

Technology Department KS3 overviews

Year 7

Food and Nutrition module – Basic Skills Unit – Students to acquire basic cooking skills and methods to ensure that they can use the hob and the oven to produce a range of meals from basic ingredients that are readily available		
Topic Outline	Students should know and understand	Students should be able to
Introduction to Food and Nutrition	<ul style="list-style-type: none"> How to devise a set of rules to ensure safe working in the Food Room and produce a basic risk assessment. 	<ul style="list-style-type: none"> Examine new working environment & apply previous knowledge to new situation. Show how to take responsibility for recognised hazards.
Fresh Fruit Crumble	<ul style="list-style-type: none"> How to select equipment to peel, shape & cut Understand the need to eat 5 portions of fruit and vegetables a day to provide vitamin C & fibre. 	<ul style="list-style-type: none"> Chopping, Slicing, Peeling, Safe use of knives, Identifying seasonal fruits, Weighing, Rubbing In method and Use of Oven. Be able to wash up.
Scones	<ul style="list-style-type: none"> What the 'rubbing in' method is. Understand how the skills from last week can be extended by adding liquid to the recipe. 	<ul style="list-style-type: none"> Shape and form ingredients by rubbing in, and consistency.
Bread	<ul style="list-style-type: none"> The working characteristics and properties of yeast and the effect of heat on yeast. Exploring a range of ideas for bread. 	<ul style="list-style-type: none"> How to produce a bread product using the Rubbing in method, Mixing, shaping and dividing evenly. Using yeast, Use of oven, temperature control.
Pizza	<ul style="list-style-type: none"> Produce a bread-based pizza using skills and adapting recipe from 'Bread' lesson. Add toppings of their choice. Evaluate product and discuss possible changes. 	<ul style="list-style-type: none"> Making a dough, Shaping, Designing, grating, chopping, slicing and use of oven. Combining ingredients to form dough and the working characteristics of yeast dough.
Mince - Chilli Con Carne or Spaghetti Bolognese	<ul style="list-style-type: none"> Dem and use of the stove and hob safely. How to cook with mince. Difference between gas and electric hobs and how to operate each ring. 	<ul style="list-style-type: none"> Use the hob to produce a main meal made with mince.

	<ul style="list-style-type: none"> • Discuss ways recipes can be adapted. 	<ul style="list-style-type: none"> • Experiment with different settings to make food simmer raise and lower the temperature.
Chicken / Sausage Casserole	<ul style="list-style-type: none"> • Understand how exact measures and ingredients aren't crucial to the success of a stew or casserole. 	<ul style="list-style-type: none"> • Use the hob to make a stew. • Use of Meat and Veg, Chopping, Slicing, Peeling & cooking, Simmering, Boiling. • Be able to adapt a recipe.
Biscuits	<ul style="list-style-type: none"> • How to produce a shaped biscuit. • Be able to explain how to light the oven and which equipment to use. • Experiment with additional ingredients. 	<ul style="list-style-type: none"> • Making Dough, Rolling, Shaping, Cutting, Baking, Decoration and garnish. • Select & use equipment and use it to Combine, shape and form accurately
<p>Textiles Module: - Stencilled Draw String Bag – Basic Skills Unit - Students will learn how to thread and use the sewing machine for simplistic straight seams. They will learn how to decorate fabrics using stencils, fabric crayons and tie dye. Students will also gain a basic understanding of natural and synthetic fibres.</p>		
Topic Outline	Students should know and understand	Students should be able to
Stencilling	<ul style="list-style-type: none"> • Know what stencilling is. Know the names of the equipment. Understand the safety using the scalpels and the iron. 	<ul style="list-style-type: none"> • Stencilling and using the scalpels.
Design Specification	<ul style="list-style-type: none"> • Know what specification is and the difference between a brief and specification. Key terms Aesthetics, cost, customer, environment, safety, size, function, materials, Manufacture. 	<ul style="list-style-type: none"> • Demonstrate your ability to identify key specification points for a product and write a specification.
Tie Dye	<ul style="list-style-type: none"> • What is a resist technique? Which fabric types work best? • Understand the success criteria for each technique. 	<ul style="list-style-type: none"> • Demonstrate your ability to trial a range of tie dye patterns (circles/bullseye/ stripes/ spiral/marble).
How to use the Sewing Machine	<ul style="list-style-type: none"> • Understand how a sewing machine works. The names of the parts of the machine. What the different types of stitches are for? Understand the hazards and control measures. 	<ul style="list-style-type: none"> • Be able to thread and operate the machine. Be able to sew a zigzag and straight stitch. Be able to turn a corner.

