St Christopher's: *A Church of England Academy*

SUBJECT: Technology Curriculum Map

Please note: Courses are always under constant development as Technology is an ever-evolving subject but were correct at the review date.

Key Stage 3:

- Pupils arrive with minimal or certainly very diverse experiences of Technology.
- **Baseline** aptitude tests and KS2 data are used to loosely set pupils (reviewed each year).

Year 7 Induction: After a baseline assessment period, pupils are loosely set and then move round four specialist rooms with four different specialist teachers working with a wide range of different materials on a diverse range of tasks, designed to develop a broad balanced curriculum. The starting point for each group will be different but the rotation the same. (A fifth module in the rotation has been called STEM and is being used to teach about cross-curricular eco issues). Accurate assessment data is shared each module and each class's first teacher of the year mentors that class to ensure suitable progress is being made and communicates with parents.

Year	DT Induction Module (13/14 lessons)	Food Induction Module (13/14 lessons)	Graphics Induction Module (13/14 lessons)	Textiles Induction Module (13/14 lessons)	STEM Induction Module (13/14 lessons)
7	**Task: Toy Vehicle Project** **Health and Safety** Safe use of marking-out tools (e.g. steel rule, marking gauge) Safe handling of hand tools: saws, files, rasps, abrasive papers Safe operation of power/bench tools and 3D printer Personal protective equipment: goggles, gloves, aprons **Workshop & Making Skills** Marking-out, wasting, abrading and finishing techniques Cutting and shaping materials (e.g. wood, plastic) Assembly methods: fixing components, glue/joinery techniques Integrating 3D-printed parts into the build Tool maintenance and safe storage **Design & Research Principles**	**Task: Healthy balanced nursery school foods** Hygiene and safety routines: preparation for cooking – sanitiser, personal hygiene - hand washing, aprons, hair, high risk foods, food storage, the practice and science of washing up. Practical skills, bridge and claw cutting techniques, peeling, onion preparation, combining, blending, boiling, simmering, grilling, baking, grating, portion control, weighing and measuring. The safe use of knives, the hob, grill & oven. Enzymic browning in fruits and vegetables. The Eatwell Guide – dietary analysis & adapting recipes for health (extension – individual nutrients).	**Task: Fruity Air freshener** Health & safety. Introduction to typography, product analysis, Packaging symbols/logos, design skills, following a design specification & 2D design. Introduction to basic tools, CAD, development of colour/effects, lettering development, basic card modelling with accurate use of tools and equipment. Self-assessment of skills and evaluation. *Homework:* *Typography* *Descriptive words.* *Planning flow diagram.* *Evaluation.* *Advertising Poster.*	**Task: Clare Youngs inspired Animal Wall hanging.** Health and Safety How to use the sewing machine: threading up, safe use, basic stitching, plain seams, hems, applique. Mark- making Cutting with fabric scissors. Pining together for simple construction of wall hanging. Designer research and analysis of designer's work. Design idea communication and annotation – this is peer assessed. Evaluation of practical and design work. *Homework:* 1. *Key words -Wordsearch and spellings and definitions - tested.* 2. *Mark making work sheet.* 3. *Create a help sheet to explain one decorative technique.* 4. *Plan of making for the wall hanging*	**Task: Iteratively Design 3D Bedrooms and Model Furniture.** Health and Safety Introduction to 'ITERATIVE DESIGN' Introduction to 'ACCESS_FM & DT GLOSSARY' Introduction to 'META BORDERS' 'CLIENTS' and CRITERIA Creation Producing a 'DESIGN SHEETS' GRAPHIC SKILLS: Shapes, Light, Tone, Shading, Line Quality, Textures, Rendering, Isometric, One (Single) Point Colour Theory and Colour Schemes PRACTICAL: Upon completion of a GOLD DS student to complete the modelling of a Bed, Desk and Chair. MATERIALS: Bamboo, Cardboard and Fabrics TOOLS: Steel Rulers, Junior Hacksaws, Bench Hooks, and Hot Glue Guns Journalled Evaluation of Gold Design Sheet and Practical Modelling *Homework: Email Digital Versions (Photographs) of Bronze, Silver and Gold Design Sheets.*

