

# Our Lady Queen of Peace

Catholic Engineering College

## Curriculum Overview

### Year 8 Technology

	Knowledge & Understanding				Subject Specific Literacy Development		Cultural Capital / Enrichment Opportunities
	Topics (Bigger Picture)	Knowledge (Key Concepts)	Links to NC	Recall & Retrieval Practice Focus	Reading for Meaning	Key Vocabulary	
Rotation 1 Product Design and Manufacture	<b>Developing product design and manufacture skills and knowledge</b> How you work through the design process to design and manufacture a product?	To know how to use ACCESFM to analyse an existing product.	Investigating new and emerging technologies	<u>Every Lesson:</u> Recall activity linked to prior learning and key terminology.	The impact that technology has had on society.	Impact	Understanding the positive and negative impact that technology is having on society and on mental health.
		To know how to create a workshop production plan and identify where quality control must take place during their practical.	Develop specifications to inform the design of innovative, functional appealing products that respond to the needs of a variety of situations	Think pair and share activities.  Using mini white boards to check for understanding.		Quality Control  Soft Wood	
		To Know the working properties of softwoods and be able to work independently when using tools and equipment.		<u>Mid-Point:</u> Low stakes Quiz based on cumulative knowledge and Key Piece based on key part of design process  <u>End Point:</u> End of topic assessment 35 marks			Recognising that technology is ever evolving and that the impacts are felt globally.  Understanding how we communicate ideas is ever evolving.  Makers Club  STEM Club

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Rotation 2 Textiles and Fashion	<u>Developing Textiles and Fashion Skills and Knowledge</u> How to respond to a textiles brief	To know how to make a 3D model of a chosen design idea and understand why designers make prototypes.	Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties	<u>Every Lesson:</u> Recall activity linked to prior learning and key terminology.  Think pair and share activities.  Using mini white boards to check for understanding.  <u>Mid-Point:</u> Low stakes Quiz based on cumulative knowledge and Key Piece based on key part of design process  <u>End Point:</u> End of topic assessment 35 marks	Where does cotton come from?	Batik Tie Die Modelling Prototype	Understand the impact of fashion on the environment and how sustainable design practices can make a difference.
		To know how to Batik and tie die fabrics safely.  To know how to use ACCESSFM to evaluate their finished garments.					Learn how to choose fabrics, colours, and patterns that reflect personal style.  Explore how textiles tell stories and carry cultural significance.  Textiles Club
Rotation 3 Cooking and Nutrition	<u>Developing baking skills</u> How to select ingredients to make appealing and nutritious sweet and savoury baked dishes	How to create dough  How to create batter  How to perform the rubbing in method  How to time dishes when baking  Weighing and measuring ingredients	Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet	<u>Every Lesson:</u> Recall activity linked to prior learning and key terminology.  Think pair and share activities.  Using mini white boards to check for understanding.  <u>Mid-Point:</u> Low stakes Quiz based on cumulative knowledge and Key Piece based nutritious meal planning.  <u>End Point:</u> End of topic assessment 35 marks	The history of British baking.	Savoury Dough Weighing Organoleptic	Understand the skills employers value, such as teamwork, hygiene, and time management  Explore how food choices impact energy, growth, and wellbeing.  Catering Club

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Rotation 4 STEM	<u>Using computer aided design software</u> How designers adapt design solutions using computer design software?	To develop design and modelling skills through using 2D and 3D CAD software	Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools	<u>Every Lesson:</u> Recall activity linked to prior learning and key terminology.  Think pair and share activities.  Using mini white boards to check for understanding.  <u>Mid-Point:</u> Low stakes Quiz based on cumulative knowledge and Key Piece based on key part of design process  <u>End Point:</u> End of topic assessment 35 marks	How CAD/CAM has changed the design industry.	CAD CAM Rapid Prototyping	Discover how design affects the way we live, from phones to furniture  Understand how designers think and innovate in response to real needs.  Discover career paths in architecture, engineering, carpentry, product design, and manufacturing. Makers Club  STEM Club

## Key Assessments

When	What will be assessed?	Why is this being assessed?
During Product Design and Manufacture rotation.	<ul style="list-style-type: none"> <li>Key Piece on production planning and quality control.</li> <li>Mid topic low stakes quiz on key terminology.</li> <li>End of topic assessment.</li> </ul>	<ul style="list-style-type: none"> <li>To check that students understand the planning process and they can work to a given plan.</li> <li>To check that students have embedded language and concepts from year 7 and understand the language that is associated with product design and manufacture in year 8.</li> <li>To check that students have retained knowledge and can apply design choices to an alternative brief.</li> </ul>
During Textiles and Fashion rotation	<ul style="list-style-type: none"> <li>Key Piece on product analysis.</li> <li>Mid topic low stakes quiz on key terminology.</li> <li>End of topic assessment.</li> </ul>	<ul style="list-style-type: none"> <li>To check students understand that using ACCESSFM to analyse existing products can aid them with their designs</li> <li>To check that students have embedded language and concepts from year 7 and understand the language that is associated with Textiles and Fashion in year 8.</li> <li>To check that students have retained knowledge and can apply design choices to an alternative brief.</li> </ul>
During Cooking and Nutrition rotation	<ul style="list-style-type: none"> <li>Key Piece on global pastry production.</li> <li>Mid topic low stakes quiz on key terminology.</li> <li>End of topic assessment.</li> </ul>	<ul style="list-style-type: none"> <li>To check students, understand how pastries are produced in different countries depending on the availability of ingredients.</li> <li>To check that students have embedded language and concepts from year 7 and understand the language that is associated with Cooking and Nutrition in year 8.</li> <li>To check that students have retained knowledge and can apply nutritional choices to alternative menus.</li> </ul>
During STEM rotation	<ul style="list-style-type: none"> <li>Key Piece on using computer commands on 2D design software.</li> <li>Mid topic low stakes quiz on key terminology.</li> <li>End of topic assessment.</li> </ul>	<ul style="list-style-type: none"> <li>To check students, understand how to use 2D design to create a design.</li> <li>To check that students understand the language that is associated with CAD.</li> <li>To check that students have retained knowledge and can apply their knowledge to alternative design contexts.</li> </ul>
Half Term 6	<ul style="list-style-type: none"> <li>Cumulative assessment on 4 different technology rotations</li> </ul>	<ul style="list-style-type: none"> <li>To check that students have retained knowledge from the four different areas of technology.</li> </ul>