

Subject	DT	Year Group	8
	Food Tech	Design & Technology	Textiles
<b>Course Aims</b>	<b>Food Technology</b> This project requires the skills learnt in yr7. Students learn a new practical skill every week along with theory topics such as nutrition, social, moral and environmental issues, recipe planning and hygiene and safety. A lot more ownership is given to students in this project culminating in them writing their own recipe and following it to create their own recipe from scratch.	<b>Consumer Education</b> Through creative and imagination, pupils are to design and make products that solve real and relevant problems. They require a broad range of subject knowledge and draw on cross-curricular disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks within a supportive environment, becoming resourceful, innovative, enterprising and capable adults. Through the evaluation of their products (both past & present), they develop a critical understanding of its impact on daily life and the wider environment.	<b>Structure - Skills Art</b> This course aims to introduce the students to art textiles which will be studied in phase 2. It aims to improve confidence and skills using the sewing machine independently enabling students to set up the top and bobbin thread and sew various different clothes and change machine feet used by teaching staff. Students are introduced to a range of new decorative and functional techniques: Machine embroidery, hand embroidery, weaving and quilting, during the technique exploration students will become familiar with using more technical machine feet, the embroidery foot; they will also use embroidery thread when doing hand embroidery which is a lot more difficult than cotton sewing thread. During this topic students will be aware about various different textiles artists which will enable students to understand the close links between art and textiles.
<b>Purpose of scheme</b>	Building on from their basic skills learned in yr7 students to create complete dishes and a variety of multicultural main meals. Students will use all parts of the oven, make bread dough, whizz the sauce, poach meat, blanch, butter, cooking pasta and rice correctly, reduction sauce as well as preparing and cooking meat and vegetables of their choice. This will be done by making: Multicultural pizza Pasta salad Bolognese Pasta Savory rice Pita bread Fruit only biscuits Carrot cake muffins Sweet and sour Macaroni cheese Oven festival food dish	Design Identification of successful design features in logos. Explore areas for design inspiration through the discussion of different logos, some good, some not so good. Pupils to reflect on what makes a good logo before designing their own. Developing graphic skills Pupils to develop their graphic communication skills, using a variety of mediums – from hand-drawn sketches to digital design to generate business images and to utilise VR software to create a virtual model of their container. Materials Technology (Timber) Be able to select materials based on their properties, identify where they have been used around the home and school. Construction methods The use of a range of fabrication methods including, adhesives, wood joints and semi-permanent joints (glue joints). Pupils should be able to be selective when faced with fasteners regarding attaching materials together. Understand wood finishes Pupils are to be taught how and why we apply a finish to wood. Interior wood finishes covered in this project are oils and wax to apply a protective coating, but also primarily as a method of decoration. Pupils must be able to discuss the preparation necessary before any finish is applied to their product. The application of progressively smoother finishes covered glass paper in order to prepare MDF or Ply for the finish proposed. Develop evaluating skills Pupils are taught what the grading criteria are for completed practical work. The details and features people are looking for in a completed 'shop ready' completed project. Health & Safety Pupils need to be made aware of the rules of working in a workshop. The processes involved in using any specific machinery and a generic holistic approach to ensure every bodies safety in the workshop from their approach to practical work and the safety features inherent in every process they are taught.	Researching work of existing artists and recreating the work. Story of techniques, giving key bullet pointed instructions on how to create techniques, listing all resources and equipment. Reviewing the correct way to set up and use the sewing machine. Exploring techniques that are used to create surface patterns.
<b>Knowledge in sequence</b>		Tool selection After demonstrating the processes involved in generating a comb joint, pupils are trusted to select the appropriate tool for the task they are completing. Machinery operation Again, after demonstrations, pupils are encouraged to utilise the machinery within the workshop. This will enable them to work quicker and to a higher accuracy rather than attempting to complete tasks by hand which can prove less than satisfactory when the outcome is complete. Materials selection and their properties Pupils are encouraged to select and work with materials which can improve the quality of the outcome of their final practical piece.	
<b>Skills</b>	Ability to: Design recipes and plan a method. Presentation techniques of food and plating up dishes. Ability to use the oven, grill and hob safely Safe knife skills	Design Use research and exploration to identify and understand user needs. Identify and solve their own design problems. Design innovative, functional, appealing products that respond to needs in a variety of situations. Use a variety of approaches, to generate creative ideas and avoid stereotypical responses. Develop and communicate design ideas using annotated sketches, detailed plans, 3D modelling, oral and digital presentations and computer-based tools. Make Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. Infer from and use a wide range of materials, considering their properties. Evaluate Investigate new and emerging technologies (3D print, evaluate their uses and products against a specification, considering the views of intended users. Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of design, engineering and technologists. Technical knowledge Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.	All the techniques that students develop skills in could be used and refined in GCSE coursework if the student opt for the subject. Bread machine embroidery- how to use the sewing machine correctly to create a fresh machine sample. Bring the embroidery hoop to keep fabrics taught for hand embroidery and free machine embroidery. Bread embroidery- how to create a range of hand embroidery stitches correctly and accurately. Quilting- how to layer fabric and wadding to create a padded or insulated fabric. Weaving- how two create a warp and a weft from two pieces of paper and weave them together correctly and accurately. Bring the food safely following the correct procedure to protect the machine and the materials being pressed. Bring CAD to create an interesting final waffle piece. All examples are to be based on the work of the artists given by the teacher. Understanding how to insert and use a range of sewing machine feet and a bobbin and insert it to the sewing machine correctly.