	History & Manufacture: overview of classic toy vehicles and production methods **Iterative Design**: stages of prototype, test, refine **User-Centred Design**: understanding end-user needs, wants and desires **Project Planning**: mind-mapping project purpose, stages and research areas **Designer Case Studies** Research on influential toy designers and brands Analysis of design features, materials and construction techniques **Idea Development & Communication** Generating 2D sketch ideas Introduction to isometric 3D drawing on grid Annotation of design ideas against user needs Peer-assessment of concept drawings **Specification & Planning** Writing a clear design brief and specification Finalising dimensions, materials list and manufacturing plan **Testing, Refinement & Evaluation** Functional testing: wheels alignment, durability checks Refinement: adjusting design to improve performance Evaluation against the specification: written analysis with photographs **Assessment**	Planning – Ingredients, Equipment, Order of work, Timing, Health & Safety and Reasons for Choice. Sensory evaluation – 5 senses, description and profiling. Food science: Coagulation, gelatinisation, aeration Subject specific vocabulary. Pupil assessed tasks, marking and feedback. *Homework:* *Kitchen safety and hygiene – Spot the Hazards.* *The Eatwell Guide – individual dietary analysis.* *Designing, planning and preparing for practical work.* *Revision for test.*		5. *Evaluation of finished product.*	

	End-of-unit online assessment (automatically marked) Practical evaluation of finished model **Homework** **Moodboard:** initial visual research into toy vehicles **Materials Research:** properties and suitability of chosen materials **Plan for Manufacture:** detailed step-by-step making guide **Revision:** prepare for end-of-unit assessment **Evaluation Draft:** write up an early evaluation of your prototype				

Year 8 Progression modules: Pupils continue to move round four specialist rooms with four different specialist teachers working with different materials on a diverse range of tasks, designed to develop a broad balanced curriculum. The starting point for each group will be different but we aim to repeat the year 7 rotation pattern shown previously above. (A fifth module in the rotation has been called STEM and is being used to teach about cross-curricular eco issues). Accurate assessment data is shared each module and each class's first teacher of the year mentors that class to ensure suitable progress is being made and communicates with parents.

Year	DT Progression Module (13/14 lessons)	Food Progression Module (13/14 lessons)	Graphics Progression Module (13/14 lessons)	Textiles Progression Module (13/14 lessons)	STEM Progression Module (13/14 lessons)
8	**Task: Dyson Inspired Lasercut Line-Bent Acrylic Phone Stand with Capacitive Touch LED Light** **Health & Safety** Laser cutter operation: correct material support, ventilation, supervision Handling acrylic: avoid sharp edges, wear gloves when deburring Hot-wire/strip-heater for line bending heat-resistant gloves, eye protection Low-voltage electronics: safe use of alligator clips, insulated wiring	**Task: Healthy, balanced, school meals** Recap / reinforcement of year 7 food work – hygiene and safety, Eatwell Guide, practical skills and routines. Analysis of the task and school meals standards. Food Choices and reasons.	**Task: Cereal Packaging** Task analysis / target market investigation, product analysis, theme inspiration, design ideas and branding gimmicks logo design and development, net design planning and layout, scale drawing, draft measurement drawing, final design idea, net (cereal box) construction. Study of Jon Burgerman illustration to inspire designs ideas. Legality of packaging.	**Task: Soft Sculpture** Artist (Holly Levell & Kate Talbot) analysis and evaluation. Detailed design idea communication showing an understanding of fabric properties and appropriate decorative techniques. Recap of health and safety and the sewing machine. Trialling ideas practically for decoration and/or shape. Pattern making 2d to 3D with paper modelling. Complex construction.	**Task: Iteratively Design a 'BUG HOTEL' and Produce a Prototype.** Health and Safety Introduction to 'ITERATIVE DESIGN' Introduction to 'ACCESS_FM & DT GLOSSARY' Introduction to 'META BORDERS' 'CLIENTS' and CRITERIA Creation Producing a 'DESIGN SHEET' (DS) RESEARCH SKILLS: Needs and Desires of different stakeholders. Digital research using AI. CUSTOMERS: Clients, Manufacturing and Industries

