

Our Lady Queen of Peace

Catholic Engineering College

Curriculum Overview

Year 9 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	Electronic Products	To be able to recognise basic electronic components such as LED'S & Resistors.	Use electronics to embed intelligence in products that respond to inputs and control outputs using programmable components.	<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	The technological revolution.	Electronics Input, process, Output Integrate.	Sustainability and Eco-Friendly design. Discovering how design affects the way we live, from phones to furniture. Design Makers Club STEM Club
	How do electronic products work and what impact have electronics had on society?	To know how electronics interact with Voltage, Current and Resistance. To understand how sensors work and where they would be used in real world applications.					

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Rotation 2 Textiles and Fashion	<u>Designing for an event</u> How do we meet the needs of our clients?	To know what smart materials are and be able to identify them. To be able to plan each stage of their practical using a flow chart method. taking quality control into account. To be able to work independently to create a final piece using the practical skills learned in year 7&8	test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups	<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 can Textiles be smart?	Pattern Decoration Festivals	Thinking Like a Designer Engage in research, planning, and problem-solving to develop innovative designs. Learn how to evaluate your own work and make improvements. Apply creative thinking to real-world design challenges Explore how textiles tell stories and carry cultural significance. Textiles Club
Rotation 3 Cooking and Nutrition	<u>Cultural Cuisine</u> How do different cultures combine ingredients to make food unique to them?	How to combine herbs and spices to make distinctive dishes. How to cater for alternative diets i.e vegetarian and vegan. To be able to evaluate the cultural significance of cuisine and how it is influenced by factors such as religion.	Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients, adapting and using their own recipes] Understand the source, seasonality and characteristics of a broad range of ingredients.	<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	What is street food and why is it so popular?	Spices Sensory analysis Marinade	Discover how different cultures prepare and celebrate food. Learn about international cuisines and the history behind them. Explore how food reflects identity, tradition, and beliefs. Catering Club

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Rotation 4 STEM	Jewellery design How do designers refer to the work of others and design periods to create new design trends?	To be able to identify design periods based on design features I.e Art Deco.	Analyse the work of past and present professionals and others to develop and broaden their understanding	<u>Every Lesson:</u> Recall activity linked to prior learning and key terminology. Think pair and share activities.	What are design movements and how have they shaped society?	Movements Style Jewellery Trends	Discover how design affects the way we live, from phones to furniture
		To be able to identify the work of other designers based on their style i.e. De Stijl. To be able to develop design ideas that avoid design fixation by adapting the work of others.	Use research and exploration, such as the study of different cultures, to identify and understand user needs.	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			Understand how designers think and innovate in response to real needs. Explore how global cultures influence patterns, colours, and product styles. 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"> Key Piece on input/process/output. Mid topic low stakes quiz on key terminology. End of topic assessment. 	<ul style="list-style-type: none"> To check that students understand how electronic components interact with each other. To check that students have embedded language and concepts from year 7 & 8 and understand the language that is associated with product design and manufacture in year 9. To check that students have retained knowledge and can apply design choices to an alternative brief taking the use of more advanced technology into account.
During Textiles and Fashion rotation	<ul style="list-style-type: none"> Key Piece on evaluating design ideas. Mid topic low stakes quiz on key terminology. End of topic assessment. 	<ul style="list-style-type: none"> To check students understand that by evaluating a range of ideas they can create the best solution for the brief. To check that students have embedded language and concepts from year 7 & 8 and understand the language that is associated with Textiles and Fashion in year 9. To check that students have retained knowledge and can apply design choices to an alternative brief taking the needs of a client into account.
During Cooking and Nutrition rotation	<ul style="list-style-type: none"> Key Piece on food production planning. Mid topic low stakes quiz on key terminology. End of topic assessment. 	<ul style="list-style-type: none"> To check students, understand how to plan the cooking of a dish from start to finish including cleaning and quality checks. To check that students have embedded language and concepts from year 7 & 8 and understand the language that is associated with Cooking and Nutrition in year 9. To check that students have retained knowledge and can apply nutritional choices to alternative menus taking dietary requirements into account.
During STEM rotation	<ul style="list-style-type: none"> Key Piece on avoiding design fixation. Mid topic low stakes quiz on key terminology. End of topic assessment. 	<ul style="list-style-type: none"> To check students, understand how to use various design styles to avoid design fixation. To check that students understand the language that is associated with design movements and styles. To check that students have retained knowledge and can apply their knowledge to alternative design contexts all while avoiding design fixation.
Half Term 6	<ul style="list-style-type: none"> Cumulative assessment on 4 different technology rotations 	<ul style="list-style-type: none"> To check that students have retained knowledge from the four different areas of technology.