Sewing a draw string bag	<ul style="list-style-type: none"> • Key terms: seam allowance, quality control, eyelets, bagging out, pinking shears. Understand how fabric frays and how pinking shears help avoid this. Quality control. 	<ul style="list-style-type: none"> • Be able to sew accurate seams and insert eyelets using the die press. Use pinking shears to neaten the inside edge of the bag.
Test and Evaluate	<ul style="list-style-type: none"> • Recap what a specification is. Understand why it is important to revisit the specification. Understand what the success criteria should be for each process. 	<ul style="list-style-type: none"> • Be able to identify areas where the specification has/hasn't been met. Be able to state what could be improved further and why?
Woven Fabrics	<ul style="list-style-type: none"> • Weft & warp in a weave. Plain, twill and satin weave. • Properties of different weaves. 	<ul style="list-style-type: none"> • Be able to identify different woven fabrics.
Workshop 1 Module: Mechanical Toy		
Topic Outline	Students should know and understand	Students should be able to
Mechanical Toy (Cam based)	<ul style="list-style-type: none"> • Relevant workshop safety. 	<ul style="list-style-type: none"> • Use appropriate machinery and be signed off on a safety test.
	<ul style="list-style-type: none"> • Correct methods for marking out (Timber). 	<ul style="list-style-type: none"> • Mark out using appropriate tools and equipment.
	<ul style="list-style-type: none"> • Units of measurement. 	<ul style="list-style-type: none"> • Convert from cm to mm and using a steel rule.
	<ul style="list-style-type: none"> • Types of movement and mechanical systems. 	<ul style="list-style-type: none"> • Describe types of movement and predict input/output of mechanical systems.
	<ul style="list-style-type: none"> • How to shape materials (Timber). 	<ul style="list-style-type: none"> • Demonstrate use of hegnar and coping saw in timber.
	<ul style="list-style-type: none"> • Methods of joining materials (Timber Permanent). 	<ul style="list-style-type: none"> • Use adhesive and appropriate clamping systems to create permanent joints.
	<ul style="list-style-type: none"> • Methods of finishing edges (Timber). 	<ul style="list-style-type: none"> • Show safe and correct technique for smoothing edges by hand and by machine (belt sander).
	<ul style="list-style-type: none"> • Methods of QA and QC. 	<ul style="list-style-type: none"> • Use QC checks to ensure a quality product.
	<ul style="list-style-type: none"> • Methods of surface finish (Timber). 	<ul style="list-style-type: none"> • Demonstrate the Applications and reasons for applying a finish.

Workshop 2 Module: Hanging Mobile Students will design and make a Hanging Mobile, based on a theme of their choice		
Topic Outline	Students should know and understand	Students should be able to
	<ul style="list-style-type: none"> • What a Specification is and how to develop a design idea. 	<ul style="list-style-type: none"> • Identify specification points for their hanging mobile. Assess positive points and points for improvement to improve their design ideas.
	<ul style="list-style-type: none"> • Work shop Health & Safety requirements. 	<ul style="list-style-type: none"> • Discuss and identify what health and safety procedures need to be considered and carried out when working in a workshop.
	<ul style="list-style-type: none"> • How to shape and sand Pine Wood and Acrylic. 	<ul style="list-style-type: none"> • Use the appropriate tools to cut and smooth pine wood and cut and heat the acrylic to mould and manipulate it in to a shape desired.
	<ul style="list-style-type: none"> • How to construct Mobile Hanging successfully. 	<ul style="list-style-type: none"> • Create holes in both pine wood and acrylic, using the appropriate tools, to be able to attach the components together, constructing the mobile hanging.

Year 8

Year 8 Food Module Afternoon Tea project		
Introduction to mini NEA tasks that start to replicate GCSE coursework – science experiment and food assessment project		
Topic Outline	Students should know and understand	Students should be able to
Food investigations - Small Cakes Experiments mini NEA 1 task	<ul style="list-style-type: none"> • What are the main functions of ingredients in cakes. • Be able to produce a set of small cakes and recognise what makes them successful. 	<ul style="list-style-type: none"> • Creaming Method, Baking, Using the oven, Decorating and Icing. • Considering properties of materials by investigation.
Small cakes	<ul style="list-style-type: none"> • How to select equipment to peel, shape & cut as appropriate. • Understand the need to carry out health and safety checks. • How to evaluate a product. 	<ul style="list-style-type: none"> • Creaming Method, Baking, Using the oven, Decorating and Icing. • Selecting materials, tools and equipment appropriate to the task. • Combine ingredients to create products with interesting sensory characteristics.
Tray Bake	<ul style="list-style-type: none"> • Be able to understand how the practical could be improved. 	<ul style="list-style-type: none"> • Creaming Method, Baking, Using the oven, Decorating and Icing. • How to line a cake tin.
Chocolate Muffins	<ul style="list-style-type: none"> • Consideration of physical & chemical properties of foods. 	<ul style="list-style-type: none"> • Melting method, Baking, Using the oven, Decorating and Icing
Plan Afternoon Tea project	<ul style="list-style-type: none"> • Understand what Afternoon Tea is and plan ingredients and time plan. • Design a menu to display with the practical task. 	<ul style="list-style-type: none"> • Using a range of sources for information investigate what Afternoon Tea is and look at the types of products that would be suitable. • Start to put a time plan together.
Afternoon Tea assessment	<ul style="list-style-type: none"> • Produce 2 products that could be served for afternoon tea. • Understand the need to follow a time plan. 	<ul style="list-style-type: none"> • Baking, Using the oven, Decorating and Icing. • Present and photograph food in a to maximise grades using suitable props.
Year 8 Food Module Multi Cultural Foods Project		
Introduce students to a range of foods from around the world looking at how they can be replicated at home using easy to source ingredients.		
Topic Outline	Students should know and understand	Students should be able to