<b>Key Words</b>	All dentiflow pasta should be cooked - texture should be soft with bite. Herbs - typically are generally green and leaves are generally orange/brown. They are used to flavour and season food. Tenderloin/loin is to be cut and chew (not tough). Marinate/soak flavour and tenderise meat by leaving food to soak in a sauce, acid, spices. Roux/Alioli/Emulsion/Methods of making a white sauce. Emulsification/Process of thickening a liquid using starch. Batter/Waffle batter is different to cake batter as it should not be over mixed as it causes a tough texture. Sealing/cooking meat at a high temperature to prevent it drying out when cooking. Kneading/Mixing/work/prepare dough. In bread it is to stretch gluten strands. Proofing/Rising bread to rest to allow the yeast to ferment. Sauce/Removal/Just before boiling point Multicultural/When people of different cultures come together to celebrate and share their different traditions. Organoleptic testing/Bring your senses to assess food. Ambient/food stored at room temperature e.g. cereal Dormant/When food is frozen bacteria is not killed it is simply dormant (alive). SWEET/acidic, moral, ethical and environmental issues, including: red tractor, vegetarianism, GM food.	Hardwood—Wood which came from deciduous trees. Softwood—Wood which is produced by coniferous trees. MDF—Wood particles combined with urea-formaldehyde. Chipboard—Made from compressed wood chips and phenol formaldehyde. Ply—Simpler type of wood joint. File—Hardened steel in the form of a bar or rod with many small cutting edges raised on its surface, used for smoothing or shaping objects. Bandformer - machine used for sanding, finishing & finishing tasks. Coping Saw - hand held saw used to cut intricate shapes in woodworking. T-square - 90 degree angles in construction work. Manufactured - Timber sheets which are produced by gluing wood layers or wood fibres together. Plywood - Strong thin wooden board consisting of two or more layers glued and pressed together. Comb joint - a wood joint which consists of a series of alternate notches and square pins of the same width. PPE - General term for health & safety equipment. Steel Rule - measures metric or imperial (or both) scales along its length. Router Saw - a piece of machinery used to cut intricate curves and joints. Hinges - Standard components used for joining parts. Beech - A hardwood used in kitchen utensils.	Free Machine foot- The foot that has to be used when doing the technique of free machine embroidery. Embroidery hoop - a wooden hoop made up of a smaller circle and a larger circle that include a tightening device. Embroidery hoops and frames hold embroidery thread - a thick thread that is brightly coloured and quite oily, only to be used with a hand sewing needle. Quilting - is the process of sewing two or more layers of fabric together to make a thick or padded material, usually to create a quilt or quilted garment. The use of wadding in the middle layer creates the padding. Wadding - any fibrous or soft substance used as padding or stuffing. Wadding comes in sheets and can be used to insulate products. Scanning - a process of copying an image and sending to another person electronically. Sublimation printer- A printer that is used to print on to paper that can be heat pressed onto fabric. Heat press - A very large iron that reaches high temperatures and is used to transfer the image from the sublimation paper onto synthetic material. CAD- Computer aided design. Using a computer to create or alter an image that will later be transferred on to material using CAM- Computer aided manufacture. Warp and Weft- The two different directions that the paper travels in a weave. •RIGHT - UP •LEFT - LEFT
<b>Assessment</b>			
<b>End of course</b>			
<b>Final Point</b>	<b>End of evaluation</b> Pasta recipe planning Students are required to plan a recipe for a pasta sauce they have designed. A list of ingredients with quantities and a list of equipment is required. This recipe will be used to make their dish next lesson (week 3) EAT: Multicultural food research and recipe design - Aids are given to carry out a larger research project. Students choose between researching a country/culture/particular cuisine or researching how different countries use a certain ingredient or food. (week 4) Cross contamination exam Q1 - following the theory lesson students are tested on what they learn by completing an exam question. (week 5) End of unit test - students complete a selection of short answer questions to test what they have learnt from the past 10 weeks of lessons. All content has been covered. (week 10) Own recipe planning This is the second attempt at writing up a recipe along with ingredients and equipment lists. This one requires more depth including timings, and linked quality control checks and hygiene and safety checks for each recipe step. (week 11)	<b>End of evaluation</b> Final Assessment: Container Project Identify the positive and negative aspects of your container. Explain ways to improve your container. Justify why your container is the best you have stated. Extension: Suggest modifications for your container. Page 14 & 17 in Booklet	<b>End of evaluation</b> Final Assessment: Students are able to make links between their own work and that of a designer. Pupils are able to make links between the media and materials used. Pupils are able to incorporate skills in an unusual and creative manner.