

COMPASSION

COURAGE



Curriculum overview

Subject	Subject- DT (KS3 RM/ TEXTILES/FOOD)	KS3	
Vision statement:	At Landau Forte our curriculum exists to ensure all students regardless of background a students being challenged from their previous key stage learning experiences. Our broand will provide the platform for preparing students with the foundations for examinations	oad and balanced curriculum is ambitiou	
	Our Curriculum Intent has been informed by a wide variety of researchers and is steep our curriculum to empower all learners creating a pathway to success in university, the		e Counsell summarises the aspiration o
	'A curriculum exists to change the pupil, to give the pupil new power. One acid test for to clamber into the discourse and practices of educated people, so that they gain powe		lower attaining or disadvantaged pupi
	As well as excellent academic success we aim to ensure our students leave us as polite and Curiosity are currently being embedded throughout our curriculum offer to ensure		
Curriculum intent:	In line with the Academy's vision to enhance students' understanding of the world by a Technology department at Landau Forte Academy QEMS aim to deliver a curriculum the practical skills of the subject but inspires them to succeed far beyond their education at The Design Technology curriculum aims to be; o Challenging for all o Ambitious o Coherent both in planning and sequence o Adapted successfully to suit all needs and abilities o Broad - covering a range of specialisms and subject disciplines within the DT countries a knowledge and practical skill-based curriculum, students will be able to theoretical knowledge into their practical outcomes and make seamless links and contrange of options available to all learners to suit their needs and interests within the DT	nat not only develops students' theoretic the academy. urriculum area not only achieve the best they can acad sections between them. Our course offe	cal knowledge, design concepts and emically but would be able to apply the rs at KS4 and 5 ensure there is a wide
	our subject area. In summary the Design Technology curriculum is developed and tailored for each speci which is to allow students to be challenged in both a theoretical context around our su school values are at the heart of the planning and delivery of our curriculum – Curiosit	ific year group considering the demogra bject and in a practical setting based ar	phic of our students. The intention of
Threshold			
Concepts (TCs):	Threshold concepts- Food		
	T1: Research- show understanding of the function and properties of ingredient	The state of the s	
	T2: Research and analysis- Nutrition- Be able to explain nutrition in regards to	- ·	
	T3: Preparation- Have the ability to prepare ingredients/ themselves/ the envir	onment for safe and effective pract	ical work.



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T4: Making- Can select ingredients to work with to reflect the needs of recipes and methods. Show evidence of a progressive development of technical skills through making.

T5: Evaluation-Can articulate the use of ingredients/ equipment. Can reflect and analyse dishes produced through sensory testing and can suggest improvements to products and performance.

<u>Threshold Concepts (Design Technology – following Iterative design process)</u>

T1- Context – Demonstrate understanding that all design technology activity takes place within all contexts that influence design practice T2-Analysis- Exploration of design opportunities & user's needs, wants & values.

T3-Design- Develop realistic design proposals, using a range of designing strategies including Isometric/ orthographic and CAD to meet a stakeholder need, within a given context and solves a problem. Link to wider contexts such as environmental impact- Product life cycles

T4-Test and model -Develop a broad knowledge of materials and their properties including source & origin. Use a range of practical skills, materials, tools and equipment. Use a range of testing methods to see if a model is fit for purpose both accurately & safely.

T5- Evaluate and modify- Explain and justify decisions made, linked back to the design, modelling and researching of a context to meet needs of a stake holder. Suggest modifications and changes to make a product or idea more fitting of the context and meet the needs of a stake holder.