Plan breakfast	<ul style="list-style-type: none"> • Discuss how to produce a healthy breakfast and use a range of sources for information. • Considering nutritional priorities in choosing food products. 	<ul style="list-style-type: none"> • Plan breakfast- ingredients and time plan. • Adapt breakfast plan to make healthier version.
Breakfast practical	<ul style="list-style-type: none"> • Using a range of processes and equipment and Suggest modifications. • Discuss healthier adaptations. 	<ul style="list-style-type: none"> • Breakfast Planning, Preparing, Toasting, Frying, Timings. • Sit down and eat as a group. Share.
Nutrition theory	<ul style="list-style-type: none"> • Revise nutrition and discuss different needs • Give examples of menu ideas and discuss family needs to help to devise a week of meals and snacks. 	<ul style="list-style-type: none"> • Be able to recognise basic food groups • and devise a set of basic nutrition rules.
Introduction to multi-cultural project	<ul style="list-style-type: none"> • What foods get eaten where and why and expand awareness and knowledge of different foods and cultures and why we eat more multi-cultural foods. 	<ul style="list-style-type: none"> • Be able to describe the foods from 3 countries. • Be able to recognise foods we eat every day that originated from another country.
BRITISH - Savoury Parcels	<ul style="list-style-type: none"> • The use of standard components - How to use pre-prepared pastry. • 	<ul style="list-style-type: none"> • Savoury Parcels Making a sauce, Use of veg, • Apply understanding by demonstrating how to make savoury parcels by shaping pastry.
ITALIAN - Basic Pasta recipe eg Macaroni Cheese	<ul style="list-style-type: none"> • Learn how to produce a white sauce and the meaning of gelatinisation • Using a range of processes and equipment. 	<ul style="list-style-type: none"> • - Macaroni Cheese Sauce making, Chopping, Slicing, Peeling, Cooking pasta, Using the hob.
Italian - Lasagne	<ul style="list-style-type: none"> • How to adapt mince recipe and create a layered lasagne using either standard components or higher skilled fresh made layers. 	<ul style="list-style-type: none"> • Bolognese sauce - Meat and Veg skills Chopping, Slicing, • Cheese Sauce making Chopping, Slicing, Peeling, Cooking pasta, Using the hob and the oven.
Practical : Cottage Pie	<ul style="list-style-type: none"> • How to adapt a basic mincemeat recipe. • How to boil and mash potatoes and check they are cooked. 	<ul style="list-style-type: none"> • Cottage Pie - Meat and Veg skills Chopping, Slicing, Peeling & cooking a variety of vegetables, Using the hob.
Practical : Risotto	<ul style="list-style-type: none"> • Understand how the absorption method works. 	<ul style="list-style-type: none"> • Risotto Meat and Veg skills Chopping, Slicing, Peeling & cooking a variety of vegetables, Using the hob.

