Technology Department Curriculum 2021-22

“Design is thinking made visual.” - Saul Bass
"Cooking is all about people. Food is maybe the only universal thing that really has the power to bring everyone together. No matter what culture, everywhere around the world, people eat together." - Guy Fieri

Intent

Technology is an invaluable part of the education of young people. It challenges students to solve real world problems through practical and rigorous investigation whilst developing key skills such as creativity, resilience, risk taking, innovation, enterprise and collaboration. Students design, develop and make products to meet the needs of others and in doing so become resourceful, capable, and confident individuals.

Technology also offers opportunities for students to develop self-knowledge: they build skills in evaluating themselves and target setting; they develop an understanding of their role and place within the wider world; they explore their role as learners, such as learning how to learn.

The Technology curriculum at Studley High School has been formulated to provide students with a broad and diverse range of learning experiences that develop student’s capabilities and understanding across key sought after disciplines such as art, science, engineering, ICT and mathematics.

The Technology curriculum has been formulated to allow students to: develop an interest, curiosity, enjoyment and confidence in investigating a variety of processes and techniques through practical exploration to become independent learners; have an awareness and appreciation of the technological developments in the world around us and investigating how and where we could use these in development of our own practical tasks; identify and solve problems, undertake research, organise and sustain independent practical work to completion developing a sense of achievement, self-awareness and fulfilment in the creation of products; develop self-knowledge as learners, producers and consumers, and as thinking and feeling young people with the developing ability to take responsibility for the direction of their learning through the adoption of effective working practices in a vocational context.

At Key Stage 3, students’ learning centres around three key areas of study: Resistant Materials, Food & Nutrition and Graphics, where they will work through a range of diverse, relevant and contemporary design briefs that promote a love of learning and an appreciation of the importance of high quality design and the principles of nutrition.

At Key Stage 4, students will then have the opportunity to develop their skills further in one of the following three subject specialisms:

- Design & Technology
- Food Preparation & Nutrition
- Hospitality & Catering

Each specialism allows, and demands, individual students to find their own voice and personal idea development within the confines of a brief. Our ambition as a department is to avoid overly-prescriptive outcomes that would deny the students the time and space to develop themselves and their ambitions through their work.

Students learn to try out new ideas and processes without fear of failure and they become confident and purposeful risk-takers. They analyse and evaluate what they experience and observe, judging relevance and value according to intentions. Through the development of ideas and products, Students learn to explore issues, events and problems from different perspectives and viewpoints.

Implementation

The Technology Department employs a range of teaching and learning styles. These are flexible, with a considered balance between the didactic and instructional, and the need for each student to develop an individual line of theoretical and practical enquiry.

Teaching methods include: teacher led demonstration, student led research and experimentation, practical work focused on specific outcomes, open-ended tasks based on themes, negotiated tasks and outcomes and collaborative tasks.

Teachers within the Technology Department vary the teaching and learning styles to suit the needs of individual students and groups of students, and the nature of the activity. A variety of teaching and learning styles provides stimulating and motivating experiences for students. It is important to be aware of the different styles utilised and of the dominant mode if there is one. This helps to focus on the activities in the classroom in an effort to raise the attainment of all students. Furthermore, a self-reflective attitude fosters the notion of continual improvement.

Teachers within the Department work hard to identify the needs and potentials of all students. In this way the Technology Department seeks to provide a range of meaningful experiences that enable all students to fulfil their individual potential. Teachers within the Department therefore attempt to be fully aware of the needs of individual students. This knowledge informs the planning, delivery and evaluation cycle. In this way work is tailored to the needs of the full range of abilities, including both the less and the more able.

The assessment of students' learning is a vital part of the work of the Technology Department. It provides important information for students, parents and teachers regarding the achievement and attainment of individual students and groups of students. It also provides teachers with invaluable information to help plan future design experiences. Students are monitored continually in an effort to increase their rate of progress.

Assessment within the department is undertaken using:

KS3

- The National Curriculum in England Design and Technology

KS4

- AQA GCSE Food Preparation and Nutrition
- AQA Design and Technology
- WJEC Eduquas L1/2 Hospitality and Catering

Work is assessed as soon as possible following its completion. Students are given feedback regarding this teacher assessment as soon as is practicable, and are given opportunities for self-assessment and self-evaluation.

Impact/achievement

The study of Technology provides students with a range of life-long, transferable skills that will equip them for the demands of future learning, the world of work and life in general. These include decision making, independent enquiry, creative thinking, self-management, digital literacy, communication, self-confidence, presentation, team work, research, problem solving and critical thinking.
Students realise the significance of technology and the creative industries in their community, their country and the world. Students develop the technical and practical expertise needed to participate successfully in an increasingly technological world.
The department has a proven track record with regards to attainment, with all year groups making good progress leading to good results.
All 3 Technology areas are popular subjects at Key stage 4, with many students going onto further education and apprenticeships in this area.