	Safe workspace habits: tidy bench, unplug electronics before adjustment **Workshop & Making Skills** Preparing simple vector templates by hand (printouts) for laser cutting Operating the laser cutter under supervision Line bending acrylic to achieve smooth curves Deburring and polishing edges with abrasive paper Basic solderless circuit building in Tinkercad Virtual Circuits Integrating the capacitive touch sensor and LED into the acrylic stand **Design & Research Principles** **Iterative Design:** sketch–prototype–test cycles focusing on Dyson's smooth form language **User-Centred Design:** considering phone sizes, viewing angles, and ease of touch activation **Material Properties:** researching acrylic's bend radius and light diffusion qualities **Circuit Basics (Tinkercad):** virtual assembly of touch sensor and LED without manual resistor calculations **Designer Case Studies** Analysis of Dyson's iconic curves and minimal detailing Study of acrylic-based consumer electronics stands and touch-activated lighting Discussion of how light diffusers are integrated into simple forms **Idea Development & Communication** Hand-drawn annotated 2D sketches of stand profile and LED housing	Further development of knife skills to enable quick safe cutting of larger amounts and chopping. Sauce making, reduction sauces and starch-based gelatinised sauces (all-in-one). The science of gelatinisation. Hob control for frying, use of the microwave and revision of simmering, grilling and baking. Uses of types of rice and pasta (al dente). Rubbing in. Adapting recipes and balancing healthy family meals. Comparison of homemade and bought meals. International food influences, ingredients and traditions (UK, Indian, Italian, Thai, Spanish, Chinese, American etc). Understanding of ingredients such as herbs and spices, rice and pasta, alternative protein foods. Safe storage of food and cooking temperatures. Measuring and weighing. Sequencing practical work. Sensory evaluation and suggestions for improvement. Subject specific vocabulary. *Homework:* *Questionnaire* *Food Storage/ temperatures.* *Nutritionally balancing a meal* *Planning and preparation for practical work* *Revision*	*Homework:* Logo analysis Branding research Puzzle ideas research Google design Evaluation	Planning/ time management for practical task. Sublimation printing and/or computerised embroidery. *Homework:* 1. *Artist Research* 2. *Final design* 3. *Flowchart (sequencing)* 4. *Evaluation – comparing their product to an existing product.*	SUITABLE MATERIALS: Internal and External, Recycled, Sustainable, Natural and Man-made. PRACTICAL: Upon completion of a GOLD DS student to complete the prototyping of their iteratively designed BUG HOTEL. 3,5,7 ORGANISING & PLANNING: Mind Mapping System 3 (Simplification) - Past, Present, Future. System 5 Pivotal and Reflective S7S (System 7) - Hierarchical Filing TOOLS: Steel Rulers, Junior Hacksaws, Tenon Saws, Bench Hooks, Linisher, Drilling, Nailing, Screwing. FINISHING: Sanding, Hot Glue Guns, PVA, primers and Paints Journalled Evaluation of Gold Design Sheet and Prototyping *HOMEWORK: Email Digital Versions (Photographs) of Bronze, Silver and Gold Design Sheets.*

	Simple exploded-view diagrams on paper to show component placement Peer critique focused on stability, aesthetics, and user interaction Refinement of sketches based on feedback, noting bend angles and sensor location **Specification & Planning** Writing a clear design brief: target phone dimensions, desired curve profile, touch-light function Finalizing a materials list: acrylic sheet size/thickness, LED strip, capacitive touch module, wiring Manufacturing plan: sequence for laser cutting, bending, assembly, and virtual testing **Testing, Refinement & Evaluation** Prototype testing using paper/card mock-ups for form and stability Virtual circuit testing in Tinkercad: ensure touch sensor reliably switches LED on/off Physical prototype adjustments: tweaking bend angles, sensor mounting, cable routing Final evaluation: photo documentation, written reflection on how the stand meets the brief **Assessment** **Practical Demo:** present the finished stand, demonstrate LED on/off via touch sensor **Design Journal:** entries documenting each design iteration, challenges and solutions **Oral Reflection:** discuss key learning points about materials, bending, and user interaction **Homework**				

	1. **Designer Research Summary:** short written notes on Dyson's design principles (handwritten or typed) 2. **Hand-Drawn Sketches:** two alternative stand concepts with annotations—no CAD or vector software 3. **Circuit Flowchart:** hand-drawn diagram of the touch sensor → LED wiring layout as in Tinkercad 4. **Making Plan Draft:** step-by-step sequence for cutting, bending, and assembling your stand 5. **Evaluation Prep:** list three strengths and two potential improvements you expect for your final design				

Year 9 Specialism modules: Pupils select two or three modules from the four on offer, narrowing our wide breadth of study a little, in favour of greater depth of study. Technology teachers, parents and pupils are all involved in these important decisions. Each pupil therefore has their own personal rotation and does not necessarily stay in the same class all year. The two modules most important to the pupils are completed before the GCSE options process begins where possible. (For some pupils the third module in the rotation is called STEM and is being used to teach about cross-curricular eco issues). Accurate assessment data is shared each module and each class's first teacher of the year mentors that class to ensure suitable progress is being made and communicates with parents.