Practical : ASIAN Stir fry / Curry (Indian or Thai)	<ul style="list-style-type: none"> • Be able to describe the countries that form Asia and to recognise foods we eat that originate from Asia. 	<ul style="list-style-type: none"> • Be able to organise and produce a stir fry or curry - Meat and Veg skills Chopping, Slicing, Peeling & cooking vegetables, Using the hob and wok. Cooking rice.
Practical : Cheesecake	<ul style="list-style-type: none"> • Use of Food Processors to crush biscuits – production line. • Enhancing products through garnishing and display products. 	<ul style="list-style-type: none"> • Cheesecake Fruit Prep. • Use of Food processor. • Consideration of properties of foods. • Selecting appropriate equipment.
Practical : Pineapple Upside Down Pudding	<ul style="list-style-type: none"> • Consideration of properties of foods. • Selecting appropriate equipment. 	<ul style="list-style-type: none"> • Pineapple Upside Down Pudding Fruit prep, Cake mixture, Using the oven.
Practical : Final Product – Main Course	<ul style="list-style-type: none"> • Independent Learning. • How to adapt recipes used to produce a tasty nutritious family meal. 	<ul style="list-style-type: none"> • Produce a main course product that would be suitable for a family meal.
Practical : Final Product - Dessert	<ul style="list-style-type: none"> • Independent Learning. • How to adapt dessert recipes used to produce a cheap tasty nutritious family meal. 	<ul style="list-style-type: none"> • Produce a dessert suitable for a family meal.
<p>Year 8 Textiles Module : Decorative Patch work Cushion</p> <p>Students will learn a range of ways to decorate fabrics (laser etching, screen printing, applique and sublimation printing). They will learn about CAD/CAM processes. They will learn how to patchwork and the accuracy needed.</p>		
Topic Outline	Students should know and understand	Students should be able to
Decorative technique research.	<ul style="list-style-type: none"> • Technique names: Laser etching, applique, screen printing and sublimation printing. What each of them are for and how they work. 	<ul style="list-style-type: none"> • Research skills.
Patchwork	<ul style="list-style-type: none"> • Key terms: Patchwork, seam allowance, right sides together, pinning, quilting, stitch in the ditch, press seams open. • What patchwork is. What it is used for. How it is achieved. Quality control. 	<ul style="list-style-type: none"> • Recap how to use the machine and sew straight seams. • How to sew patchwork. • Cutting skills. • Recep how to use the irons.
Specification	<ul style="list-style-type: none"> • Understand what a specification is. Understand what is included in a specification. Key terms Aesthetics, cost, 	<ul style="list-style-type: none"> • Demonstrate your ability to identify key specification points for a product and write a s-specification.

	customer, environment, safety, size, function, materials, manufacture.	
Computer Aided Design	<ul style="list-style-type: none"> • Understand the term CAD and CAM. Understand the advantages and disadvantages of using CAD/CAM. • Understand the characteristics of materials and techniques. 	<ul style="list-style-type: none"> • CAD photoshop presentation skills (use of select and paste into tool) Be able to select appropriate materials and techniques for your design.
Applique	<ul style="list-style-type: none"> • Key terms: Applique, bondaweb, zigzag stitch, layers. Quality control. 	<ul style="list-style-type: none"> • Demonstrate your ability to carry out applique using a zigzag stitch.
laser cutting and sublimation printing.	<ul style="list-style-type: none"> • Key terms: CAD, 2d design, vectorise, explode, etc. Understand suitable fabrics for laser etching. Understand what laser cutters are used for in the fashion & textiles industry. 	<ul style="list-style-type: none"> • 2D design skills (vectorizing an image, exploding an image).
Screen Printing.	<ul style="list-style-type: none"> • Key terms: Screen printing, squeegee, screen, fabric paint. Understand how the technique is carried out in industry. How multi coloured designs are achieved. 	<ul style="list-style-type: none"> • Demonstrate your ability to complete a screen print.
Sewing Cushion	<ul style="list-style-type: none"> • Recap how to patchwork. • seam allowance, right sides together, pinning, , press seams open. • Understand what a hem is and what it is for. • Quality control. • Key words: Polyester wadding, stitch in the ditch. • What is an over locker and what are they used for. Risks and control measures on the over locker. 	<ul style="list-style-type: none"> • Demonstrate your ability to sew an accurate patchwork and a hem. • Using the irons and sewing machines. • Demonstrate your ability to use the overlocker.
Evaluating.	<ul style="list-style-type: none"> • Recap what a specification is. Understand why it is important to revisit the specification. Why 3rd party opinions are important. 	<ul style="list-style-type: none"> • Be able to identify areas where the specification has/hasn't been met. Be able to identify good and bad parts.
Fabric Weaves	<ul style="list-style-type: none"> • Weft & warp in a weave. Plain, twill and satin weave. Properties of different weaves. 	<ul style="list-style-type: none"> • Be able to identify different woven fabrics.

Year 8 Electronics Module – Board game		
Students produce an electronic board game based on a theme of their choice.		
Topic Outline: Board Game	Students should know and understand	Students should be able to
	<ul style="list-style-type: none"> • Basic electronics components 	<ul style="list-style-type: none"> • Assemble basic electronic circuits
	<ul style="list-style-type: none"> • H&S Soldering 	<ul style="list-style-type: none"> • Mark and shape pine
	<ul style="list-style-type: none"> • Marking and wasting wood 	<ul style="list-style-type: none"> • Use Cad and CAM to produce final products
Year 8 Materials Technology Module – Lego man		
Topic Outline	Students should know and understand	Students should be able to
Writing a Brief and Specification	<ul style="list-style-type: none"> • What is a brief and specification? • What to include in an specification. • How to use ACCESS FM. 	<ul style="list-style-type: none"> • Write a specification using ACCESS FM.
Product Analysis and mood board	<ul style="list-style-type: none"> • Identify materials and processes. • Quality control. • What should a mood board include. 	<ul style="list-style-type: none"> • Suggest improvements. • Justify improvements. • Identifying colour and shape inspiration.
Designing a unique Lego man	<ul style="list-style-type: none"> • Names of materials and processes. • How design ideas are presented. 	<ul style="list-style-type: none"> • Presentation • Rendering • Labelling • Annotating
Constructing a Lego Man from Wood	<ul style="list-style-type: none"> • Hand tools: coping saw, tenon saw, try square. • Machinery: Hegner saw, pillar drill, belt sander, oven. • Materials: Pine, Foamex, MDF, dowel. • Understand tolerances, risk assessments and hazards. 	<ul style="list-style-type: none"> • Using hand tools and machinery. • Using the hole saw. • Constructing a mitre joint. • Moulding thermoplastics into shape. • Using templates and jigs. • Painting and use of vinyl. • Gluing.
Evaluating	<ul style="list-style-type: none"> • Recap what a specification is. Understand why it is important to revisit the specification. Why 3rd party opinions are important. 	<ul style="list-style-type: none"> • Be able to identify areas where the specification has/hasn't been met. Be able to identify good and bad parts.