Year Group	Subject	Projects	Knowledge/Skills	Techniques/ Materials	Enrichment and Extension	Activities/ Outcomes	Assessment
7	Resistant Materials	Upcycled Hybrid Creature - a multi-functional bookend 12 Weeks	Introduction to tools, equipment & Health & Safety in the workshop. Research and design skills. Woodwork making skills Evaluation skills	Students will be introduced to woodwork techniques; Cutting with coping and tenon saw Shaping and smoothing with files and sandpaper Drilling wood with hand drill and pillar drill Decorating with paints and wood varnish	Literacy – key words and glossaries The environment - the importance of upcycling and environmental impact. Problem solving - working to a brief and developing design ideas.	Creating a wooden toy for a specific target audience. Primary research - interview client Write a brief Develop design ideas Use of specific tools to cut, shape, join and decorate toy.	peer assessment self assessment and target setting Formative assessment Recap Quizzes Summative assessment - End of rotation feedback
	Food & Nutrition	Introduction to Food Preparation and Nutrition 12 weeks	What does a well balanced dish look like? How can we keep healthy and safe in the kitchen environment? What skills do we know already? Which do we need to master?	Skills/ techniques: Knife skills (bridge and claw/ slicing,dicing, batons, julienne etc.) peeling, Temperature control (hob, grill & oven), Stir-frying, sauteing, simmering, boiling, blending, baking, grilling, sieving, rubbing in, combining,	Literacy – key words and glossaries Numeracy - measuring out accurately, scaling recipes up and down problem solving, - adapting recipes to suit tastes/ special dietary	Recipes: Fruit salad/ vegetable noodle salad, soup, scones, Fruit or vegetable crumble, stir-fry, fresh pasta, chicken tikka and chapati, flapjack. Food science task (prep for GCSE	Ongoing Glossary of key words Quizzes Peer assessments Gimme 5 One to one support and feedback Summative assessment - End of

			What is the importance of understanding food science?	making a dough, portioning, glazing,, stewing fruit, layering, Marinating, dry frying, melting, test for readiness Equipment: Utility knife, chopping board, peeler, saucepan, white spoon, tablespoon, butter knife, teaspoon, garlic press, tin opener, stick blender, mixing bowl, sieve, wok, pasta machine, colander.	requirements collaboration - food science tasks/ deciding on experiments and writing up results PHSE - wellbeing/ healthy eating - cooking for enjoyment/ cooking together/ understanding how to eat a healthy nutritious well balanced diet.	NEA1) Homework task - Preparation for GCSE FP&N NEA2 + L1/2 H&C NEA	rotation feedback
	Graphics	Introduction to Graphics and greetings card 12 Weeks	How do I use a drawing board What is a technical drawing? What is Graphics? 2D/3D Shapes, isometric drawing Typography	2D and 3D drawing skills Paper manipulation - pop up and stencil Craft knifes and board	Literacy – key words and glossaries Artist focus – Rob Ryna and Robert Sbuda numeracy - measurements, shapes and technical drawing skills	Research into designers Symmetry and repeat pattern 1 point and 2 point perspective drawing Typography Greetings cards	peer assessment self assessment and target setting Formative assessment Recap Quizzes Summative assessment - End of rotation feedback

					Batch production		
8	Resistant Materials	Modern design Jewellery and holder 12 weeks	How could jewellery be displayed and kept safe? How can you be inspired by design styles? How do I develop ideas based on my client profile?	Pewter casting and acrylic cutting, shaping and drilling. Making templates jewellery fastenings and accessories	Literacy – key words and glossaries Numeracy - measuring and accurate scale drawing Problem solving and working to a brief Historical research and context	Research into modern design styles - 1960's space age and 1980's memphis Design skills Pewter casting Cutting and shaping acrylic Assembling jewellery holder Review and evaluate final product	peer assessment self assessment and target setting Formative assessment Recap Quizzes Summative assessment - End of rotation feedback

	Food	Developing Skills in Food Preparation and Nutrition 12 weeks	What does a well balanced dish look like? What is food provenance? How are food ingredients processed? How can I develop my skills further in making food products?	Skills: yeast based dough - shaping, layering, fruit and veg preparation, peeling, grating, knife skills (bridge + claw , dice, mince, baton, julienne etc.), baking, Temperature control (hob, grill & oven), Stir-frying, sauteing, simmering, boiling, blending, baking, grilling, sieving, rubbing in, combining, making a dough, portioning, glazing, layering, Marinating, dry frying, jam making, whisking, test for readiness Equipment: Utility knife, chopping board, peeler, saucepan, white spoon, tablespoon, butter knife, teaspoon, fork, garlic press, tin opener, stick blender, mixing bowl, sieve, measuring jug,	Literacy – key words and glossaries Numeracy - measuring out accurately, scaling recipes up and down problem solving, - adapting recipes to suit tastes/ special dietary requirements collaboration - food science tasks/ deciding on experiments and writing up results PSHE - wellbeing/ healthy eating - cooking for enjoyment/	Recipes: Pizza Bolognese OR Chilli Pasta salad OR Pasta bake Chicken / fish / halloumi goujons + potato wedges Cheese and onion pasty/ turnovers swiss roll + homemade jam Food science task (prep for GCSE NEA1) Homework task - Preparation for GCSE FP&N NEA2 + L1/2 H&C NEA	Baseline assessment Ongoing Glossary of key words Quizzes Peer assessments Gimme 5 One to one support and feedback Summative assessment at end of project