Year	DT Specialism Module (Optional 18 or 0 lessons)	Food Specialism Module (Optional 18 or 0 lessons)	Graphics Specialism Module (Optional 18 or 0 lessons)	Textiles Specialism Module (Optional 18 or 0 lessons)
9	**Task: Sustainable Lamp design** **Research section** Introduction to design brief and basic task analysis What is sustainability and why is it important? Material sources and origins Temporary / knockdown fittings	**Task : "Party in the Park" picnic or afternoon tea items** Recap years 7 and 8 work. Investigating the fermentation of yeast as a biological raising agent. Bread making – ingredient functions, dough formation, gluten development, use of yeast,	**Task: Geometric Chocolate Bar/Stand** Health & safety recap, colour theory, product analysis, Typography & development 2D design development skills, Artist inspired geometric ideas, Geometric shape development and repeat design, Sketching	**Task: Portrait Bag for Life inspired by Edo Morales** **Analysis and evaluation of the work of Chilean artist Edo Morales.** Creating a portrait design using a variety of mark making techniques.

	Inspiration board Product analysis of existing lamp movements / joints Planned obsolescence **Design development section** Detailed specification linked to research and possible further research Design ideas Design development using SCAMPER Testing and modelling aspects of their design Analysis of their testing **Orthographic drawing of final design** **Realising design ideas section** Practical skills - marking out sawing, drilling, sanding, filing, concrete moulding, soldering, *CAD/CAM* Laser cutting Electronic circuit **Evaluation and testing section** Evaluation of final design against specification *Homework:* Life cycle of softwood. Temporary fixings. Life cycle of steel. The 6 R's. Carbon footprint. Life cycle of aluminium. Power generation. *Polymers*	shaping, ingredient and product ideas and choices, other bread products and Coeliacs. Investigating types of flour. Shortcrust pastry - ingredient functions, dough formation, shortening with different fats, investigating the proportions of fat used, shaping and ingredient and product ideas. Preparing, combining and shaping "Savoury reformed foods" – alternative protein foods and types of vegetarians. Binding and Coagulation. Chemical and physical raising agents in a batter recipe. Macronutrients – Carbohydrate, Fats and Protein (sources, functions, deficiency and excess). Energy balance. Generating ideas and time planning with special points and health and safety points. Sensory evaluation, suggestions for improvement and development ideas. Subject specific vocabulary. Allergies and intolerances. *Homework:* *Researching design ideas* *Time Planning and preparation for making* *Seasonality* *Allergies and intolerances* *Revision*	and annotation, packaging designs, Computer generated designs. Evaluation. *Homework:* Typography research Geometric Mood board Typography recreation Point of Sale Research POS designs Branding & selling ideas Target audience review	Experimenting with hand embroidery, collagraph printing, mono printing, tie-dye and appliqué. Designing for a client of their choice. Design work – communication skills. Students work creatively and there is a greater emphasis on effective presentation. Health and safety and sewing machine recap. Construction methods and seam suitability testing (plain, French and overlocked). Bag construction – including making handles, attaching fastenings. Evaluation of back with customer review/feedback. Ext: Sustainability, problems with the textiles and fashion industry. Watch clips from the 'True cost of Fashion' documentary. *Homework:* 1. *Designer analysis– Edo Morales. Find a suitable photograph to base portrait on.* 2. *Textures – worksheet exploring surface textures.* 3. *Research collagraph and mono printing.* 4. *Colour Theory worksheet.* 5. *Research in Artist: Sue Stone.* 6. *Research in seams.*

Key Stage 4: Eduqas Design Technology GCSE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
10	**Theory: Timbers and related processes** • Types and properties of timbers • Hand tools • Measuring • Wasting	**Theory: Polymers and related processes** • Types and properties of polymers • 3D printing • Extrusion	**Theory: Metals and related processes** • Types and properties of metals • Tools and processes	**Theory: Industrial manufacturing processes and practises** • Scales of production • Fixtures and fittings	**Theory: Design iteration and development** • Rapid prototyping • Modelling • The work of others • Analysis	**Theory: Mechanical devices, electronics and designing for functionality** • Forces, stresses and structural integrity • Electronic circuits

