



Building Cognitive Architecture – Coherent and Connected – Knowledge and Skill Based

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
School Value	Thankfulness	Justice	Endurance	Compassion	Koinonia	Trust
	KS3 work on a Group A and B rotation throughout the academic year where they will be studying DT and Food and Nutrition.					
Year 7 DT	DT: Device Holder Unit (Group A)	DT Tea Light (Group A)	DT: Device Holder Unit (Group A)	DT Tea Light (Group B)	DT: Drawing Skills Unit (Group A then B)	
Key Concepts/ideas	<ul style="list-style-type: none"> ▪ Main properties, advantages and applications of thermoplastics. ▪ Using creativity and imagination, apply theoretical knowledge by designing and making a thermoplastic device holder that can be used in school or at home. ▪ Showing consideration of your own needs and wants, aesthetics and function within the prototype design. ▪ Health and Safety in the workshop: Pillar drill, strip heater, dust control, PPE. ▪ Graphic communications 2D/3D. ▪ Design brief ▪ Specification ▪ Modelling ideas ▪ Annotating ideas using ACCESS FM. ▪ Measuring, marking out and shaping of materials ▪ Use specialist tools and equipment, which may include hand tools or machines. ▪ Plan of Manufacture ▪ Evaluating 	<ul style="list-style-type: none"> ▪ Working as a designer to design and manufacture an innovative tea light prototype using recycled materials to help reduce the environmental impact of wastage and unnecessary production of new materials. ▪ Design brief ▪ Specification ▪ Product Analysis ▪ Annotating design ideas using ACCESS FM ▪ Generating creative designs/working drawings/ orthographic drawings ▪ Wood joinery ▪ Health and Safety in the workshop: hand drill, disc sander, hand tools for cutting resistant materials, PPE ▪ Sustainability issues within design ▪ Timbers – softwoods and hardwoods ▪ Mood boards ▪ Using specialist tools, processes and equipment ▪ Evaluating 	<ul style="list-style-type: none"> ▪ Main properties, advantages and applications of thermoplastics. ▪ Using creativity and imagination, apply theoretical knowledge by designing and making a thermoplastic device holder that can be used in school or at home. ▪ Showing consideration of your own needs and wants, aesthetics and function within the prototype design. ▪ Health and Safety in the workshop: Pillar drill, strip heater, dust control, PPE. ▪ Graphic communications 2D/3D. ▪ Design brief ▪ Specification ▪ Modelling ideas ▪ Annotating ideas using ACCESS FM. ▪ Measuring, marking out and shaping of materials ▪ Use specialist tools and equipment, which may include hand tools or machines. ▪ Plan of Manufacture ▪ Evaluating 	<ul style="list-style-type: none"> ▪ Working as a designer to design and manufacture an innovative tea light prototype using recycled materials to help reduce the environmental impact of wastage and unnecessary production of new materials. ▪ Design brief ▪ Specification ▪ Product Analysis ▪ Annotating design ideas using ACCESS FM ▪ Generating creative designs/working drawings/ orthographic drawings ▪ Wood joinery ▪ Health and Safety in the workshop: hand drill, disc sander, hand tools for cutting resistant materials, PPE ▪ Sustainability issues within design ▪ Timbers – softwoods and hardwoods ▪ Mood boards ▪ Using specialist tools, processes and equipment ▪ Evaluating 	<ul style="list-style-type: none"> ▪ Developing orthographic and isometric drawing skills in preparation for the Year 8 Marble Maze Unit. 	
