Introduce:

Transition Phase

Sandbach School Design and Technology Curriculum:

Year 8 Design and Technology Curriculum Sequence

Intent: Pupils continue to develop further understanding of the wider world around them and consider the environmental impact of a range of products. New topics are introduced to broaden the curriculum offer in KS3 (for example textiles). The subject embeds literacy skills through research and evaluation techniques. Consideration of ethical and moral issues such as sustainability and Fairtrade are introduced to encompass all aspects to consider when designing.

HT1 Furniture Project	HT2 Furniture Project	HT3 Farm to Fork Pt 1	HT4 Vehicle Design, Product Analysis & Sustainability	HT5 Textiles	HT6 Farm to Fork Pt 2
Why This Project This project introduces students to a range of designers and design movements. Students analyse and evaluate iconic pieces of furniture to gain inspiration when designing their own. It builds on skills in product 'prototyping' and meeting a design brief (aimed at a specific target market), thus providing a context and constraints for students to work within.	**Why This Project** This project introduces students to a range of designers and design movements. Students analyse and evaluate iconic pieces of furniture to gain inspiration when designing their own. It builds on skills in product 'prototyping' and meeting a design brief (aimed at a specific target market), thus providing a context and constraints for students to work within.	**Why This Project** This module introduces an essential topic that transcends all of the technology curriculum today. It challenges students to think about all aspects of sustainability in relation to the 6 Rs. It encourages students to think about their social responsibility and the impact that food can have. It encourages students to think more broadly about the impact of their food choice and where they buy their food from.	**Why This Project** This project introduces students to a range of designers and design movements. Students analyse and evaluate iconic pieces of furniture to gain inspiration when designing their own. It builds on skills in product 'prototyping' and meeting a design brief (aimed at a specific target market), thus providing a context and constraints for students to work within.	**Why This Project** This project builds on the fundamental design concepts that have been established through year 7 and 8 previously. As well as this, the project introduces the student's to a range of fabrics, fibres and materials with a focus on synthetic, repurposed and natural fibres. Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Students work in a range of domestic and industrial contexts, such as the fashion industry and making conscious choices when working with textiles.	**Why This Project** This module introduces an essential topic that transcends all of the technology curriculum today. It challenges students to think about all aspects of sustainability in relation to the 6 Rs. It encourages students to think about their social responsibility and the impact that food can have. It encourages students to think more broadly about the impact of their food choice and where they buy their food from.
National Curriculum Links **Pupils will:** -identify and solve their own design problems and understand how to reformulate problems given to them -develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situation -develop and communicate design ideas using annotated sketches and detailed plans.	**National Curriculum Links** **Pupils will:** -identify and solve their own design problems and understand how to reformulate problems given to them -develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situation -develop and communicate design ideas using annotated sketches and detailed plans.	**National Curriculum Links** **Pupils will:** • problems given to them and understand its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists • understand the source, seasonality and characteristics of a broad range of ingredients • understand and apply the principles of nutrition and health	**National Curriculum Links** **Pupils will:** -identify and solve their own design problems and understand how to reformulate problems given to them -develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situation -develop and communicate design ideas using annotated sketches and detailed plans.	**National Curriculum Links** **Pupils will:** • Develop technical and practical abilities needed to perform everyday textiles based tasks confidently. • Critique, evaluate and test their ideas and products and the work of others following constructive methods. • Use research and exploration, including reviewing the current market, to identify and understand user needs. • Select from and use specialist tools, techniques and processes to achieve a desired outcome. • Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.	**National Curriculum Links** **Pupils will:** • problems given to them and understand its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists • understand the source, seasonality and characteristics of a broad range of ingredients • understand and apply the principles of nutrition and health
Teaching this project supports: Embedding an understanding of designers and design movements during KS4 and 5. Students understanding of modern and classical architecture buildings and structures.	**Teaching this project supports**: Embedding an understanding of designers and design movements during KS4 and 5. Students understanding of modern and classical architecture buildings and structures.	**Teaching this project supports**: cross curricular knowledge of sustainability topics in science and Geography. It also supports higher achievement in coursework and examinations in KS4 and KS5. It also supports our careers provision as it reflects job roles in industry and approaches taken in quality control and testing products. It also ties in with the school's PSHCE programmes related to moral and social responsibility.	**Teaching this project supports**: Embedding an understanding of designers and design movements during KS4 and 5. Students understanding of modern and classical architecture buildings and structures.	**Teaching this project supports**: The teaching of more complex design projects in KS4 and 5. It also supports the careers cross-curricular delivery in making links to the textiles industry job roles and the importance of students developing relevant and up-to-date skills required in Technology related job roles. It helps to broaden the students' research and evaluation skills. It also offers an opportunity for a creative response linked to art and graphic design.	**Teaching this project supports**: cross curricular knowledge of sustainability topics in science and Geography. It also supports higher achievement in coursework and examinations in KS4 and KS5. It also supports our careers provision as it reflects job roles in industry and approaches taken in quality control and testing products. It also ties in with the school's PSHCE programmes related to moral and social responsibility.
This project feeds from: This is a new concept for students to explore. Students briefly investigated inventors and architectural buildings during the year 8 blended project but this project now builds on this in greater depth.	**This project feeds from**: This is a new concept for students to explore. Students briefly investigated inventors and architectural buildings during the year 8 blended project but this project now builds on this in greater depth.	**This project feeds from**: Key stage 1 • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from Key stage 2 • understand and apply the principles of a healthy and varied diet The topic has become a pressing issue for people to address and so the project builds on the students own awareness and understanding of sustainability and the environmental challenges faced. It	**This project feeds from**: This is a new concept for students to explore. Students briefly investigated inventors and architectural buildings during the year 8 blended project but this project now builds on this in greater depth.	**This project feeds on from KS2 Design and Technology teaching linked to the National Curriculum e.g.** ▪ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ▪ generate, develop, model and communicate their ideas through discussion, annotated sketches and diagrams ▪ investigate and analyse a range of existing products ▪ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	**This project feeds from**: Key stage 1 • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from Key stage 2 • understand and apply the principles of a healthy and varied diet The topic has become a pressing issue for people to address and so the project builds on the students own awareness and understanding of sustainability and the environmental challenges faced. It