	• Abrading • Finishing • Finger joint • Dovetail joints **Theory: CAD/CAM** • CAD/CAM • Laser cutting **Project task: Storage box** Pupil's design and make a timber storage box using traditional hand tools and processes. The box includes finger joints, dovetail joints and butt joints as appropriate. The basic design can be adapted to suit a variety of purposes and pupils are challenged to improve and modify the design to suit their individual needs. Quality, accuracy and foundational practical skills are the key objectives of this task. Pupils are introduced to the process of laser cutting and all create a 2D design which would be laser cut out of acrylic and then attached to their storage box.	• Vacuum forming **Theory: Design development, 3D modelling and working drawings** • Design iteration • Fusion 360 3D modelling • Rendering • Working drawings **Project task: Games console** Pupil's research and design a new games console from a polymer of their choice. They then go on to 3D model the games console and write about how they could use 3D printing as a means of producing a rapid prototype of their design. They are also introduced to producing manufacturing drawings and ensuring enough detail is included for the product to be manufactured by a third-party.	• Brazing • Turning • Bending • Hardening **Project task:** Mock NEA Pupils introduced to the format of the NEA and a 'mock' NEA brief is given. Pupils will then sample pieces of work from each section of the NEA to prepare them for the real NEA later in the year. • Example folders • Task analysis • Product analysis • Specification and Brief writing • Design ideas • Design development • Fusion 360 3D modelling **Work experience (2 wks.)**	• Routing/turning • Injection/blow moulding • CNC lathes • Knock-down fittings & flat-pack furniture • Standard components • Casting **Theory: Modern and Smart materials** • Polymorph • SMAs • Thermochromic/ photochromic • Bioplastics • Flexible MDF • Titanium • Fibre optics • Graphene • LCD • Nanomaterials • Metal foams • QTC • Piezoelectric • Litmus paper **Project task: Mock NEA** • Manufacturing specification • Manufacturing • Evaluation	• Client involvement in design process **Theory: Surface treatments and finishes** • Types of surface finish and treatment available for each material group • Preparation of materials • Finishes for timber, metals and polymers **Revision:** Exam week written assessment **Project task: Foldable seating (modelling project)** Pupils will be tasked with developing a design for portable seat for a wildlife photographer (purposefully chosen as an example of a client they will likely have little affinity with – this is to force students to think of what their client wants, not what they want). Pupils will generate designs and spend most of their time modelling a prototype using card, timber and mechanical fixings.	• Systems thinking • Electronic components • Microcontrollers • Sensors • Making products 'smart' **Theory: Quality control** • Process time • Dimensional accuracy • Depth-stops, go/no go fixtures • Tolerances • Registration marks • CAD/CAM settings **Introduction to NEA** • Example folders • The purpose and flow of the NEA • Final words of advice and guidance • Task analysis • Research
	Theory: Technical drawing module • Sketching • Isometric • Perspective • Orthographic • Shading • Rendering		**Theory: Textiles module** • Types and properties of textiles and fabrics • Processes and tools • Surface treatments and finishes **Theory: Papers and boards module** • Types and properties of papers and boards		**Theory: Environmental, ethical and social issues module** • Social impact of design • Ethical considerations • Sustainable design • 6 Rs **Theory: Energy generation and storage module**	

			• Processes and tools • Surface treatments and finishes	• Energy generation • Energy storage • Renewable vs non-renewable	
11	**NEA Section A (cont.)** Task analysis & Research **NEA Section B** Specification and Brief **NEA Section C** Design ideas **HW Revision topics:** • Common specialist technical principles • Papers and boards • Timber based materials • Metal based materials	**NEA Section C (cont.)** Design ideas **NEA Section D** Design development **HW Revision topics:** • Polymers • Textile based materials • Electronic systems • Materials and their working properties	***PPE written examination*** **NEA Section E** Realisation of design **NEA Section F** Evaluation **HW Revision topics:** • New and emerging technologies • Energy, materials, systems and devices • Designing principles • Making principles	**Revision in lessons covering subject knowledge gaps highlighted by analysis of PPE performance and review of NEA content.**	**Public examinations**

Key Stage 4: Eduqas Food Preparation and Nutrition GCSE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
10	**Topic 1: Fruits & Vegetables** • Types / classification • Herbs and spices • Provenance – production, food miles, seasonality, organic, harvesting, processing, packaging (bagged salad) • Quality Assurance - fairtrade, organic, red tractor, farm assured. • Preservation – jams, curds, pickles & chutney • Stir fry technique. • Nutritional importance / 5-a-day • Vitamins and Minerals • Oxidation and Enzymic browning • Emulsions and Emulsification • Types of potato and alternative cooking methods • Storage – ambient, chilling & freezing, stock rotation, use by & best before dates. • Use of leftovers.	**Topic 2: Dairy Products** • Types / classification • Primary & secondary processing • Processing of milk, cream, yogurt and cheese – emulsions, bacteria, enzymes and foams • Animal rearing – local v national, pricing • Preservation of milks and dairy • Nutritional values • Fats – saturated and unsaturated and energy balance • Allergy, intolerance, bone health and heart health • Storage • Effect of cooking • Storage – ambient, chilling & freezing, stock rotation, use by & best before dates. • Key temperatures **Practical tasks:**	**Topic 3: Cereals** • Types / differences • Staple foods • Provenance – grown harvested and used • Primary & secondary processing • Nutritional values • Carbohydrates and energy balance • Gluten & intolerance (coeliac) • Raising agents – biological, chemical and mechanical • Functional properties of wheat flour • Storage, prevention of food poisoning	*Exam week – PPE revision and written assessment and PPE NEA 2 task.*	**Topic 4: Protein foods** • Meat, poultry, fish, eggs, pulses, nuts and seeds, alternatives • Sustainability • Animal rearing – local v national, environmental cost • Processing • Nutritional values • Proteins – HBV & LBV • Eating nose to tail • Traceability and food quality assurance schemes • Functions of eggs and other proteins – aeration, coagulation, emulsification,