Year 9

Year 9 Food Module - Exploring Nutrition & Celebrating Cultural Diversity		
Topic Outline	Students should know and understand	Students should be able to
Introduction to Healthy Eating Unit and The Eatwell Guide	<ul style="list-style-type: none"> • Healthy Eating- The Eatwell Guide • Nutrients required for a Balanced diet. 	<ul style="list-style-type: none"> • Recognise what constitutes a balanced diet • What each area of the Eatwell Guide is.
Ready Steady Cook Challenge	<ul style="list-style-type: none"> • Food Safety - Discuss Food Safety when preparing a meal. 	<ul style="list-style-type: none"> • Ready steady cook. • Chopping, Slicing, Peeling & cooking a variety of vegetables. • Using the ingredients provided, be able to plan and prepare a Healthy dish.
Surprise Surprise Muffins	<ul style="list-style-type: none"> • What is a HACCP - Risk assessment and how to carry one out. 	<ul style="list-style-type: none"> • How to produce Sweet or Savoury Muffins with hidden fruit or vegetables.
Healthy Vegetarian Savoury light bites: Stuffed vegetables / Stir Fry / Samosas	<ul style="list-style-type: none"> • Nutrients theory - Carbohydrates and Proteins. 	<ul style="list-style-type: none"> • Skills required to produce a healthy vegetarian lunch eg. stuffed vegetables, samosas, vegetable stir fry.
Mexican madness demonstration and sensory analysis	<ul style="list-style-type: none"> • Demonstrate tortilla wrap, fajitas, and salsa • How to produce an evaluation and Star profile including nutrients and essential criteria. 	<ul style="list-style-type: none"> • How to carry out Taste testing and sensory analysis. • Evaluate either fajitas, enchiladas, quesadillas or burritos
Spanish Sensation - Paella:	<ul style="list-style-type: none"> • Nutrients –Sugar and fats. • Discuss nutrients within your dish. 	<ul style="list-style-type: none"> • Produce a Spanish sensation – Paella. • Chopping, Slicing, Peeling & cooking a variety of vegetables, Using the hob.
A taste of Italy –Ravioli/ tuna pasta bake	<ul style="list-style-type: none"> • Nutritional Analysis – Explorefood.com Analyse nutrition of your own dish. 	<ul style="list-style-type: none"> • Pasta making skills.
A Flavour of Asia - Indian or Thai curries / Vegetable biryani Chinese Sweet and Sour Chicken	<ul style="list-style-type: none"> • What is Asian food and how has it influenced our diet today. • Reinforcing cultural diversity. 	<ul style="list-style-type: none"> • Multicultural cuisine – a taste of Asia. • Indian or Thai curries, vegetable biryani, sweet and sour chicken.
SHORTCRUST PASTRY EXPERIMENTS Mock NEA 1 assessment	<ul style="list-style-type: none"> • Plan and carry out NEA assessment task – shortcrust pastry experiments to show how different ingredients react. 	<ul style="list-style-type: none"> • Carry out assessment task and record results.