				wok, colander.	cooking together/ understanding how to eat a healthy nutritious well balanced diet.		
	Graphics	Graphics and Branding 12 weeks	How do famous company's create branding for their business? What is the importance of packaging? What makes an eye catching product? Designer research logo design, Shop front/perspective drawing, packaging design (layout and Typography)	Development of design skills - Typography, layout, logo design and corporate identity Paper and card construction - packaging	Literacy – key words and glossaries Numeracy - measuring and accurate scale drawing Problem solving and working to a brief Cross curricular - food technology	Researching into different food/drink packaging Design idea, layout designs and models Cutting and folding card/paper to construct 3D forms (packaging) Logo development	peer assessment self assessment and target setting Formative assessment Recap Quizzes Summative assessment - End of rotation feedback

9	**Design & Technology** Autumn and Spring Term (3 x 9 week rotations)	Multi discipline project – Educate children on sustainability by making a visual screen for an exhibition	What is sustainability? How do we work to a client brief? Develop design ideas How to use scale drawing to help with the construction process Learn new practical skills and further develop new skills	Build on existing woodwork and metal work skills from yr 7/8 Develop new textiles skills - Wood frame/loom construction - Welding - Stencil printing - Weaving - Embellishments	Literacy – key words and glossaries Environmental issues and discussions Problem solving and working to a brief Developing new skills and confidence in the workshop whilst adhering to health and safety rules	Researching sustainability and presenting information in a visual way Using different tools to assemble a wood and metal frame Create a woven piece and stencil piece of textiles	peer assessment self-assessment and target setting Formative assessment End of topic Quiz Summative assessment - End of rotation feedback
	Design & Technology Summer Term	Model making – looking at Architectural Design Papers and	How do you design using a specification? How do you use the work of other designers to inspire	Understand the properties of papers and boards Recap previously learnt drawing skills and apply to develop 3D drawing	Use of BBC BItesize to further develop learning and understanding of the AQA DT spec (keywords and videos)	Researching a designer (GCSE spec) Design development activities (initial	self-assessment and target setting Formative assessment

	Students to opt (GCSE style project)	boards	your work? How do you use model making to visualise an idea?	Use of plan drawing Develop cutting and model making skills		ideas, 3D drawing and technical drawing with measurements) Card and paper construction	End of topic Quiz Summative assessment – in line with GCSE
s	**Techniques/ Materials**	**Enrichment and Extension**	**Activities/ Outcomes**	**Assessment**			
	Food Preparation & Nutrition Autumn and Spring Term (3 x 9 week rotations)	**Food science practical – the functions of the ingredients in a cake recipe** **Analysing / comparing nutrition of recipes, making muffins (healthy eating theme)** **Making high quality higher skilled food products (quiche / macaroni**	What are food allergies & intolerances & how can we adapt dishes to suit different dietary needs? What are the sources and functions of the macronutrients: protein, fat, and carbohydrate? What are the functions of the ingredients used to make cakes?	**Muffins practical** • Weighing /measuring • Prepare/grate/ mash fruit/veg • Folding in • Portioning • Baking • Testing for readiness Special equipment: Muffin/ cake cases/tray	Literacy - keywords and glossaries Health related issues and discussions Developing new skills and confidence in the kitchen whilst adhering to health and safety rules	Wk. 1&2 - Food science practical - role of sugar in a Wk. 3&4 - Muffin practical **outcome: comparing muffin recipe to standard cupcake – analysing nutritional differences and implications to eating a healthier diet.**	Self-assessment and target setting Formative assessment End of topic Quiz Summative assessment

		cheese) **Food science:** **- Understanding the functions of egg in a recipe (coagulation + denaturation)** **- Understanding the function of starch in a roux sauce (gelatinisation)** **Healthy eating NEA2 style task** **Teenage Dietary needs** Key tasks: 1) Research + summarise	How can practical skills be developed further and how can I use these skills to make different dishes? What is heat transfer? Give examples of where used What do the following food science terms mean? (Gelatinisation/ coagulation/ denaturation)	**Quiche practical** Shortcrust pastry • Rubbing in • Resting • Rolling / shaping • Lining tin • Blind baking Filling • Veg + meat prep • Fat based cooking – shallow frying (conduction) • Layering • Combining • Presentation • Baking • Testing for readiness Special equipment: baking beans/foil **Cauliflower / macaroni cheese** • Making a roux (starch based) sauce • Boiling pasta/water based convection (al dente) or preparing	Use of nutritional analysis to calculate and analyse the nutritional profile of a range of dishes and use this to suggest who recipes are suitable for and possible healthier adaptions.	Wk 5&6 – **Quiche practical** (shortcrust pastry/lining tin/ blind baking/veg + meat prep/baking/testing for readiness) **outcome: final presentation / photo** Wk. 7&8 – **roux based sauce** focus - Macaroni / cauliflower cheese **outcome: final presentation / photo**	