	• Cooking methods, effects • Key temperatures **Practical tasks:** Salads dressings and emulsions Stir fries and stir fry technique. Stuffed vegetables to use up leftovers Jam chutney curds and pickles Filo pastry – spring rolls, samosas, parcels or strudel	Batters – pancakes, clafoutis, Yorkshire pudding, toad in the hole. Choux pastry – profiteroles, eclairs, choux rings, choux buns Souffles and mousses Custards and Ice cream *Work experience (2 wks.)*	**Practical tasks:** Cake making Bread making Flaky pastry Pasta making Roux sauce - gelatinisation Cooking with other cereal grains		binding, enriching, etc • High risk foods – Food spoilage, Cross contamination and storage • Critical temperatures • Marinades **Practical tasks:** Butchering chicken – Kiev's, Cordon beau, tray bakes, sticky chicken wings, soup and stock Filleting fish – fishcakes, fish bake Meringues – Lemon meringue pie, Pavlova, Baked Alaska, Eton mess Baked egg custard / quiche Alternative proteins
11	**NEA 1 – Investigative assessment** (Exam board set - released 1st September each year) *Homework:* *Research, thinking out, planning trialling and collecting feedback.*	**NEA 2 – Section A** research and planning (Exam board set - released 1st November each year) *PPE examinations – written paper* *Homework:* *Research, thinking out, planning trialling, preparing resources and collecting feedback.*	**NEA 2 – Section B** practical assessment **NEA 2 – Section C** evaluation *Homework:* *Research, thinking out, trialling, preparing resources and planning*	**Revision** • Nutrition • Functions of ingredients • Diet and Health • Temperature control • Food Provenance • Food commodities	Public examinations

Key Stage 4: AQA Art and Design: Graphical Communication GCSE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
10	Project 1: **Natural and Organic drink project** Understanding the course objectives. Annotation guidance, Analysis mind map, Primary fruit, Photographs, Sketching	Project 1: **Natural and Organic drink project** Existing products analysis Branding & advertising Typography design Logo design and development Colour development Layout development	Project 2: **Music Promotion** Product analysis, Band research Inspirational research, Legality packaging information, Artist research, recreations, computer design,	Project 2: **Music Promotion** Typography designs, Layout design, Final design, Construction of final product, Presentation layout and promotional product designs.	**Cultural Restaurant** main project 60% of grade Analysis mind map, Inspiration/theme board, Typography designer exam prep hand drawn ideas	**Cultural Restaurant** main project 60% of grade Theme research, Primary & Secondary, artist research, recreations and development. *Homework:*

	Fruit observation and stylising, Colour Theory, material experiments, Photography, Introduction to Serif photo Image manipulation *Homework:* Mind map Observational Drawing Artist research Colour Theory Stylised Drawing College Development Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	Final design Drink Presentation Poster Design *Homework:* Logo Research Artist Research Branding Research Drinks labelling Research Annotation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	illustration, development, Final design *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours) Work experience (2 wks.)	*Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	Development of typography with lettering, colour. Theme investigation Exam week assessment Typography designs *Homework:* *Students will spend a half an hour of project work for each* lesson on independent study (2 weeks 2.5 hours)	*Students will spend a half an hour of project work for each* lesson on independent study (2 weeks 2.5 hours)
11	**Street Art Take Out** main project 60% of grade artist/designer 2 research and development. Artist/designer research x2 personal response and development of ideas based upon artist inspiration, own designs inspired by artists *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	**Street Art Take Out** main project 60% of grade Design ideas, development of ideas relating to final outcomes, final designs and constructed outcomes. *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	*External set exam Project 40%* *PPE examinations* *Students choice a starting point from the externally set projects 2nd Jan release.* *Personal prep period to investigate ideas using artist and designer inspiration.* *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	*External set exam Project 40%* *Homework:* Students work on individual projects with teacher guidance. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	*External set exam Project 40%* Set 10 hours (2 Days) Students complete ideas ready for exam. *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	Public examinations Students have completed the course at this point