Best of British: Cornish or Cheese and Onion pasty	<ul style="list-style-type: none"> • Cultural diversity – local traditional food. • Food Provenance. 	<ul style="list-style-type: none"> • Pastry making and shaping skills. • Traditional finish – crimping.
Best of British: Speciality Bread	<ul style="list-style-type: none"> • The use of yeast as a raising agent. 	<ul style="list-style-type: none"> • Produce a loaf of bread using a high skilled yeast product.
Great Bideford Bake Off - Technical challenge	<ul style="list-style-type: none"> • Independent working and using gained knowledge and skills to produce a traybake. 	<ul style="list-style-type: none"> • Plan and produce a Lightly Spiced Carrot Cake or Swirly Lemon Drizzle Fingers. • Ice and display.
Great Bideford Bake Off - Showstopper	<ul style="list-style-type: none"> • Independent working and using gained knowledge and skills. 	<ul style="list-style-type: none"> • Plan and a showstopper showing independence.
CELEBRATIONS PROJECT - Assessment Planning and Recipe Trial and Final Practical	<ul style="list-style-type: none"> • Project Planning for an NEA 2 assessment task. 	<ul style="list-style-type: none"> • Produce a mini NEA 2 assessment project with a celebrations theme.
<p>Year 9: Textiles Soft Toy Project</p> <p>Students will learn how to work with a knitted and bonded fabric constructions. They will learn how to make 2d shapes into 2d shapes. They will practise applique and hand embroidery</p>		
Topic Outline	Students should know and understand	Students should be able to
Disassembly	<ul style="list-style-type: none"> • What is a disassembly. Key words: Materials, techniques, components. 	<ul style="list-style-type: none"> • Be able to identify different materials, techniques and components and comment on their suitability.
Fabric testing	<ul style="list-style-type: none"> • Understand properties that fabrics can have (crease, drape, durability, absorbency, pilling). • Understand why different fabrics act differently (woven, bonded, felted). • Understand why and how fabrics are tested in industry. 	<ul style="list-style-type: none"> • Be able to carry out fabric tests.
Knitted and Bonded Fabrics	<ul style="list-style-type: none"> • Understand the properties of knitted fabrics and bonded fabrics. • Understand different types of knit (warp and weft). 	<ul style="list-style-type: none"> • Be able to identify different types of knit and bonded fabrics.
Applique and hand embroidery.	<ul style="list-style-type: none"> • Key terms: Applique, bondaweb, zigzag stitch, layers, embroidery, running stitch, chain stitch, blanket stitch. Quality control. 	<ul style="list-style-type: none"> • Demonstrate your ability to carry out applique an applique sample (fleece on fleece, felt on fleece.)

		<ul style="list-style-type: none"> • Be able to carry out a range of embroidery stitches.
Specification	<ul style="list-style-type: none"> • Understand what a specification is. Understand what is included in a specification. Key terms Aesthetics, cost, customer, environment, safety, size, function, materials, manufacture. Understand how fleece is made and the environmental impacts. Understand how fleece can be made from recycled bottles. 	<ul style="list-style-type: none"> • <u>Skills:</u> Demonstrate your ability to identify key specification points for a product and write a specification.
Design ideas	<ul style="list-style-type: none"> • Understand the design process and know the difference between initial and developed ideas. Know the different presentation techniques. Understand what should be included in annotation. Understanding of suitability of components, materials and techniques. 	<ul style="list-style-type: none"> • Drawing. Be able to identify key features.
Pattern Cutting	<ul style="list-style-type: none"> • Understand what a pattern is. Understand how darts need to be used to create 3d shapes from 2d shapes. Key words: pattern, notch, dart, seam allowance, pinning, fleece, cutting on the fold, symmetry. 	<ul style="list-style-type: none"> • Accuracy of drawing a pattern. Pinning and cutting.
Sewing Soft Toy	<ul style="list-style-type: none"> • Recap what darts are and what they are for. • Be able to identify appropriate tools and techniques to complete the product. • Key terms: slipstitch, polyester wadding, right sides together, seam allowance, pinning, fleece, right sides together, seam allowance, pinning, fleece. 	<ul style="list-style-type: none"> • Sewing a dart. Using applique and embroidery to decorate final toy.
Evaluation	<ul style="list-style-type: none"> • Recap what a specification is. Understand why it is important to revisit the specification. Why 3rd party opinions are important. 	<ul style="list-style-type: none"> • Be able to identify areas where the specification has/hasn't been met. Be able to identify good and bad parts.

Year 9 Textiles Module Busy Book

Students will learn how to use a range of decorative techniques creatively and make a fabric busy book for a child.

Topic Outline	Students should know and understand	Students should be able to
Heat Transfer	<ul style="list-style-type: none"> The difference between natural and manmade fibres. What heat transfer is and how it is carried out? 	<ul style="list-style-type: none"> Demonstrate your ability to carry out heat transfer and be able to draw upon conclusions.
Embroidery and Trapunto	<ul style="list-style-type: none"> Recap how to achieve the technique. Name the equipment. Understand the quality control checks and safety control measures needed Other techniques embroidery, trapunto, quilting. 	<ul style="list-style-type: none"> Hand Embroidery Machine Sewing
SMART fabrics	<ul style="list-style-type: none"> Understand the quality control checks needed when fabric painting. Equipment names: Friction pens. What is a SMART material? Names of SMART materials and what they do (thermochromic, photochromic, hydrochromic, microencapsulated, shape memory polymers, shape memory alloys. What are their stimuli? 	<ul style="list-style-type: none"> Painting, using the friction pens. Identifying smart fabrics.
Sublimation Printing	<ul style="list-style-type: none"> Recap how to use this technique since year 8. What is CAD/CAM. What are the advantages and disadvantages. What quality checks need to be carried out? Selecting appropriate fabrics. 	<ul style="list-style-type: none"> Computer skills: removing backgrounds, flipping text, adjusting layout and size. Using the heat press.
Applique	<ul style="list-style-type: none"> Recap what applique is and the equipment needed (bondweb). Understand its advantages and disadvantages. Understand why zigzag stitch is used. Understand the quality control checks needed. 	<ul style="list-style-type: none"> Planning and cutting. Sewing machine skills. Using zigzag stitch.