KS2 National Curriculum summary:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

- Design:
- 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, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Make:
- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing],
 accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- Evaluate:
- 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

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	 Technical Knowles apply their understand and understand and apply their understand and Cooking and nuterstand and understand and prepare and cook 	edge: erstanding of how to stren use mechanical systems in use electrical systems in erstanding of computing t crition: apply the principles of a lock a variety of predominan	o program, monitor and c	ce more complex structunple, gears, pulleys, cams le, series circuits incorpointrol their products	res , levers and linkages] rating switches, bulbs, buz ques	zers and motors]
Learner skills:	Critical thinking	Organisation	Collaboration	Adaptability	Oracy	Self-quizzing
	CRITICAL THINKING	ORGANISATION	COLLABORATION	ADAPTABILITY	ORACY	SELF QUIZZING
	Year 7 Rotation 1- RM Handy Stand- Plastics	Year 7 Rotation 2- RM Handy Stand- Plastics	Year 7 Rotation 1- Textiles Applique Clock	Year 7 Rotation 2- Textiles Applique Clock	Year 7 Rotation 1- Food Health and safety/ Nutrition	Year 7 Rotation 2- Food Health and safety/ Nutrition
The Big Question	-	ect materials considering operties?	1	ect materials considering operties?	How does the food we eat	impact of our health?
Big picture questions:	Can you identify plastics/p Can you draw accurately (o How can we create ideas? How do we model? Can you work safely & inde	oblique/thickness)?	Where do natural and synt What is iterative design an design process? How are we influenced by How do we work safely & ind classroom? How do we gather researc	d how will it help our the work of others? ependently in the Textiles	How do we stay safe in the kitchen? What are macro nutrients and how do they impact our health? What does a healthy diet look like?	What are macro and micro nutrients and how do they impact our health? Why do some people have different dietary needs?

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Content (Linked to TCs):	T4-Test and model - Develop a broad knowledge of materials and their properties including source & origin. Use a range of practical skills, materials, tools and equipment. Use a range of testing methods to see if a model is fit for purpose both accurately & safely.	T2 Analysis T3 Design T5 Evaluate & Modify	T4-Test and model - Develop a broad knowledge of materials and their properties including source & origin. Use a range of practical skills, materials, tools and equipment. Use a range of testing methods to see if a model is fit for purpose both accurately & safely.	T2 Analysis T3 Design T5 Evaluate & Modify	Health and safety Introduction/ Healthy Eating and nutrition- T2/5 Practical's: T3/4 -Fruit salad -Flapjack -Spicy rice	Macro nutrients/ Energy balance/food labelling/ Special diets and needs of people T2/5 Practical's: T3/4 -Breakfast muffins (savoury) -Fruit crumble -Pizza on baguette
Key vocabulary:	Tier 2 & 3 vocabulary Acrylic Wet & Dry Polishing Scoring Design Thermoplastics Stencil Template Accuracy	Tier 2 & 3 vocabulary Acrylic Wet & Dry Polishing Scoring Design Thermoplastics Stencil Template Accuracy Tier 2 & 3 vocabulary	Tier 2 & 3 vocabulary Synthetic Natural Absorbent Resistant Abrasive Elasticity Renewable Function/Functionality	Tier 2 & 3 vocabulary Designer Artists Influence Stereotypical Controversial Political Ethical Moral Manufactured	Key vocabulary: Tier 3- subject specific: Health and safety/ the 4 C'S – Hazard/ control measure/ bacteria/ food poisoning/ food safety/ use by date/ bridge and claw hold/ danger zone/ high risk foods/ temperature control Eatwell guide/ nutrition/ nutrients/ carbohydrates/ protein/ fats/ macro nutrients/ micro nutrients/ energy balance / amino acids/ balanced diet/ excess/ deficiency/ function/ source/ nutritional	Key vocabulary: Tier 3- subject specific: Health and safety/ the 4 C'S – Hazard/ control measure/ bacteria/ food poisoning/ food safety/ use by date/ bridge and claw hold/ danger zone/ high risk foods/ temperature control Eatwell guide/ nutrition/ nutrients/ carbohydrates/ protein/ fats/ macro nutrients/ micro nutrients/ energy balance / amino acids/ balanced diet/ excess/ deficiency/ function/ source/ nutritional

