

Year 8 Design & Technology - Cooking & Nutrition

Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p>What will I be learning about in this Learning Programme?</p> <p>The foods we should eat through analysing diets, developing knowledge of the functions of nutrients and ways to meet our changing nutritional needs.</p> <p>Where have I seen this learning before?</p> <p>In year 7 you learnt about controlling the 4Cs of food safety to prevent food poisoning bacteria multiplying and how to ensure our food is safe to eat. You also develop knowledge on the basic functions of nutrients needed for a healthy diet.</p> <p>What could I use it for?</p> <p>The topics in this Learning Programme are the key building blocks for many food topics over your next 4 years and will have links into many other subjects you study. It will also equip you with knowledge and recipes to cook healthy balanced meals at home.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> Capital letters must be used at the start of sentences and for the first letter of proper nouns Full stops must be used at the end of a sentence Question marks must be used at the end of a question Apostrophes should only be used for possession or omission Days of the week and months must be spelled correctly Key words must be spelled correctly
<p>In LP4.1, I will know:</p> <p>the functions and food sources of macro nutrients; the functions and food sources of micro nutrients.</p>	<p>04/03/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Nutrients</p>	<p>Homework</p> <p>Micro and macro nutrients.</p>
<p>In LP4.2, I will know:</p> <p>my strengths and areas for development from my learning so far; how to apply preparation and cooking techniques to make potato croquettes.</p>	<p>11/03/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Coating</p>	<p>Homework</p> <p>Practical evaluation.</p>
<p>In LP4.3, I will know:</p> <p>the nutritional and dietary needs of specific groups.</p> <p>Extended Task.</p>	<p>18/03/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Intolerances</p>	<p>Homework</p> <p>Dietary needs of specific groups.</p>
<p>In LP4.4, I will know:</p> <p>how to adapt dishes; how to apply the preparation and cooking techniques to make and even batch of scones.</p>	<p>25/03/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Glazing</p>	<p>Homework</p> <p>Adapting a recipe for a group of people.</p>
<p>In LP4.5, I will know:</p> <p>the importance of temperature control in reducing food poisoning.</p>	<p>15/04/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Pathogen</p>	<p>Homework</p> <p>Food Safety and Food Poisoning.</p>
<p>In LP4.6, I will know:</p> <p>how to apply preparation and cooking techniques to make tear and share bread.</p> <p>Extended Task.</p>	<p>22/04/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Kneading</p>	<p>Homework</p> <p>Practical evaluation of outcome and skills.</p>
<p>In LP4.7, I will know:</p> <p>how to apply preparation and cooking techniques to make chicken fajitas.</p>	<p>29/04/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Stir frying</p>	<p>Homework</p> <p>Preparation and Cooking Techniques.</p>
<p>In LP4.8, I will know:</p> <p>how to apply preparation and cooking techniques to make an all in one cake.</p>	<p>06/05/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Creaming method</p>	<p>Homework</p> <p>Learning review task.</p>
<p>Resources to support learning:</p> <p>The following websites contain extensive revision material and information to increase Cooking & Nutrition subject knowledge:</p> <p>www.food.gov.uk;</p> <p>www.foodfactoflife.org.uk;</p> <p>www.britishnutritionfoundation.co.uk;</p>		
<p>FFET Award Challenge for this Learning Programme:</p> <p>Create an information poster to educate others about a specific dietary need.</p>		