Sewing Books	<ul style="list-style-type: none"> • Key terms: seam allowance “right sides together”, bagging out, edge stitching. 	<ul style="list-style-type: none"> • Accuracy of pinning. • Sewing machine skills. • Edge stitching
<p>Year 9 Graphic Design Module - Festival Merchandise Project.</p> <p>Students will learn about how graphic designers use colour, imagery, composition and typography in their work. They will experiment with using these components to meet a festival brief.</p>		
Topic Outline	Students should know and understand	Students should be able to
Specification	<ul style="list-style-type: none"> • What is a brief and a task analysis. • What is a specification and what should be included in it. • What ACCESS FM stands for. 	<ul style="list-style-type: none"> • Be able to identify key features for specification.
Introduction to Colour Wheel	<ul style="list-style-type: none"> • Key words: Primary, Secondary and Tertiary colours, linking to colour theories, analogue, contrasting, subtractive and additive colours. • Understand different emotions that colours can portray. 	<ul style="list-style-type: none"> • Create their own colour wheel design.
Monoprinting Experiments	<ul style="list-style-type: none"> • What Monoprinting is. • The equipment used. • How Karel Martens used monoprinting using tone and colour. 	<ul style="list-style-type: none"> • Be able to achieve a monoprint in the style of Karel Martens.
Typography Experiments	<ul style="list-style-type: none"> • Understand the anatomy of type: Serif, sans serif, cap height, ascenders, defenders. • Understand traditional typeface: italics, bold, Times New Roman, Helvetica etc. • Understand why type as image is used. • Understand how hand lettering is achieved 	<ul style="list-style-type: none"> • Create their own word as image and hand lettering. • Identify a range of typefaces and key features.
Logo Design Ideas and Developments	<ul style="list-style-type: none"> • What makes a successful logo. • Why are logos used. • Recap colour theory and typography. • Understand how iconic imagery is used 	<ul style="list-style-type: none"> • Designing and presentation skills. • CAD skills
Ticket/Poster Designs	<ul style="list-style-type: none"> • Key terms composition: White space, kissing, layout, leading lines, symmetry, repetition. 	<ul style="list-style-type: none"> • Be able to identify key features of composition on tickets and posters.

	<ul style="list-style-type: none"> • What makes a good composition. 	<ul style="list-style-type: none"> • Be able to plan your own composition design considering colour, type and imagery. • CAD Skills
Sublimation Printing Lanyard/T Shirt/mug	<ul style="list-style-type: none"> • What is sublimation printing. • Recap composition. 	<ul style="list-style-type: none"> • Be able to sublimation print.
Evaluation	<ul style="list-style-type: none"> • Recap all key terminology learnt about the graphic components. 	<ul style="list-style-type: none"> • Be able to identify key features that were and were not successful in the final products referring to how the components of graphic design were used.
Year 9 Construction Module - Chest Project		
Topic Outline	Students should know and understand	Students should be able to
Practical: Measuring and marking out	<ul style="list-style-type: none"> • Interpreting working drawings and understand symbols and dimensions. 	<ul style="list-style-type: none"> • Using workshop equipment to measure and mark out.
Sawing and sanding	<ul style="list-style-type: none"> • Hazards and precautions associated with the sander. • Applications of different saws. 	<ul style="list-style-type: none"> • Use the sander safely and accurately. • Use hand tools safely and accurately.
Finger joints	<ul style="list-style-type: none"> • How to cut a finger joint accurately. • Understand why finger joints are used. • Know why a marking gauge is used. • Know when a finger joint would be appropriate. • Understand safety and application of a chisel. 	<ul style="list-style-type: none"> • Measuring and marking out. • Using a marking gauge. • Manufacturing a finger joint. • Sawing. • Chiselling.
Practical: Cutting a bevel	<ul style="list-style-type: none"> • How to complete quality control checks and why they are important. • Know when a bevel cut would be appropriate. 	<ul style="list-style-type: none"> • Using a plane.
Chisel out hinge sections	<ul style="list-style-type: none"> • How to use the chisel safely and accurately • Know correct chiselling technique appropriate to hinges. 	<ul style="list-style-type: none"> • chiselling out a hinge.
Cut and shape lid section	<ul style="list-style-type: none"> • Interpreting working drawings and understand symbols and dimensions. • Hazards and precautions associated with the sander. 	<ul style="list-style-type: none"> • Using workshop equipment to measure and mark out.