		2) Choose recipes (chosen from list given - may be agreed in advance with teacher) 3) Evaluate skills/ nutrition / cost/ successes / suggest improvements		cauliflower (steaming?) • Checking for readiness • Grilling , • Combining • Layering • Garnishing • Presentation Special. Equipment: steamer? (for cauliflower) colander, / food processor (for breadcrumb gratin topping if desired)			
	Food **Preparation & Nutrition** Summer Term Students to opt (GCSE style project)	NEA 2 style task: Special dietary requirement theme 1) research a htopic of Special dietary requirement (e.g. vegans/ coeliac/ pescatarian/ low fat / low carbohydrate/	What are the different cooking methods? How do cooking methods affect the nutritive value of food? How can I show high skills in my practical tasks?	**Pasta** making a dough/ shaping/ filling/ layering/ coating / boiling/ baking/ steaming/ **Chicken kiev and coleslaw** Meat/protein prep/ stuffing / enrobing/pan frying / veg prep / emulsion sauce (mayonnaise)	Trip to local farm OR Malvern 3 Counties Show Use of nutritional analysis to calculate and analyse the nutritional profile of a range of dishes and use this to suggest who recipes are suitable for and possible healthier	Design and developed dishes Analysis of GCSE FP&N subject Practice exam questions	Self assessment and target setting Formative assessment End of topic Quiz Summative assessment

		high fibre) summarise findings 2) choose 1 recipe to develop (agreed with teacher) 3) Write a detailed step by step plan of how to make (focus on showing wide variety of skills)	How do you write a detailed time plan?	**Decorated Focaccia** Bread making / kneading proving / shaping / veg prep / presentation / baking **Kung Pao Stir fry** marinating / veg prep / optional to make noodles **High fibre cupcakes** **Weighing and** measuring / recipe adaptation / combining / portioning / baking **Designed salad and vinaigrette** Veg cuts, julienne, fine dice, baton / emulsion sauce / presentation / recipe adaptation	adaptions.		
	Hospitality & Catering Autumn and	Theory lessons will cover content from this qualification	What does the kitchen Brigade look like?	**Minestrone Soup** Veg prep – medium and fine dicing. Sautéing and	Numeracy - measuring out accurately	Practical dishes, minestrone soup, samosas, fajitas and decorated	Self-assessment and target setting

	Spring Term (3 x 9 week rotations)	and the practicals will develop more complex preparation, cooking and presentation skills.	What are the nutritional needs of a teenager? What are the different cooking methods? How do cooking methods affect the nutritive value of food? What information can be found on food labelling and why is it important?	simmering. **Samosas** veg prep - julienne/ / fine dice **Filo pastry** -filling, shaping, folding, baking. **Fajitas and wraps** Veg prep. Preparing meat or choice of protein, marinating. Bread making, combing, kneading and pan frying. Assembling and presentation **Decorated cheesecake** Crushing, melting. Combining. Flavouring and decorating,	problem solving, - adapting recipes to suit tastes/ special dietary requirements Developing their understanding of cooking methods and nutrients How does the industry work?	cheesecake. Knowledge of nutrients and the foods they are found in. Ability to read food labels.	Formative assessment End of topic Quiz Summative assessment
	Hospitality & Catering Summer	The structure of the hospitality and catering industry	What kind of establishments are there in the industry?	**Pasta** making a dough/ shaping/ filling/ layering/ coating / boiling/ baking/	Trip to local farm OR Malvern 3 Counties Show	Practical dishes Design and	Self-assessment and target setting Formative

	Term Students to opt	Practical lessons will focus on increasing the skill required in preparation, cooking and presentation	What makes a H&C establishment successful?	steaming/ **Chicken kiev and coleslaw** Meat/protein prep/ stuffing / enrobing/pan frying / veg prep / emulsion sauce (mayonnaise) **Decorated Focaccia** Bread making / kneading proving / shaping / veg prep / presentation / baking **Kung Pao Stir fry** marinating / veg prep / optional to make noodles **High fibre cupcakes** **Weighing and** measuring / recipe adaptation / combining / portioning / baking	Focus on industry local business and changing government policies.	developed dishes Analysis of H&C offerings Recommend types of establishments, service and facilities for different demographics with reasoning. Practice exam questions	assessment End of topic Quiz Summative assessment

