed • Encourage revision for mock exams • Purchase GCSE revision guides.