Assembly and applying a finish	<ul style="list-style-type: none"> • How to apply an accurate finish when painting. • Understand what a quality control check is. • Properties and application of PVA glue. 	<ul style="list-style-type: none"> • Masking in preparation for paint. • Painting.
Evaluation	<ul style="list-style-type: none"> • How to plan an evaluation. • Understand the content of an evaluation. • Use of PEE paragraphs. 	<ul style="list-style-type: none"> • Writing an evaluation.
Year 9 Construction Module - Picture Frame		
Topic Outline	<ul style="list-style-type: none"> • Students should know and understand 	<ul style="list-style-type: none"> • Students should be able to
Using the router	<ul style="list-style-type: none"> • Health and safety when using the router. • Effective use of colour / colour theory. 	<ul style="list-style-type: none"> • Safely use the router. • Shading / rendering with colour pencils.
Marking and cutting halving joints	<ul style="list-style-type: none"> • How to measure and mark out accurately. • Understand why joints are used. • Know why a marking gauge is used. • Know when a halving joint would be appropriate. 	<ul style="list-style-type: none"> • Measuring and marking out. • Using a marking gauge. • Manufacturing a halving joint. • Interpret a working drawing.
Cut mitre joints	<ul style="list-style-type: none"> • How to measure and mark out accurately. • Know when a mitre joint would be appropriate. 	<ul style="list-style-type: none"> • Measuring and marking out. • Using a marking gauge. • Manufacturing a halving mitre joint. • Interpret a working drawing.
Cut Corner Bridle	<ul style="list-style-type: none"> • How to measure and mark out accurately. • Know when a corner bridle would be appropriate. 	<ul style="list-style-type: none"> • Measuring and marking out. • Using a marking gauge. • Manufacturing a corner bridle joint. • Interpret a working drawing.
Cut Mortice and Tenon	<ul style="list-style-type: none"> • How to measure and mark out a mortice and tenon joint accurately. • Know when a mortice and tenon joint would be appropriate. • Understand hazards and precautions associated with the mortice machine. 	<ul style="list-style-type: none"> • Measuring and marking out. • Using the mortice machine. • Manufacturing a mortice and tenon joint. • Interpret a working drawing.
Year 9 Materials technology Module – Sweet dispenser		
Topic Outline	Students should know and understand	Students should be able to

Research and Investigation	<ul style="list-style-type: none"> The need for a Mood Board. 	<ul style="list-style-type: none"> Create a Mood Board.
	<ul style="list-style-type: none"> The function of specific tools and equipment within the workshop. 	<ul style="list-style-type: none"> Use specific tools and equipment.
Specification	<ul style="list-style-type: none"> Understand the need for a design specification. 	<ul style="list-style-type: none"> Complete a detailed design specification.
Designing	<ul style="list-style-type: none"> How to communicate ideas effectively. 	<ul style="list-style-type: none"> Produce a range of varied / creative design ideas.
Planning	<ul style="list-style-type: none"> The need for a production plan and manufacturing log. 	<ul style="list-style-type: none"> Produce and work to a production plan. Display understanding of manufacturing with a manufacturing log.
Correct and safe use of tools and machines	<ul style="list-style-type: none"> How to use a Pillar drill, belt sander, Hegner saw, Laser cutter and Battery drill. 	<ul style="list-style-type: none"> Use a Pillar drill, belt sander, Hegner saw, Laser cutter and Battery drill to a given tolerance.
Health and safety	<ul style="list-style-type: none"> hazards within the workshop and be able to suggest control measures. 	<ul style="list-style-type: none"> Use tools and equipment safely.
ICT	<ul style="list-style-type: none"> how to operate basic functions on 2D design. 	<ul style="list-style-type: none"> Produce a range of vector drawings on 2D design.
	<ul style="list-style-type: none"> How to operate the laser cutter and sticker machine. 	<ul style="list-style-type: none"> Operate the laser cutter and sticker machine.
Evaluate	<ul style="list-style-type: none"> The need for and benefit of producing an evaluation. 	<ul style="list-style-type: none"> Produce a detailed evaluation outlining strengths and areas for improvement.
Year 9 Materials technology Module – USB Lamp project Students produce a lamp with a basin USB circuit. The theme of sustainability is used as a medium to convey the need to consider out environment when designing.		
Topic Outline	Students should know and understand	Students should be able to
	<ul style="list-style-type: none"> Sustainability – LED, Batteries, Flat Pack and Materials. 	<ul style="list-style-type: none"> Solder circuits safely.
	<ul style="list-style-type: none"> Tolerances. 	<ul style="list-style-type: none"> Produce models to improve their designs
	<ul style="list-style-type: none"> Iterative design. 	<ul style="list-style-type: none"> Consider simple effects to enhance design finish.
	<ul style="list-style-type: none"> Sustainability – LED, Batteries, Flat Pack and Materials. 	<ul style="list-style-type: none"> Solder circuits safely.