				Designed salad and vinaigrette Veg cuts, julienne, fine dice, baton / emulsion sauce / presentation / recipe adaptation			
10	**Design & Technology** Term 1	**Project – Cam toy** (mechanisms) **Theory lesson** - Research into **new and emerging technologies** (1 lesson a fortnight) 7 weeks	What is motion? How and why are mechanisms used? How do you make an interactive toy? What are the different industries and production techniques? The importance of sustainability?	Responding to a brief Using a theme to help develop design ideas Developing working drawings to help with making Theory: Looking at people, culture and society, sustainability, industry and enterprise and production techniques and systems	The impact of mechanisms on everyday life Links to culture and society. PLTS - Independent enquirers and Reflective learners. Developing their understanding of the ethical debate relating to sustainability Enterprise	Initial ideas Working drawing Designing and making a cam toy Various presentations videos discussions research into topics	tests quizzes formative self-assessment Summative end of project feedback sheet

	Design & Technology Term 2 -3	**Wooden chair project** **Theory:** **Investigate different materials and techniques** (1 lesson a fortnight)	Why do we need flat pack furniture? What is biomimicry? How do you develop a design into a working drawing? What are the properties of different materials? Why are different techniques used?	Computer research and portfolio presentation Developing design ideas Further development of practical woodwork skills Theory: Papers and boards natural and manufactured timbers metals and alloys polymers textiles	Links to the environment and the implications of different materials and processes	Research into Ikea, flat pack and Biomimicry Design ideas and developing designs Various presentations Theory: videos discussions research practical investigations	tests quizzes formative Peer/ self-assessment Summative end of project feedback sheet
	Design & Technology Term 4	**Circuits project** **Theory:** Investigate different energy, material, systems and devices.	What is Energy generation and how is it stored? What are smart and modern materials? What are composite materials and technical textiles? mechanical devices, electronic systems	Learn how to draw out a circuit diagram Make a circuit Theory: Research into all of the	cross curricular - science Environmental Issues – linked to climate change and carbon footprints	Various presentations Theory: videos discussions	tests quizzes formative

			and programmable components. How do you make a circuit?	different topic areas and terms.		research practical investigations	self-assessment Summative end of project feedback sheet
	Design & Technology Term 5	**Perfume design project** **Theory** Designing and making principles	What are the main features when designing in technology? How do you use cad/cam?	Recap of design principles CAD drawing making process and card mock up	Real life scenarios problem solving gathering market research - social skills and discussion	Go through design process with a given brief practice 2D design skills make mock up card model write up a making diary	tests quizzes formative self and peer assessment
	Design & Technology Term 6	**Launch coursework project - NEA**	What scenario will you choose? Who is your target market/user? What will you design and make?	mind map mood board primary research write a brief	Problem solving real life scenarios Primary research – market research	Identifying and investigating design possibilities Producing a design brief and specification	self and peer assessment personal tutorials questioning

				specification			internal standardisation
	GCSE Food Term 1	Nutrition Macronutrients: Protein, carbohydrate and fats recap Micronutrients: vitamins, minerals	What is NEA2, what does it involve? How will I make sure I am prepared well for it? What food products can I make which will demonstrate a high level and range of skills for (nutrient) How can I use my knowledge on macronutrients to help me answer exam questions?	Knowledge of Function , Excess / deficiency, DRVs / RIs, and food science terminology of macronutrients choose 3 recipes (linked to specific macronutrients) and make independently to demonstrate a range of skills	UCB Birmingham - cooking course for Y10/11 Mid Sept - Oct Half term (Saturdays) - info provided - up to pupils & parents to enroll, ensure pupils attend Seneca Learning set as homework and extension to link into topics covered and wider revision.	Exam style questions mini tests Mini NEA 2 - focus on exploring nutrition of dishes and comparing against portion sizes / Eatwell guide suggestions etc. Free and/ or guided choices to show higher level skills where possible on foods that are a good source of • Carbohydrate • Protein • good fats • Vitamins • Minerals	Written and verbal feedback Termly Internal standardisation Questioning Quizzes

	GCSE Food Term 2	Nutritional needs and health - the impact of eating to excess/ deficiency Comparing dietary needs of different age groups	What are the nutritional needs of different age groups? How much is a portion? What are the possible negative effects of a poor diet? What do the following words mean and how are they caused? Obesity, cardiovascular disease. high blood pressure, cavities, rickets, osteoporosis anaemia, type 2 diabetes.	Practical tasks / skills based on guided choices which demonstrate a variety of skills. as follows: S1 – General practical skills S2 – Knife skills S3 – Preparing fruit and vegetables S4 – Use of the cooker S5 – Use of equipment S6 – Cooking methods S7 – Prepare, combine and shape S8 – Sauce making S9 – Tenderise and marinate S10 – Dough S11 – Raising agents S12 – Setting mixtures	Seneca Learning set as homework and extension to link into topics covered and wider revision.	Free and/ or guided choices to show higher level skills where possible on foods that provide a healthy balance of foods to encourage a healthy lifestyle to prevent diseases researched. Pupils fill in a skills passport throughout this year, guided to complete skills which will help them to show as many skills as possible throughout the year.	Written and verbal feedback Termly Internal standardisation Questioning Quizzes
	GCSE Food Term 3	Food science cooking of food and heat transfer Selecting	What is NEA1, what does it involve? How will I make sure I am prepared well for it? Why is food cooked and how is heat transferred to food?	Practical tasks / skills based on guided choices which demonstrate a variety of skills. as follows: S1 – General practical	UCB Birmingham - cooking course for Y10/11 Mid Feb - April approx (Saturdays) - info provided - up to pupils & parents	Practical tasks will be a mixture of food science experiments and and link practical tasks which demonstrate the different food	Written and verbal feedback Termly Internal standardisation