Key Stage 4: AQA Art and Design: Textile Design GCSE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6

10	**Memories Project** Understanding the course objectives. Annotation guidance, Analysis mind map, Primary Photographs of a variety of memories of childhood, travel, home or local environment. Sketching observational and stylising. Free machine embroidery Hand embroidery Applique Transfer printing with transfer dyes and sublimation. Artist/Designer – Cas Holmes research and recreation samples. *Homework:* Mind map Primary images of memories/travel Observational Drawings Artist/Designer research Writing notes for how experimental samples were created and evaluating them fully, suggesting ways of how to further refine ideas. Students will spend a half an hour of project work for each lesson on independent study (Over 2 weeks - 2.5 hours*)*	**Memories Project** Mark making CAD repeat printing techniques using PowerPoint – sublimation printing and further 3D manipulation. Artist research - 1 other designers/artists plus Cas Homes minimum per student will be fully explored and analysed along with experimental samples. Developed ideas – sampling experiments. Design ideas. Final design. Making the final wall hanging/panel. Design boards for display. *Homework:* Mid project evaluation. Artist Research Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	**Surfaces Project** Project analysis mind map and proposal. Primary images of interesting surfaces these could be natural or man made. Paint/dye techniques, brusho, freehand embroidery, dissolvable fabric, cotton paper, heat press, transfer dye. Homework: Photographs of interesting surfaces (primary images) Artist Research Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	**Surfaces Project** (main project 60% Grade) Artist/designer research x4 in total, artist responses, developed ideas. Experimenting with a range of different meltable fabrics such as Tyvek, lutradur and polyester voiles. Safe use of heating tools will be taught and pupils will experiment. *Homework:* Mid project evaluation. Artist Research Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	**Surfaces Project** (main project 60% Grade) Continue with Artist/designer research and experimental samples and development. Fabric manipulation: pleats, tucks, piping, slashing, quilting, applique etc. Laser cutting. Techniques taught may also depend on the artist/designers who have been chose by the pupils. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)* *Homework:* *Artist Research* *Annotation including analysis and evaluation.*	**Surfaces Project** (main project 60% Grade) Ongoing surfaces project – pupils will work independently to explore a variety of different surfaces of their choice. Pupils need to have fully researched and explored 4 artists or designers with fabric samples that recreate their work and developed samples that include their own ideas. Modelling on mannequin (or 3D models if not fashion outcome) to start to formulate initial design ideas – these will be photographed and annotated. *Exam week assessment:* *Pupils will produce artist samples for assessment. The number of which will be determined by which techniques and/or artist they are studying.* *Homework:* Artist Research Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*
11	**Surfaces project** Students will complete initial ideas over the summer break and spend the first 6 lessons creating detailed design ideas which will be developed into	**Completion of Surfaces project.** This term focusses on the making of the final product/outcome for the	***External set exam Project 40%PPE examinations*** Students choose a starting point from the externally set projects 2nd Jan release.	***External set exam Project 40%*** Students will complete ideas through experimental sampling and drawing ready for exam.	***External set exam Project 40%*** The examination - 10 hours (2 Days) will take place this term. Students will be fully prepared so that they can	Public examinations Students have completed the course at this point

	a final design. Students will produce: Design ideas Developed ideas Final design. These will be presented and annotated in their sketchbook. *Homework:* Further Artist/designer Research Photographs of surfaces to aid development Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	Surfaces project – whatever that may be for each student. *Homework:* Making diary/log. Annotation including analysis and evaluation. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours*)*	Personal prep period to investigate ideas using artist and designer inspiration. *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	The ideas will develop into a final design for their final outcome which they will produce in the practical examination. *Homework:* Students work on individual projects with teacher guidance. They will need to research a theme, take photographs, study the work of artists/designers. Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	work independently throughout the 10-hour practical exam. *Homework:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 2.5 hours)	