Sequence of Learning	We start year 7 with health and safety training. They learn how to move around the workshop and use the hand tools and		We start year 7 with health and safety training. They learn how to move around the workshop and use the hand tools and		Pupils develop basic graphic communications skills through	



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	<p>machinery safely and independently. The machines they are introduced to are the strip heater, pillar drill and hand drill. They are also taught how to cut materials safely using hand tools such as files, chisel and hand saws. Pupils are also trained on the use PPE, setting up and clearing away practical work safely. We then start with the foundation skills of designing and then develop planning skills for the practical work. Pupils have the opportunity to produce a device holder and a tea light. We also cover graphics skills as part of design communication. For knowledge and understanding pupils learn about materials and their working properties (polymer and wood), sustainability and the environment.</p>	<p>machinery safely and independently. The machines they are introduced to are the strip heater, pillar drill and hand drill. They are also taught how to cut materials safely using hand tools such as files, chisel and hand saws. Pupils are also trained on the use PPE, setting up and clearing away practical work safely. We then start with the foundation skills of designing and then develop planning skills for the practical work. Pupils have the opportunity to produce a device holder and a tea light. We also cover graphics skills as part of design communication. For knowledge and understanding pupils learn about materials and their working properties (polymer and wood), sustainability and the environment.</p>	<p>orthographic and isometric drawing.</p>
Key Opportunities			
Year 7 Food and Nutrition	Food and Nutrition: Healthy Meal Planning unit (Group B)	Food and Nutrition: Healthy Meal Planning unit (Group A)	Food and Nutrition: Bread Unit (Group B then A)
Key Concepts/ideas	<ul style="list-style-type: none"> ▪ Preparing ingredients and cooking a repertoire of primarily savoury dishes ▪ How to follow a recipe ▪ What constitutes a healthy meal linked to NHS recommendations and the dietary requirements for young children and teenagers. ▪ Malnutrition ▪ Deficiency ▪ How to plan and cook a balanced meal for young children, teenagers and adults. ▪ Eatwell guide – Maintaining a healthy balanced diet, the importance of hydration and traffic light food labelling. ▪ Weighing and measuring food and liquids accurately ▪ How to use a hob and oven safely for cooking ▪ Food hygiene and safety including personal hygiene, 4Cs – storing and preparing foods and prevention of cross-contamination ▪ Sustainable food choices ▪ Importance of senses when making food choices - sight, taste, touch and aroma. ▪ Sensory analysis to test and evaluate food products – Star profile and rating tests ▪ How to use nutritional analysis software to calculate nutritional values 	<ul style="list-style-type: none"> ▪ Preparing ingredients and cooking a repertoire of primarily savoury dishes ▪ How to follow a recipe ▪ What constitutes a healthy meal linked to NHS recommendations and the dietary requirements for young children and teenagers. ▪ Malnutrition ▪ Deficiency ▪ How to plan and cook a balanced meal for young children, teenagers and adults. ▪ Eatwell guide – Maintaining a healthy balanced diet and the importance of hydration. ▪ Weighing and measuring food and liquids accurately ▪ How to use a hob and oven safely for cooking ▪ Food hygiene and safety including personal hygiene, 4Cs – storing and preparing foods and prevention of cross-contamination ▪ Sustainable food choices ▪ Importance of senses when making food choices - sight, taste, touch and aroma. ▪ Sensory analysis to test and evaluate food products – Star profile and rating tests ▪ How to use nutritional analysis software to calculate nutritional values 	<ul style="list-style-type: none"> ▪ Breads from around the world. ▪ Use research to generate and develop design ideas. ▪ Designing a unique bread product for a target user including annotation. ▪ Function of ingredients used in bread making. ▪ Bread making process including the science behind how yeast works, protein – gluten, kneading and proving. ▪ Source and function of carbohydrate including fibre. ▪ Dietary recommendations for carbohydrate including fibre and how it relates to your diet. ▪ Food packaging
Sequence of Learning	<p>This unit has been designed to teach pupils how to prepare and cook a repertoire of primarily savoury dishes whilst learning about traditional dishes cooked by other cultures. The unit is delivered with an underpinning ethos of healthy meal planning; enabling pupils to feed themselves and others a healthy and balanced diet. Pupils will further develop the basic cooking skills they acquired in KS2 and recall knowledge of the basic dietary requirements from the Eatwell guide. This unit will prepare pupils for GCSE Food Preparation and Nutrition – Food, nutrition and health – Macronutrients, Food safety, making informed choices for a varied and balanced diet and selecting appropriate cooking methods.</p>		<p>This unit has been designed to teach pupils to develop a cultural insight of bread as a staple food in many cultures around the world and learn about the nutritional value of the ingredients and methods used. Pupils will apply their knowledge by designing and making a unique bread product. Pupils will also learn about the</p>



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					science of bread making through the processes used during production. This will prepare pupils for GCSE Food Preparation and Nutrition - food science – functional and chemical properties of food – fats and oils and raising agents.