PRT Task 1

PRT Task 2

Year 8 Design & Technology - Graphics Bottle Branding

Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p>What will I be learning about in this Learning Programme?</p> <p>The history and importance of product branding. How to write a brief and develop a brand. The importance of anthropometrics and ergonomics in design. How to apply 3D drawing and rendering techniques. How to use Styrofoam for block modelling.</p> <p>Where have I seen this learning before?</p> <p>In Year 7 design & technology you will have designed a range of prototypes using annotated sketches; you will have used workshop equipment to cut and shape materials into prototypes.</p> <p>What could I use it for?</p> <p>You will apply the different design techniques and the iterative design process extensively when designing and modelling in year 9 and at GCSE Design and Technology level.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> Capital letters must be used at the start of sentences and for the first letter of proper nouns Full stops must be used at the end of a sentence Question marks must be used at the end of a question Apostrophes should only be used for possession or omission Days of the week and months must be spelled correctly Key words must be spelled correctly
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PRT Task 1	In LP4.1, I will know:	04/03/24 - (WK 1)	Key Vocabulary	Homework
	what branding and marketing is and how they influence consumer decisions; how to write a design brief to include a primary user.		Branding	Produce a mood board which reflects my brand.
PRT Task 2	In LP4.2, I will know:	11/03/24 - (WK 2)	Key Vocabulary	Homework
	my strengths and areas for development from my learning so far; why and how we explore and analyse existing products; what anthropometrics is and how to calculate anthropometric data.		Anthropometrics	Explore and evaluate existing drinks packaging & brands.
PRT Task 1	In LP4.3, I will know:	18/03/24 - (WK 1)	Key Vocabulary	Homework
	why ergonomics is important when designing products; how to write a design specification using ACCESS FM.		Ergonomics	Complete a maths question on anthropometrics.
PRT Task 2	In LP4.4, I will know:	25/03/24 - (WK 2)	Key Vocabulary	Homework
	how to develop a unique brand name with appropriate lettering style; how to create unique logo designs with colour to represent the bottle brand.		Typography	Create a logo idea for a brand.
PRT Task 1	In LP4.5, I will know:	15/04/24 - (WK 1)	Key Vocabulary	Homework
	how to use the ellipse technique to graphically present 3D bottle design ideas; how to label and annotate my designs to communicate my ideas.		Rendering	Complete a rendering graphics task.
PRT Task 2	In LP4.6, I will know:	22/04/24 - (WK 2)	Key Vocabulary	Homework
	how bottles are manufactured using the blow moulding process; how to use the hot wire sculptor and file to cut the shape of my bottle prototype.		Prototype	Analyse the information on a drinks label.
PRT Task 1	In LP4.7, I will know:	29/04/24 - (WK 1)	Key Vocabulary	Homework
	how to use abrasive paper to shape and finish my bottle prototype.		Abrasive	Create market research survey questions about my drink packaging and branding.
PRT Task 2	In LP4.8, I will know:	06/05/24 - (WK 2)	Key Vocabulary	Homework
	how to test the ergonomics of my prototyped design and identify strengths, weaknesses and future improvements.		Testing	Learning review task.

<p>Resources to support learning:</p> <p>The following websites contain extensive revision material and information to increase design & technology subject knowledge:</p> <p>www.technologystudent.com;</p> <p>www.mr-dt.com;</p> <p>www.bbc.co.uk/bitesize.</p>
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<p>FFET Award Challenge for this Learning Programme:</p> <p>Create a recycling campaign to encourage pupils to recycle bottles at school.</p>
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Year 8 Design & Technology - Polymers Desk Tidy Design Learning Programme 4

The LORIC skill focus for his LP is: INITIATIVE.		Literacy: <ul style="list-style-type: none">• Capital letters must be used at the start of sentences and for the first letter of proper nouns• Full stops must be used at the end of a sentence• Question marks must be used at the end of a question• Apostrophes should only be used for possession or omission• Days of the week and months must be spelled correctly• Key words must be spelled correctly
The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.		
Integrity - Having strong moral principles.		
Gratitude - Feeling and expressing thanks.		
What will I be learning about in this Learning Programme?		
The source, categories and types of polymers; the impact of polymers on the environment. The process of thermoforming polymers. Communicating design ideas and applying workshop safety when shaping and forming polymers.		
Where have I seen this learning before?		
In Year 7 design & technology you will have used these tools and equipment to make prototypes from timbers, papers & boards and textiles. You will have learnt about the sources of timbers and papers and boards and how they are processed.		
What could I use it for?		
You can use polymer materials to manufacture products in design & technology over your next 6 years; you will apply your knowledge of polymers in the GCSE Design & Technology exam. You can use hand tools to create polymer items in your everyday life.		