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N'ANZ					labelling/ allergies/ intolerance religion/ obesity/ diet related conditions/	labelling/ allergies/ intolerance religion/ obesity/ diet related conditions/
Assessment:	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks. End of topic Summative Assessment 1	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks. End of topic Summative Assessment 2	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks. End of topic Summative Assessment 3
Key/Historical misconceptions in this unit:	Names of tools, equipment and tools and processes Design Fixation Originality of ideas	Evaluating practical skills. Measuring and marking out Developing refinement	The differences between Natural & Synthetic/Chemical What are properties? Names of tools, equipment and tools and processes Annotation v Labelling	Evaluating practical skills.	The difference between a hazard, risk and control measure. The difference between excess and deficiency. Names of key equipment and tools. Names of specific ingredients.	The difference between a deficiency, excess and function. Difference between a macro and micro nutrient and the role they play in a healthy diet. Amino acids in protein. Evaluating practical skills.
Sequencing:	year 7 curriculum aims to b	•	t build a solid foundation in [s KS3 and bring some elemer of KS3 and into KS4. Developin	



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Values	Curiosity - Introducing new	ideas and themes though	out, developing the knowledg	ge to be able make products	s better using a wide range o	ftechniques
	Compassion - Learning how	to keep each other safe in	the various D&T environmen	nts, how can we improve de	esign to better all.	
	Courage – Take ownership	of projects and to take risk	s with their design choices. To	o be bold when trying some	thing new which may seem s	scary or challenging at first.
National	In addition to teaching the statutory elements of the national curriculum, we also include some elements required at KS4 to ensure a solid foundation is built early on					
Curriculum plus:	in the KS3 journey.					
•			oss referenced through all les			
	_		gh language of aspiration eg	_		
	=		curriculum back to careers a	nd real world experiences ir	n industry eg machinery, equ	ipment, how small
	production methods can be	e upscaled to mass product	ion methods etc.		Voor 0	Vaar 0
	Year 8	Year 8	Year 8	Year 8	Year 8	Year 8
	Rotation 1- RM	Rotation 2- RM	Rotation 1- Textiles	Rotation 2- Textiles	Rotation 1- Food	Rotation 2- Food
	Jewellery/ Metals	Jewellery/ Metals	Wash bag	Wash bag	Provenance/ World	Provenance/ World
	,,	,,			foods	foods
The Big	How is design influence	d by society & culture?	How is design influenced by society & culture?			
Question		, ,			Where does our food com influenced to eat it?	e from and how are we
Big picture	What are metals?		What has influenced these	existing products?	How do we stay safe in	How does historical
questions:	How do we decorate ourse	lves?			the kitchen?	events and geography
	What is industrial scale?		How does iterative design support our project?		Why should we know	impact on what we eat?
	Can you develop ideas?		Can you correctly identify the key components and		about food from around	How and why should we
	NA/batio mandallima?		how they have been used to construct a product?		the world? How does	be inspired by fair trade?
	What is modelling?		What is ACCESS FMM?		historical events and geography impact on	Where does our food come from and what are
			How do we justify a specification? What is user centred design?		what we eat?	impacts of this on the
			Triat is user centiled desig	,,,,	mac we cat.	environment? How can
						we eat in a more
						sustainable way?