		appropriate cooking methods Protein - functional and chemical properties of food Carbohydrates - functional and chemical properties of food Fats - functional and chemical properties of food	How do different cooking methods affect the sensory qualities of the food? What do the following terms mean? : Denaturation, coagulation, gluten formation, foam formation What do the following terms mean?: gelatinisation, dextrinization, caramelisation What do the following terms mean?: Shortening, aeration(by creaming) plasticity in emulsification	skills S2 – Knife skills S3 – Preparing fruit and vegetables S4 – Use of the cooker S5 – Use of equipment S6 – Cooking methods S7 – Prepare, combine and shape S8 – Sauce making S9 – Tenderise and marinate S10 – Dough S11 – Raising agents S12 – Setting mixtures	to enroll, ensure pupils attend Seneca Learning set as homework and extension to link into topics covered and wider revision.	science Terminology for each macronutrient area. Pupils fill in a skills passport throughout this year, guided to complete skills which will help them to show as many skills as possible throughout the year. Revision and NEA1 practice/ preparation Choice of: Fats carbohydrates Proteins	Questioning Quizzes

	GCSE Food Term 4	Food science functional and chemical properties of food: raising agents(mechanical, Biological and chemical raising agents)	describe what is meant by the term raising agents explain how chemical raising agents work in food products explain how mechanical raising agents work in food products explain how biological raising agents work in food products	Practical tasks / skills based on guided choices which demonstrate a variety of skills. as follows: S1 – General practical skills S2 – Knife skills S3 – Preparing fruit and vegetables S4 – Use of the cooker S5 – Use of equipment S6 – Cooking methods S7 – Prepare, combine and shape S8 – Sauce making S9 – Tenderise and marinate S10 – Dough S11 – Raising agents S12 – Setting mixtures	Seneca Learning set as homework and extension to link into topics covered and wider revision.	Revision and NEA1 practice/ preparation Choice of raising agents	Written and verbal feedback Termly Internal standardisation Questioning Quizzes
	GCSE Food Term 5	Food Safety: Food spoilage and	How does food spoilage occur? What conditions do microorganisms need	Practical tasks / skills based on guided choices which demonstrate a variety of skills. as follows:	Seneca Learning set as homework and extension to link into topics covered and	Pupils will complete a variety of activities/ tasks which will enable them to understand the importance of	Written and verbal feedback Termly Internal

		contamination	to grow? How are microorganisms used in food production? What are pathogenic bacteria? How can we plan to make sure we are safe when we are preparing high risk food items?	S1 – General practical skills S2 – Knife skills S3 – Preparing fruit and vegetables S4 – Use of the cooker S5 – Use of equipment S6 – Cooking methods S7 – Prepare, combine and shape S8 – Sauce making S9 – Tenderise and marinate S10 – Dough S11 – Raising agents S12 – Setting mixtures	wider revision.	food safety including how to prevent food spoilage, contamination etc. Pupils will produce a detailed plan including health and safety points and make a main meal which could, if prepared incorrectly, leads to to a range of food poisoning possibilities EG rice, meat, (minced beef, chicken, pork)	standardisation Questioning Quizzes
	GCSE Food Term 6	Food choice NEA2 Focus: British and international cuisine: explore foods of	Identify the factors that contribute to food choice Identify and explore religious, cultural and ethical reasons that may influence what we choose to eat	Practical tasks / skills based on guided choices which demonstrate a variety of skills. as follows: S1 – General practical skills S2 – Knife skills S3 – Preparing fruit and vegetables S4 – Use of the cooker	Seneca Learning set as homework and extension to link into topics covered and wider revision.	NEA2 Focus: research and summarise a selection of international cuisines, use that information to choose a product of choice. Demonstrate practical skills, explain reasons for	NEA2 marking framework shared, Written and verbal feedback as a group and individual where needed. Termly Internal standardisation

		British and international cuisine, equipment, cooking meth, eating patterns, presentation Styles.	What is the importance of food labelling information? How is sensory evaluation used in food production?	S5 – Use of equipment S6 – Cooking methods S7 – Prepare, combine and shape S8 – Sauce making S9 – Tenderise and marinate S10 – Dough S11 – Raising agents S12 – Setting mixtures		choice, analyse nutrition and discuss costing, suggest adoptions.	Questioning Quizzes
	Hospitality & Catering Term 1	Factors that affect the Hospitality and Catering industry	What makes a Hospitality and catering establishment successful? Costs Profit Economy Environmental Technology Trends Customer demographics and lifestyle expectations	**Fresh pasta** making a dough/ shaping/ filling/ layering/ coating / boiling/ baking/ steaming/ **Equipment:** pasta machine steamer food processor stick blender **Lasagne** - Veg prep / dry frying / reduction sauce / roux sauce / layering / pasta making. **Optional side garlic bread** -	Cultural Development - Looking at wider society to understand how H&C establishments are successful	**Wk 1&2** **Pasta-** Ravioli shaped pasta that has not split when cooked **Wk 3&4 Lasagne** – Making own pasta. Making a smooth bechamel sauce. Prepping and cooking a reduction sauce. Creating distinguished layers **Wk 5&6** **Rough puff/ flaky**	Written and verbal feedback Termly Internal standardisation Questioning Quizzes