Key Opportunities					
Year 8 DT	DT: Marble Maze (Group A)		DT: Marble Maze (Group B)		DT: Lino Printed Calico Tote Bag (Group A then B)
Key Concepts/ideas	<ul style="list-style-type: none"> Write a design brief and specification in order to develop a series of design ideas before manufacturing their chosen design. Product form, function and aesthetics Develop drawing skills (Isometric & exploded diagrams) Developing sketch modelling skills Use a range of techniques in order to produce their final product made from timber. Evaluate the product after completion, reflecting on whether they met the requirements of the specification. Health and safety in the workshop: pillar drill, hand drill, hand tools for cutting resistant materials including the craft knife, hot glue gun and PPE. 		<ul style="list-style-type: none"> Write a design brief and specification in order to develop a series of design ideas before manufacturing their chosen design. Product form, function and aesthetics Develop drawing skills (Isometric & exploded diagrams) Developing sketch modelling skills Use a range of techniques in order to produce their final product made from timber. Evaluate the product after completion, reflecting on whether they met the requirements of the specification. Health and safety in the workshop: pillar drill, hand drill, hand tools for cutting resistant materials including the craft knife, hot glue gun and PPE. 		<ul style="list-style-type: none"> Designing and cutting a Lino block based on a symbol which represents you. These will be used to print onto a calico memory bag.
Sequence of Learning	This is a Design and Make unit. Pupils design a vending machine applying their initial knowledge and skills of working with resistant materials in Year 7. They also have an opportunity to design and make a component from 3D printing. Pupils further develop their graphics communications skills using the Isometric drawing system. Pupils make decisions about the materials they need to build their machine, considering upcycling in sustainability.				
Key Opportunities					
Year 8 Food and Nutrition	Food and Nutrition: Pastries Unit (Group B)	Food and Nutrition: Bake Off Unit (Group B)	Food and Nutrition: Pastries Unit (Group A)	Food and Nutrition: Bake Off Unit (Group A)	DT: Multicultural Meals Unit (Group B then A)
Key Concepts/ideas	<ul style="list-style-type: none"> Function of ingredients in savoury pastry making Food products made using shortcrust and puff pastry. Developing food preparation skills through shortcrust and puff pastry making. Functional and chemical properties of fats and oils. How to design a shortcrust and 	<ul style="list-style-type: none"> Applying the core principles of baking science to the preparation of a variety of food products within set time constraints. Function of basic ingredients used in baking and the effects their absence has on a food product. Functional properties of ingredients used in baking. 	<ul style="list-style-type: none"> Function of ingredients in savoury pastry making Food products made using shortcrust and puff pastry. Developing food preparation skills through shortcrust and puff pastry making. Functional and chemical properties of fats and oils. How to design a puff pastry 	<ul style="list-style-type: none"> Applying the core principles of baking science to the preparation of a variety of food products within set time constraints. Function of basic ingredients used in baking and the effects their absence has on a food product. Functional properties of 	<ul style="list-style-type: none"> Diversity within food culture Making a variety of new cook/chill food products that reflect traditional cultural recipes from around the world whilst helping families to maintain a healthy balanced diet. Planning, preparing, modifying and cooking recipes from a range of countries and cuisines, using different cooking utensils and cooking methods. How international cuisines have influenced meals cooked by families in today's society. Multicultural ingredients/ meals



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	<p>puff pastry snack showing consideration of sensory features. i.e. taste, texture and appearance.</p> <ul style="list-style-type: none"> ▪ The needs of different people when designing a food product i.e. their preferences, diet - vegetarian, religion, allergy, health and age. ▪ Different methods of food preservation – short and long term ▪ Bacteria which cause food poisoning e.g. E.coli, salmonella etc... ▪ Handling high risk foods safely to avoid the growth of pathogenic bacteria. ▪ Sources and functions of vitamins, A, D, B-group and C. ▪ Sources and functions of calcium and iron. 	<ul style="list-style-type: none"> ▪ Chemical and mechanical raising agents ▪ Sweet and savoury ingredients ▪ Technical baking skills ▪ Showcasing creativity and presentation when making food products. ▪ How to write a recipe and method for making a baked food product linked to cakes, bread or pastry. Including time plans and health and safety checks where necessary. ▪ Evaluating food products –Sensory analysis and star profile 	<p>snack showing consideration of sensory features. i.e. taste, texture and appearance.