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Content (Linked to TCs):	Health & safety T1 - CONTEXT T3 - DESIGN	Health & safety T4 – TEST & MODEL T5 – EVALUATE & MODIFY	Health & Safety T1 - CONTEXT T2 – ANALYSIS	Health & safety T4 – TEST & MODEL T5- EVALUATE & MODIFY	Health and safety Introduction/ Cultural cuisine/ Italian/ Chinese/ British foods T1/2/5 Practical's: T3/4 -Chocolate chip cookies -Bread based pizza (yeast) -Spring rolls	Fair trade/ where our food comes from (Farming/ Fishing and crops)/ Seasonality T1/2/5 Practical's: T3/4 -Potatoe layer bake -Banana loaf -Chicken fajitas
Key vocabulary:	Tier 2 QEMS vocab list Estimate Similar Strategies Relevant Comments Specified Constraints Technical Mechanism Dimensions Perspective Amendment	Compass, Molten, Design, Jewellery, Decoration, casting, segment, mould, Bessemer	Tier 2 QEMS vocab list Create Concept Section Construction Features Positive Techniques Components Style Challenge Accurate Instructions	Component Production Planning, Evaluate, Bespoke	Tier 3- subject specific: Health and safety/ the 4 C'S – Cooking/ cleaning/ cross contamination/ chilling/ Hazard/ risk/ control measure/ preparation/ bacteria/ food poisoning/ food safety/ fair trade/ seasonality/ historical events/ geography/ immigration/ emigration/ climate/ weather/ fair trade/ sensory testing/ seasonality/ farming/ fishing/ crops/ multi- culture/ culture/ religion/ locally sourced/ nutrition	Tier 3- subject specific: Health and safety/ the 4 C'S – Cooking/ cleaning/ cross contamination/ chilling/ Hazard/ risk/ control measure/ preparation/ bacteria/ food poisoning/ food safety/ fair trade/ seasonality/ historical events/ geography/ immigration/ emigration/ climate/ weather/ fair trade/ sensory testing/ seasonality/ farming/ fishing/ crops/ multi- culture/ culture/ religion/ locally sourced/ nutrition
Assessment:	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class
	feedback to specific learning and repair tasks.	feedback to specific learning and repair tasks.	feedback to specific learning and repair tasks.	feedback to specific learning and repair tasks.	feedback to specific learning and repair tasks.	feedback to specific learning and repair tasks.



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		End of topic Summative Assessment 1		End of topic Summative Assessment 2		Summative Assessment 2
Key/Historical misconceptions in this unit:	Independent learning Using ruler & pencil to draw with Realising intentions (2D- 3D)		Clarity on The iterative design process Scales of production Correct & safe use of tools & equipment Components		Historical and geographical links to food production. How food in the UK is influenced from other cultures/ religions/ countries and trends.	How food is produced-farming- fishing and crop growth. What impacts on this. Fair trade and the impact on farmers and consumers. Sustainability in food and the impact on the
Sequencing:	year 8 curriculum aims to b	 nce the year 8 curriculum like puild on prior knowledge fro ased skills across all DT areas	m KS2 and year 7 but build a	solid foundation in DT for t		
Values		v ideas and themes though o		·		f techniques
	Courage - Take ownership	of projects and to take risks	with their design choices. T	o he hold when trying some	thing new which may seem	scary or challenging at first
National Curriculum plus:	In addition to teaching the in the KS3 journey. Courage, Curiosity & Comp The idea of building vocation links to the subject we teach	of projects and to take risks statutory elements of the national state of the national state of the national and careers links through the careers links through a through linking the care upscaled to mass productions.	ational curriculum, we also in oss referenced through all leading gh language of aspiration eg curriculum back to careers a	nclude some elements requi ssons where best fits. calling our students chefs or	red at KS4 to ensure a solid	foundation is built early on those wider real world

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7.00	Storage unit- wood/ manufactured boards	Storage unit- wood/ manufactured boards			Health and safety/ Bacteria	Health and safety/ Bacteria
The Big Question	How does our designing, making & disposal consider the environment?		How does our designing, making & disposal consider the environment?		Why do we need to consider food safety?	
Big picture questions:	Can you identify timber types? How do we join materials? How do you work with accuracy? What does it mean to 'Finish' a product?		How does design & Manufacturing fit into the wider world? What are the environmental impacts of manufacturing? As designers, how can we be more sustainable? What are the 6R's?		How do we stay safe in the kitchen? What is bacteria and how/ why does it make us ill? How can we avoid cross contamination? How can we control bacteria when cooking? Why does some foods need to be refrigerated?	What are date marks and food labels used for? What is the difference between an intolerance and an allergy? Why do pests impact on food safety? What is an EHO and what do they do?
Content (Linked to TCs):	T2 - Analysis	T4 – TEST & MODEL T5 – EVALUSTE & MODIFY	T1 - CONTEXT T3 DESIGN - Develop realistic design proposals, using a range of designing strategies including Isometric/ orthographic and CAD to meet a stakeholder need, within a given context and solves a problem. Link to wider contexts such as environmental impact- Product life cycles	T4-TEST & MODEL T5 – EVALUATE & MODIFY	Health and safety Introduction/ Risk assessments (hazards and control measures)/ Bacteria basics/ food borne ill health/ safe storage- T3/5 Practical's: -Cheese and onion pasties -Meat balls and sauce -Chocolate brownies- T3/4	Date marks and food labels/ allergies and intolerances/ personal hygiene/ The role of the EHO- T2/3/5 Practical's: -Mini quiches -Chicken stir fry -Cheese pasta bake T3/4