			Customer service Competition Political factors Media	kneading / shaping / baking **Salad** - spiralising **Equipment** - pasta machine / lasagne baking dish **Rough puff/ flaky pastry,** making a dough lamination - (folding to create thin layers of fat + dough) rolling and shaping **Equipment:** mixing bowl palette knife measuring jug food bag/ cling film rolling pin **Developed Puff/Flakey pastry**		**pastry,** (lamination) - Used to make fruit tartlets or sausage plait with garnish/ decoration **Week 7&8** -Self guided practical choice to develop their puff pastry into a dish of their choice ie sausage roll	

				Practical tasks / skills based on guided choices which demonstrate a variety of skills.			
	Hospitality & Catering Term 2	Working practices of the Hospitality and Catering Industry	How does the front of house and back of house operate? Kitchen layout Work flow Equipment Stock control Documents Dress code Safety and security	**Fruit upside down cake with custard** - Fruit preparation / caramelisation / creaming / baking. **Custard** - thickening / hob control **Equipment** - cake tin / electric whisk **Rice - Risotto or savoury stuffed peppers** - Veg prep / Sauteing / cooking rice. Side dishes such as vegetables salad **Equipment** - Saucepan / fish slice **Kung pow chicken** - Deboning chicken legs / marinating / veg prep / optional to make noodles **Equipment** - Wok / Deboning knife / pasta		**Wk 9&10 Fruit upside down cake and custard -** presentation and sides, dovetailing two dishes **Wk 11&12** **Rice -** Cooked rice without excess liquid, presented in an attractive way with thought given to sides **Wk 13&14 Kung pow chicken** - Working with meat and deboning. presenting in an attractive way **Christmas / celebration theme** -	One to one tutorials – written and verbal feedback Termly Internal standardisation Questioning

				machine		christmas cake (victoria sponge based) / choc yule log (swiss roll or meringue based) / etc.	
	Hospitality & Catering Term 3	**Catering for customers needs**	What provisions and facilities can establishments offer for its customers? What do other H&C establishments look like and what do they offer that is unique? Types of customer - businessman, leisure and local residents Customers needs and expectations Customer trends Customer rights	**Panna cotta with fruit coulis** - using gelatine / hob control / preparing and shaping fruit / layering / presentation techniques **Equipment** - Pudding moulds / sieve / paring knife **Veggie or meat burgers and buns** - Mincing / blending / shaping / kneading / proving / layering / adding flavour with herbs and spices **Optional side chips, ketchup, salad,** **Equipment** - Mincer / blender / dredger **Curry with chapatti/naan/**	UCB Birmingham - cooking course for Y10/11 Mid Feb - April approx (Saturdays) - info provided - up to pupils & parents to enroll, ensure pupils attend	**Wk 15&16 Panna cotta with fruit coulis -** Gelatinisation, presentation skills, plate up dish and decorate. **Wk 15&16 veggie or meat burgers -** Practicings higher level skills, designing burger thinking about flavour and accompaniments **Wk 17&18 Curry with chapatti/naan/ paratha -** making curry paste from scratch, making and presenting of dish and	One to one tutorials – written and verbal feedback Termly Internal standardisation Questioning

				paratha - veg prep / meat/fish/ alternative protein prep / marinating / simmering / making a sauce / making a dough baking/grilling, stuffing naan/ paratha garnishing. **Equipment** - flour dredger / boning knife Practical tasks / skills based on guided choices which demonstrate a variety of skills.		accompaniments **Wk 19&20 -** Self guided practical choice to practice skills and recipes to suit a brief.	
	Hospitality & Catering Term 4	**Environmental issues** **Catering for customers needs**	How can you consider environment when menu planning Food provence Food production and sustainable practices Saving energy Reducing waste Planning a menu	**Meringue italian or french. Mini pavlovas, Eton mess or baked alaska** - whipping / baking / decorating Equipment - Electric whisk / piping bag **Meat/Halloumi/ Vegetable kebabs with dressing** - veg/meat prep marinating / mixing / skewering grilling / making a dressing	Moral Development - looking at our environment and understanding the effect our food choices can have	**Wk 20&21 Meringue italian or french -** Even sizes piping and shaping skills **Wk 22&23 Meat/Halloumi/ Vegetable kebabs with dressing -** Using the grill, nutritionally balanced dish, portion sizing	One to one tutorials – written and verbal feedback Termly Internal standardisation Questioning