</p> <ul style="list-style-type: none"> ▪ The needs of different people when designing a food product i.e. their preferences, diet - vegetarian, religion, allergy, health and age. ▪ Different methods of food preservation – short and long term ▪ Bacteria which cause food poisoning e.g. E.coli, salmonella etc... ▪ Handling high risk foods safely to avoid the growth of pathogenic bacteria. ▪ Sources and functions of vitamins, A, D, B-group and C. ▪ Sources and functions of calcium and iron. 	<p>ingredients used in baking.</p> <ul style="list-style-type: none"> ▪ Chemical and mechanical raising agents ▪ Sweet and savoury ingredients ▪ Technical skills baking skills ▪ Showcasing creativity and presentation when making food products. ▪ How to write a recipe and method for making a baked food product linked to cakes, bread or pastry. Including time plans and health and safety checks where necessary. ▪ Evaluating food products – Sensory analysis and star profile 	<ul style="list-style-type: none"> ▪ Writing a specification for a food product. ▪ How to write a recipe and method for making a cultural meal suitable for families. Including time plans and health and safety checks where necessary. ▪ Dietary requirements of a variety of religious groups e.g. Hindus, Muslims, Jewish, Buddhists and Sikhs. ▪ How to develop a suitable 3 course meal for one of the religious groups. ▪ Importance of senses when making food choices - sight, taste, touch and aroma.
<p>Sequence of Learning</p>	<p>This unit has been designed to teach pupils how each ingredient you use in a recipe has a specific function especially in pastry making. Pupils will learn about the function of ingredients in savoury pastry making through a variety of practical cooking tasks whilst making sure they meet the dietary requirements of their target client. Pupils will recall knowledge of the 4 C's for good food hygiene from KS2</p>	<p>This unit has been designed to teach pupils about the importance of understanding the scientific principles behind how ingredients work when they are combined together but also the effects their loss has when missing from a food product. Pupils will learn about the function of ingredients used in baking so they understand how each ingredient works in a baked food product and why. Pupils will recall knowledge of the 4 C's for good food hygiene from KS2 and</p>	<p>This unit has been designed to teach pupils how each ingredient you use in a recipe has a specific function especially in pastry making. Pupils will learn about the function of ingredients in savoury pastry making through a variety of practical cooking tasks whilst making sure they meet the dietary requirements of their target client. Pupils will recall knowledge of the 4 C's for good food</p>	<p>This unit has been designed to teach pupils about the importance of understanding the scientific principles behind how ingredients work when they are combined together but also the effects their loss has when missing from a food product. Pupils will learn about the function of ingredients used in baking so they understand how each ingredient works in a baked food product and why. Pupils will</p>	<p>This unit is delivered with the underpinning ethos of accepting diversity within food culture. It is important pupils are given the opportunity to prepare and cook recipes from a range of countries and cuisines, using different equipment and cooking methods. This helps pupils to understand and value how international cuisines have influenced meals cooked by families in today's society. The unit will also prepare pupils for the controlled assessed element at GCSE where they will be required to make decisions about food preparation and cooking techniques which are appropriate to the meal they are making based on their</p>



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	and Year 7 during completion of the practical cooking tasks. This will prepare pupils for GCSE Food Preparation and Nutrition – food, nutrition and health – fats and making informed choices for a varied and balanced diet.	Year 7 during completion of the practical cooking tasks. This will prepare pupils for GCSE Food Preparation and Nutrition - food science – functional and chemical properties of food – fats and oils, raising agents, food safety – principles of food safety.	hygiene from KS2 and Year 7 during completion of the practical cooking tasks. This will prepare pupils for GCSE Food Preparation and Nutrition – food, nutrition and health – fats and making informed choices for a varied and balanced diet.	recall knowledge of the 4 C's for good food hygiene from KS2 and Year 7 during completion of the practical cooking tasks. This will prepare pupils for GCSE Food Preparation and Nutrition - food science – functional and chemical properties of food – fats and oils, raising agents, food safety – principles of food safety.	understanding of nutrition, food and different culinary traditions.
Key Opportunities					Bake Off Final Competition at KOW