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E. Si R C SI D P	Tier 2 QEMS vocab list Estimate Similar Strategies Relevant Comments Specified Constraints Fechnical Mechanism Dimensions Perspective Amendment	Accuracy, accurate, jig, former, prototype, Coping saw, Halving joint, finger joint, adhesive, epoxy resin, tenon saw	Tier 2 QEMS vocab list Create Concept Section Construction Features Positive Techniques Components Style Challenge Accurate Instructions	Innovation, Innovative, Creativity, Applique, Embellishment, Client, Life Cycle, Sustainability	Tier 3- subject specific: Health and safety/ the 4 C'S – Hazard/ control measure/ bacteria/ food poisoning/ food safety/ use by date/ bridge and claw hold/ danger zone/ high risk foods/ temperature control/ Hot holding temperatures/ refrigeration/ pests/ disease/ food borne illness/ symptoms/ EHO- Environmental health officer/ inspection/ food standards agency/ personal hygiene/ intolerance/ allergy/ use by date.	Tier 3- subject specific: Health and safety/ the 4 C'S – Hazard/ control measure/ bacteria/ food poisoning/ food safety/ use by date/ bridge and claw hold/ danger zone/ high risk foods/ temperature control/ Hot holding temperatures/ refrigeration/ pests/ disease/ food borne illness/ symptoms/ EHO- Environmental health officer/ inspection/ food standards agency/ personal hygiene/ intolerance/ allergy/ use by date.
sl R e: fe	Assessment of practical kills. Recall/ retrieval practice/exit tickets/ whole class eedback to specific earning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.	Assessment of practical skills. Recall/ retrieval practice/ exit tickets/ whole class feedback to specific learning and repair tasks.
		End of topic		End of topic		End of topic



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		Summative Assessment 1		Summative Assessment 2		Summative Assessment 3	
Key/Historical misconceptions in this unit:	Annotation V Labelling Accuracy in manufacture Following a plan		Design development Design fixation		The difference between a hazard, risk and control measure.	The difference betweer the use by and sell by dates.	
			6R's Life cycles of products		Specific bacteria and how it can make us ill.	The difference between an allergy and intolerance.	
			Life cycles of products		Symptoms of food poisoning.	The role of the EHO in catering environments	
					How to avoid cross contamination.	catering environments	
					Cooking with raw meat rules.		
ļ	!				Storing food safely.		
Sequencing:	We have chosen to sequence the year 9 curriculum like this because content cross links from KS2, covers across KS3 and bring more elements needed at KS4. The year 9 curriculum aims to build on prior knowledge from KS2 and year 7 and 8 but build a solid foundation in DT for the onward journey of KS3 and into KS4. Developing knowledge and practical based skills across all DT areas and covering the threshold concepts.						
Value	Curiosity - Introducing new ideas and themes though out, developing the knowledge to be able make products better using a wide range of techniques						
	Compassion – Continue to learn how to keep each other safe in the various D&T environments and how can we improve design to better all.						
ļ	Courage – Take ownership of projects and to take risks with their design choices. To be bold when trying something new which may seem scary or challenging at firs						
National Curriculum plus:	In addition to teaching the statutory elements of the national curriculum, we also include some elements required at KS4 to ensure a solid foundation is but journey. Courage, Curiosity & Compassion is embedded and cross referenced through all lessons where best fits. The idea of building vocational and careers links through language of aspiration eg calling our students chefs or designers and encouraging those wider real links to the subject we teach. Also through linking the curriculum back to careers and real world experiences in industry eg legislation, machinery, equipmes small production methods can be upscaled to mass production methods etc.					foundation is built at KS	