			that's suitable for different establishments and customers needs Exam long answer question practice	garnishing. **Equipment** - skewers / boning knife **Fish pie** - veg prep / fillet fish / boiling roux sauce / baking / food styling piping. **Equipment -** filleting knife, piping bag / colander / potato ricer Practical tasks / skills based on guided choices which demonstrate a variety of skills.		**Wk 24&25 Fish Pie -** High level skill practice, filleting fish, piping. Presentation	
	Hospitality & Catering Term 5 & 6	Revision and practice NEA (unit 2) - Street food	Exam preparation for mocks Practice NEA - plan and make dishes suitable for a festival Skills - focus on independent menu planning	Practical tasks / skills based on guided choices which demonstrate a variety of skills.	Working to a brief – vocational context to develop transferrable skills and competencies e.g problem solving, communication	Students work independently selecting dishes to trial that demonstrate a range of skills and meet the brief. Students will complete written coursework and	One to one tutorials – written and verbal feedback Termly Internal standardisation Questioning

						cook two dishes	
11	**Design & Technology** Term 1, 2 &3	NEA Coursework 50% Design, make, test and evaluate deadline at the end of term 3.	NEA Coursework Design, make, test and evaluate	Generating design ideas Developing design ideas Realising design ideas Analysing & evaluating	Problem solving Numeracy - scale drawings, isometric drawing	Developing designs based on previous research work. Final technical drawings on paper and using CAD. Using different tools and processes to make a prototype or model. Record getting the user to test out product and evaluate.	Peer and self assessment work to be sent off for moderation.
	Design & Technology	Revision for external exams	Revise the 3 different areas for the external exam; **Core technical**	Past papers Power points	PLTS – encouraging creative thinking, independent enquiry and reflective learning and problem	Students to work through a range of past papers. Tests and quizzes on	Peer assessment Self assessment

	Term 4,5 &6		**principles** **Specialist technical principles** **Designing and making principles**	Videos BBC Bitesize Quizzes	solving	the 3 different areas. watch videos and make notes/mind maps of ket terms	regular feedback from mini quizzes and mock tests
	GCSE Food Term 1, 2 &3	NEA 1 Food Science Investigation 10 hours (including 3 hours of practical) NEA 2 Food Preparation Assessment (20 hours including practical)	Pupils produce both paper element and practical outcome.	NEA1: food science experiments: Research Into how ingredients work and why, draw conclusions, plan and conduct tests, analyse findings 10 hours. NEA2: Plan and prepare 3 dishes applying their knowledge of nutrition to the chosen brief. Complete skills trials. 20 hours	Research Analysing, drawing conclusions Conducting tests to prove or disprove a theory re Responding to results, explaining. Revision sessions	Students will be able to comprehend a question quickly through understanding of key command words. Students will be able to structure their written answer for long answer questions practical assessment outcomes	Quizzes One to one tutorials – written and verbal feedback Questioning
	GCSE Food	NEA 2 Food Preparation	Pupils produce both paper element and	NEA2: Plan and prepare 3 dishes applying their	Research	Students will be able to	Peer assessment

	Term 4, 5 &6	Assessment (20 hours including practical) Revision for exam paper	practical outcome. Recap of exam paper knowledge and practicing long answer questions. Practice exam papers	knowledge of nutrition to the chosen brief. Complete skills trials. 20 hours Learn command words Structure of written answers Revision guides	Demonstrating skills Menu planning Analysing, Evaluation Revision sessions	comprehend a question quickly through understanding of key command words. Students will be able to structure their written answer for long answer questions	Self-assessment Assessment of NEA using AQA template. Only generic - not individual feedback can be given during task due to this forming part of the final grade Feedback to pupils when graded / moderated.. NEA2 Grade out of 70 (35% of final grade) Work to be sent off for moderation.

							Quizzes, questioning One to one tutorials – written and verbal feedback
	Hospitality & Catering Term 1, 2 &3	Revision for mock exams Non exam assessment 9 hours	Recap of exam paper knowledge and practicing long answer questions. Feedback from mock exam and targeted revision Brief for non-exam assessment issued, work completed in lesson time. Research plan and cook 2 dishes and accompaniments to meet brief	Laptops Practicing high level skills and trialing dishes that are suitable for brief.	Research - looking at existing H&C establishments Revision sessions	Trial dishes to practice skills Written coursework which includes research, menu suggestions and time plan for cooking Two dishes plated and presented. Revision resources	Verbal feedback Self-assessment mini mock nea completed and grades given
	Hospitality & Catering Term 4, 5 & 6	Non exam assessment 9 hours Revision for	Finish non exam assessment work Recap of exam paper knowledge	Learn command words Structure of written answers	catch up NEA sessions Higher level skills sessions for	Non exam assessment work is completed Students will be	Quizzes One to one tutorials – written and verbal

		exam paper	and practicing long answer questions. Practice exam papers	Revision guides	students if needed Revision sessions	able to comprehend a question quickly through understanding of key command words. Students will be able to structure their written answer for long answer questions	feedback Questioning