In LP4.1, I will know:		04/03/24 - (WK 1)	Key Vocabulary	Homework
what synthetic polymers are, their source and how they are processed; the environmental and social impact of using polymers to make products.			Polymers	The stages of processing polymers.
In LP4.2, I will know:		11/03/24 - (WK 2)	Key Vocabulary	Homework
my strengths and areas for development from my learning so far; the difference between thermoplastic and thermosetting polymers; the different types of polymers, their properties and uses.			Thermosetting	Polymers and the environment.
In LP4.3, I will know:		18/03/24 - (WK 1)	Key Vocabulary	Homework
the difference between cross and draw filing techniques to finish the edges of an acrylic paper clip.			Draw filing	Research polymer products.
Extended Task.				
In LP4.4, I will know:		25/03/24 - (WK 2)	Key Vocabulary	Homework
what thermoforming is, and how a strip heater is used to form an acrylic paper clip; what a manufacturing jig and how it ensures consistent quality.			Thermoforming	Working safely in the DT workshop.
In LP4.5, I will know:		15/04/24 - (WK 1)	Key Vocabulary	Homework
how to explore the desk tidy context using the 5Ws strategy.			Context	Filing manufacturing methods.
In LP4.6, I will know:		22/04/24 - (WK 2)	Key Vocabulary	Homework
how to investigate requirements and record the sizes of stationery.			Requirements	Interview your desk tidy primary user.
Extended Task.				
In LP4.7, I will know:		29/04/24 - (WK 1)	Key Vocabulary	Homework
how to communicate my desk tidy ideas using 2D & 3D techniques and annotation.			Annotation	Product analysis of existing desk tidy.
In LP4.8, I will know:		06/05/24 - (WK 2)	Key Vocabulary	Homework
how to test my desk tidy idea through precise card modelling.			Modelling	Learning review task.

Resources to support learning:	
The following websites contain extensive revision material and information to increase design & technology subject knowledge: www.technologystudent.com ; www.mr-dt.com ; www.bbc.co.uk/bitesize .	

FFET Award Challenge for this Learning Programme:
Interview a primary school pupil to find out their needs and wants for a desk tidy. You can choose how to present your questions and their answers.

PRT Task 1

PRT Task 2

Year 8 Design & Technology - Polymers Desk Tidy Manufacture Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p>What will I be learning about in this Learning Programme?</p> <p>How to use a Gantt Chart to plan the stages of manufacture to make a functioning polymer desk tidy. How to use a range of tools and equipment correctly and safely. About the different forms of polymer forming and moulding methods.</p> <p>Where have I seen this learning before?</p> <p>You will build on your learning from the last Learning Programme in which you were introduced to working with polymers in the D&T workshop.</p> <p>What could I use it for?</p> <p>You can use polymer materials to manufacture products in design & technology over your next 6 years; you will apply your knowledge of polymers in the GCSE Design & Technology exam. You can use hand tools to create polymer items in your everyday life.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> Capital letters must be used at the start of sentences and for the first letter of proper nouns Full stops must be used at the end of a sentence Question marks must be used at the end of a question Apostrophes should only be used for possession or omission Days of the week and months must be spelled correctly Key words must be spelled correctly
<p>In LP4.1, I will know:</p> <p>how to use a Gantt chart and my initiative to plan the manufacturing stages of my desk tidy; which equipment and material I will be using and will have gratitude for the resources that are provided.</p>	<p>04/03/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Gantt chart</p>	<p>Homework</p> <p>Measuring shapes in millimetres.</p>
<p>In LP4.2, I will know:</p> <p>my strengths and areas for development from my learning so far; how templates ensure accuracy when marking out the desk tidy.</p>	<p>11/03/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Template</p>	<p>Homework</p> <p>Calculating area task.</p>
<p>In LP4.3, I will know:</p> <p>how to use of a file to smooth the edges of my acrylic body; how to use a coping saw and scroll saw to cut out my acrylic desk tidy head.</p> <p>Extended Task.</p>	<p>18/03/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Wastage</p>	<p>Homework</p> <p>Risk assessment of tools and equipment.</p>
<p>In LP4.4, I will know:</p> <p>how different grades of wet and dry paper can produce a smooth finish; how to use a step drill bit in the pillar drill to create the pen holes for my desk tidy.</p>	<p>25/03/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Drill bit</p>	<p>Homework</p> <p>Polymer questions to retrieve my knowledge.</p>
<p>In LP4.5, I will know:</p> <p>how to shape my acrylic desk tidy body using a convection oven or strip heater.</p>	<p>15/04/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Former</p>	<p>Homework</p> <p>Describe how to thermoform using the convection oven safely.</p>
<p>In LP4.6, I will know:</p> <p>how polymer products are manufactured using the injection moulding process; how to apply a decorative finish to enhance its aesthetics for my primary user.</p> <p>Extended Task.</p>	<p>22/04/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Decorative finish</p>	<p>Homework</p> <p>Describe the injection moulding process.</p>
<p>In LP4.7, I will know:</p> <p>how to use a glue gun safely to assemble the parts of my desk tidy; how to finalise my desk tidy ready for the primary user.</p>	<p>29/04/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Assemble</p>	<p>Homework</p> <p>Primary user feedback.</p>
<p>In LP4.8, I will know:</p> <p>how to test and evaluate the quality of my desk tidy and show compassion and honesty when evaluating the work of my peers.</p>	<p>06/05/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Testing</p>	<p>Homework</p> <p>Learning review task.</p>
<p>Resources to support learning:</p> <p>The following websites contain extensive revision material and information to increase design & technology subject knowledge:</p> <p>www.technologystudent.com;</p> <p>www.mr-dt.com;</p> <p>www.bbc.co.uk/bitesize.</p>		
<p>FFET Award Challenge for this Learning Programme:</p> <p>Create a 'user testing' report to evaluate how well your desk tidy works.</p>		

