Curriculum Map

Subject: Design Technology (3-way rotation each term at KS3)

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Hal Term 5	Half Term 6
7	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating	**Curriculum Topics:** **Materials:** Focus on Plastics and Metals. Responding to a design brief and writing a design specification to design products for a museum gift shop. **Textiles:** 'Discovering Textiles' – The origins and uses for different fibres. The construction of fabrics and the application of colour, pattern and texture to fabrics. **Food:** Introduction to food and cooking, skills & Healthy Eating
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8	**Curriculum Topics:** **Materials:** Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a Passive Speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context	**Curriculum Topics:** **Materials:** Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a Passive Speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context	**Curriculum Topics:** **Materials**: Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a passive speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context	**Curriculum Topics:** **Materials**: Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a Passive Speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context	**Curriculum Topics:** **Materials:** Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a Passive Speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context	**Curriculum Topics:** **Materials:** Focus on Timbers. Use of manufacturing processes and CAD/ CAM to design and manufacture a Passive Speaker. Communicating ideas, the work of others and how biomimicry can inspire the shape and function of designs. **Textiles:** Japanese 'Boro' inspired Textiles. Textiles with a cultural and historical context

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	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.	decoration techniques to create an appealing product. Use their knowledge and experience of the sewing machine to assemble a final product. **Food**: Linking foods to nutrients and food choices. Using practical skills learnt to develop high level skills to increase practical skills.
9	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is	**Curriculum Topics:** **Materials:** *Iconic design* **– The** Anglepoise lamp**.** Designing for sustainability and functionality. Exploration of levers ,linkages and electronics in order to make an adjustable lamp. **Textiles:** Students explore surface pattern, types of repeat patterns, printing techniques and applique to create their own repeat pattern that is

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10	**Curriculum Topics:** **<u>Product Design:</u>** **Furniture Design** Research – patterns and colours of the 70's. Communicating hand sketched ideas in 3D. Revisiting Polymers (Focus on Polypropylene, Hips, Acrylic) Revisit Timbers (Focus on MDF) Vacuum Forming. Revisit use of hand tools with a view to introducing Hegner saw for efficiency. **<u>Hospitality & Catering:</u>** Food Safety	**Curriculum Topics:** **<u>Product Design:</u>** **Furniture Design** Modelling and working to scale. CAD design and use to develop designs Marking and measuring Use of general workshop tools and equipment. Final design drawing / presentation **<u>Hospitality & Catering:</u>** Nutrition	**Curriculum Topics:** **<u>Product Design:</u>** **Wood Box –** How to carry out research and use it to inspire ideas. Manufacturing and assembling a product with a given set of materials. Shaping, forming, etc. Working to tolerances Detailed learning of material specialism – Timber. **<u>Hospitality & Catering:</u>** Hospitality Industry	**Curriculum Topics:** **<u>Product Design:</u>** **Wood Box** Manufacture of final product. Use a range of processes and materials (wood and plastic) CAD/CAM use on products Evaluation **<u>Hospitality & Catering:</u>** Health & Safety	**Curriculum Topics:** **<u>Product Design:</u>** **Mood Lamp** Sublimation printing – application to polymers. Revisit Eletronic components. Drawing circuits as a schematic diagram. Communicating ideas with a focus on being able to develop and refine ideas with good grasp of how to annotate. **<u>Hospitality & Catering:</u>** Hospitality Operations	**Curriculum Topics:** **<u>Product Design:</u>** Introduction to the NEA, Investigating the Context, Primary/ secondary research and interviewing a client. **<u>Hospitality & Catering:</u>** NEA practice
	Links with previous topics: **<u>Product Design:</u>** Research, ACCESS FM, designing, developing ideas, Material selection, practical skills. **<u>Hospitality & Catering</u>** Health & Safety, Bacteria & Danger zone, Food storage, developed practical skills.	**Links with previous topics:** **<u>Product Design:</u>** ACCESS FM designing, developing ideas How we make the product different manufacturing techniques Drilling cutting shaping plastic processes from KS3 **<u>Hospitality & Catering</u>**	**Links with previous topics:** **<u>Product Design:</u>** ACCESS FM designing, developing ideas How we make the product different manufacturing techniques Drilling cutting shaping plastic processes from KS3 The 6 R and the environment	**Links with previous topics:** **<u>Product Design:</u>** Properties of wood plastics and metals Look at forces on these materials **<u>Hospitality & Catering</u>** Link to all H&S in KS3 and what has been learnt in term 1 Food Safety.	**Links with previous topics:** **<u>Product Design:</u>** Linkages CAMS Movement types **<u>Hospitality & Catering</u>** Extending knowledge on what has been learnt in previous terms from Food Safety, Hospitality Industry and Health & Safety.	**Links with previous topics:** **<u>Product Design:</u>** Designing for specific users Look at sizes shapes and data **<u>Hospitality & Catering</u>** Linking all previous knowledge learnt throughout KS3 and previously in the year to trial their NEA. They will

		All nutrition content learnt at KS3.	**Hospitality & Catering** Links to term 1 looking expanding knowledge learnt of food safety in Hospitality and Catering and linking to a wholistic look of the Hospitality and Catering Industry.			use both theoretical and practical knowledge and skills to showcase their learning.
11	**Curriculum Topics:** **Product Design** **NEA -**Types of research – Primary and secondary. Evaluating research findings in order to write a design brief and specification. **Hospitality & Catering** **NEA** coursework prep and practice	**Curriculum Topics:** **Product Design** -Intensive exam theory. -PPE's -**NEA** -Using research to inspire initial solutions to the problem identified by the client. -Client feedback in order to develop ideas. -Modelling of ideas **Hospitality & Catering** **NEA** coursework	**Curriculum Topics:** **Product Design:** -Exam theory/revision -Further investigative research. -cutting lists, measurements, and templates prepared for practical. -Manufacturing of final product begins. **Hospitality & Catering** **NEA** coursework & theory recap.	**Curriculum Topics:** **Product Design** -Intensive exam theory. -Manufacturing of final Product. -Plan of manufacture -Evaluation and client feedback. **Hospitality & Catering** Exam theory recap	**Curriculum Topics:** **Product Design** -Intensive exam theory. **Hospitality & Catering** Exam theory recap	**Curriculum Topics:** **Product Design** Course completed **Hospitality & Catering** Course completed
	Links with previous topics: **Product Design:** Evaluation and analytical techniques. **Hospitality & Catering:**	**Links with previous topics:** **Product Design:** Implementing client responses and practical modelling skills.	**Links with previous topics:** **Product Design:** Practical skills, safety and quality control. **Hospitality & Catering:**	**Links with previous topics:** **Product Design:** Recapping over all of Year 10 theory Project coursework structure of Y10 term 1	**Links with previous topics:** **Product Design:** Recapping over all of Year 10 theory **Hospitality & Catering:**	

	Link to all previous learning that can be implemented into NEA.	**<u>Hospitality & Catering:</u>** Link to all previous learning that can be implemented into NEA.	Link to all previous learning that can be implemented into NEA and recapping all theory knowledge from Year 10 that is relevant to exam.	and term 2 applying to term 3 and Y11 **<u>Hospitality & Catering:</u>** Link to all previous learning that can be implemented recapping all theory knowledge from Year 10 that is relevant to exam.	Link to all previous learning that can be implemented recapping all theory knowledge from Year 10 that is relevant to exam.	