Key Stage 5: Eduqas Design Technology GCE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
12	Public Seating Design project **Materials:** plastics, papers/boards, textiles **Processes:** printing, plastics (injection moulding, vacuum forming, extrusion, rotational), Drawing skills, Nets and die cutting **Digital:** CAD, CAM, Rapid prototyping **Factors influencing development of products:** user-centred design, anthropometrics and ergonomics, form vs function, design movements and designers.	Public Seating Design project **Materials:** smart materials **Processes:** Paper finishes, Sand Casting **Effects of technological developments:** Features of manufacturing industries: Quality control **Maths:** calculating surface areas and volumes, use of trigonometry *School examinations*	Mini-tools project **Materials:** metals **Processes:** Die casting, investment casting, turning, drilling, marking out, bending, pressing/stamping/punching, welding, mechanical fixings, heat treatments **Safe working practices, potential hazards and risk assessment** **Features of manufacturing industries:** Production planning and scheduling **Designing for maintenance and the cleaner environment**: 5 principles of sustainability, circular economy, disassembly	Mini-tools project **Materials:** woods, composites **Processes:** plaster of Paris casting, wood joining techniques, adhesives, mechanical fixings **Effects of technological developments:** Mass production, global marketplace **Features of manufacturing industries:** Scales of production, quality monitoring systems, modern manufacturing methods **Designing for maintenance and the cleaner environment**: Product life	NEA project **Information handling modelling and forward planning:** collection, collation and analysis of information, standards **Maths:** Anthropometrics and probability	NEA Project **Information handling modelling and forward planning:** modelling the costing of projects, protecting intellectual property rights *School examinations*

	Effects of technological developments: Smart material applications **Maths:** using numbers and percentages, ratios and percentages		**Maths:** use and analysis of data, charts and graphs	cycle and the wider issues of using cleaner technologies **Maths:** Co-ordinates and geometry		
13	NEA project **Further processes and techniques:** strategies, techniques and approaches to explore, created and evaluate design ideas, project management strategies, the stages of a product's life cycle	NEA project *PPE examinations*	NEA project	NEA project	Revision	*Public examinations*

Key Stage 5: AQA Art and Design: Textile Design GCE

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
12	**Decorative Architecture (Portfolio Project)** Health & Safety Introduction to the course Machine skills, Understanding the course objectives. Project analysis and proposal, Annotation guidance, Primary & secondary research inspiration, Fabric Manipulation, Couching, elastic thread, folding, gathering, shibori, Artist/designer 1 research, artist recreation samples ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	**Decorative Architecture (Portfolio Project)** Artist/designer 2 research, artist recreation samples Laser cut work and development, Samples of influenced ideas developed into design ideas, Final idea, Constructed outcome. ***School examinations*** (5 Hours) ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	**Close-up (Portfolio Project)** Project analysis mind map and proposal, Artist/designer research x2, artist responses, developed ideas, Paint/dye, marbling, heated textiles, felting, embellishing, coaching techniques, freehand embroidery, embellishing machine, felting, heat press, transfer dye *Personal Time:* ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	**Close-up (Portfolio Project)** Development of artist influences developed into a surface outcome, design ideas and final idea ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 4-5 hours)	**Personal Investigation** (60%) of final grade (Individual project) *Student choice own starting point to personal investigation. Research theme, artist/designer research, recreations and developing ideas through exploring techniques.* ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	**Personal Investigation** (60%) of final grade (Individual project) ***School examinations*** (5 Hours) Further researching artist/designers or contextual studies. Recreations through experimenting and developing own ideas. ***Personal Time:*** Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)

13	**Personal Investigation** (60%) of final grade (Individual project) Focused directed research towards initial ideas. Continue to sample techniques and refine ideas. Commence written element. *Personal Time:* Students will spend half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	**Personal Investigation** (60%) of final grade (Individual project) Design ideas, Mock-ups, construction investigations, Final idea and constructed final outcome. ***Personal Time:*** Students will spend half an hour of project work for each lesson on independent study (2 weeks 9-10 hours) *PPE examinations* *(5 HOURS)*	***External set exam Project*** *(40%)* *PPE examinations* Complete final outcome. Students choice a starting point from the externally set projects 2nd Jan release. Personal prep period to investigate ideas using artist and designer inspiration. ***Personal Time:*** Students will spend half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	***External set exam Project*** *(40%)* *Personal Time:* Students will spend a half an hour of project work for each lesson on independent study (2 weeks 9-10 hours) ***Personal Time:*** Students will spend half an hour of project work for each lesson on independent study (2 weeks 9-10 hours)	***External set exam Project*** *(40%)* Set 10 hours (2 Days) Students complete ideas ready for exam. ***Personal Time:*** Students will spend half an hour of project work for each lesson on independent study (2 weeks 9-10 hours	***Course completed***

Differentiation:

Please note that these are generalised overviews of the Technology curriculum, but actual schemes of work are adapted and differentiated for each ability group to try to ensure stretch and challenge for all.

C. O'Reilly 2024-25