PRT Task 1

PRT Task 2

Year 8 Design & Technology - Systems Night Light Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p>What will I be learning about in this Learning Programme?</p> <p>Electronic systems and their input, process and output. The function of electronic components. How to solder safely to produce a functioning Night Light.</p> <p>Where have I seen this learning before?</p> <p>In KS2 design & technology you will have used simple electronic components to make electrical systems in a product.</p> <p>What could I use it for?</p> <p>You can use electronic components to manufacture electronic systems in design & technology over your next 6 years; you will apply your knowledge of electronic systems in the GCSE Design & Technology exam.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> Capital letters must be used at the start of sentences and for the first letter of proper nouns Full stops must be used at the end of a sentence Question marks must be used at the end of a question Apostrophes should only be used for possession or omission Days of the week and months must be spelled correctly Key words must be spelled correctly 	
<p>In LP4.1, I will know: 04/03/24 - (WK 1)</p> <p>that all systems consist of an input, process and output; why we use diagrams to show how electronic circuits work.</p>		<p>Key Vocabulary</p> <p>Input</p>	<p>Homework</p> <p>Find 3 systems in your home and identify their input, process and output.</p>
<p>In LP4.2, I will know: 11/03/24 - (WK 2)</p> <p>my strengths and areas for development from my learning so far; the name, symbol and function of the components I will use in my night light circuit.</p>		<p>Key Vocabulary</p> <p>Circuit</p>	<p>Homework</p> <p>Describe the input, process and output for two systems that use sensors.</p>
<p>In LP4.3, I will know: 18/03/24 - (WK 1)</p> <p>how to demonstrate resilience when safely using the soldering iron.</p> <p>Extended Task.</p>		<p>Key Vocabulary</p> <p>Soldering</p>	<p>Homework</p> <p>Produce a step-by-step storyboard to explain how to use the soldering iron safely.</p>
<p>In LP4.4, I will know: 25/03/24 - (WK 2)</p> <p>how to use CAD 2D Design to present a Night Light shade final design; how to safely and precisely solder components onto a circuit board.</p>		<p>Key Vocabulary</p> <p>CAD (Computer aided design)</p>	<p>Homework</p> <p>Explain the positives and negatives of using CAD.</p>
<p>In LP4.5, I will know: 15/04/24 - (WK 1)</p> <p>the advantages and disadvantages of using the CAM laser cutter; how to convert my 2D design file to the laser cutter.</p>		<p>Key Vocabulary</p> <p>Convert</p>	<p>Homework</p> <p>Explain the positives and negatives of using CAM.</p>
<p>In LP4.6, I will know: 22/04/24 - (WK 2)</p> <p>how to test and troubleshoot any problems on my circuit board.</p> <p>Extended Task.</p>		<p>Key Vocabulary</p> <p>CAM (Computer aided manufacture)</p>	<p>Homework</p> <p>Describe the stages of the vacuum forming process.</p>
<p>In LP4.7, I will know: 29/04/24 - (WK 1)</p> <p>what the main stages of the vacuum forming process are, to manufacture the night light base.</p>		<p>Key Vocabulary</p> <p>Vacuum forming</p>	<p>Homework</p> <p>Primary user feedback of the night light in use.</p>
<p>In LP4.8, I will know: 06/05/24 - (WK 2)</p> <p>how to use my initiative to assemble all parts of my night light product; how to test and evaluate my final night light product and suggest improvements.</p>		<p>Key Vocabulary</p> <p>Improvement</p>	<p>Homework</p> <p>Learning review task.</p>
<p>Resources to support learning:</p> <p>The following websites contain extensive revision material and information to increase design & technology subject knowledge:</p> <p>www.technologystudent.com;</p> <p>www.mr-dt.com;</p> <p>www.bbc.co.uk/bitesize.</p>			
<p>FFET Award Challenge for this Learning Programme:</p> <p>Create a safe soldering fact sheet for pupils to use a guide when soldering.</p>			

PRT Task 1

PRT Task 2