Subject: Year 7 DT			
In Year 7 Design and Technology curriculum, students will gain a comprehensive understanding of health and safety protocols through practical lessons and theoretical study. They will learn technical language relevant to their projects, enhancing their ability to articulate design concepts and processes effectively. The focus will be on integrating theory with hands-on experience, allowing students to demonstrate their knowledge through the creation of high-quality products that emphasise aesthetics, functionality, and material suitability. This year is dedicated to learning and developing new skills that will lay a strong foundation for their future work in Design and Technology.			
Product Design Soft toy	Electronics	Food Technology	**DEC P6**
Acquire:			
● Introduction to health and safety expectations ● Introduction to measuring, marking and creating lines. ● Introduction to safe working practices in the workshop ● Know how to identify hazards and be able to implement prevention methods ● Know how to convert units to achieve the correct measurement ● Be able to work with some independence in the lesson to develop a product safely ● Be able to identify and name the use of hand tools ● Be able to identify the difference between manufactured woods and natural woods ● Be able to learn about a designer and their influence on the world ● Know how to apply negative spacing to create a shape ● Identify a range of sewing skills and link to appropriate applications	● Introduction to health and safety expectations links to textiles and electronics ● Introduction to different types of sewing techniques ● Introduction to safe working practices in the workshop ● Know how to identify hazards and be able to implement prevention methods ● Understand the difference between input, output and process. ● Can identify tools and equipment and explain their use. ● Can problem solve and create a refined idea. ● Can link a product to its functional properties.	● Nutrition and Health Introduction to current advice for a healthy diet: • Introduce Eatwell guide • Introduction to macro and Micronutrients, fruits and vegetables, vitamins focus Food safety • Personal hygiene / Kitchen safety / Food safety Food science Chemical processes of food ingredients • Raising agents Food choice Factors which influence food choice: • Packaging and food labelling (nutritional) • Effect of fast food on our health • Using awareness of taste, texture and smell to analyse a variety of foods Food provenance Where and how ingredients are grown • Food Miles • Food Seasonality	● Primary and secondary research carried out on one or two relevant existing products. ● Some materials, measurements and costing are created ● Analysis is linked aspects such as social, and cultural issues are mentioned ● Designs can be clearly linked to the design specification. ● Most developments include focused quality drawings (close-ups, exploded) to accompany explanations. ● Investigation of machinery and equipment used in Industry ● understanding of a range of materials, their properties and source. ● Understand the environmental impact of a range of materials ● Be able to use a range of techniques and process to create a quality product ● Demonstrate a quality of finish ● Designs can be clearly linked to the design specification.

Apply			
● Identify hazards in the room and discuss prevention methods ● Watch teacher demonstration and apply knowledge verbally and physically ● Set up the workshop ready to manufacture, ensuring everyone is safe and ready to learn ● Watch teacher demonstrations and apply knowledge in practical and explain in own words ● Be able to use tools and equipment accurately and develop a product in line with the WAGOLL provided ● Manufacture a product with awareness of how to use the tools and equipment correctly whilst being safe. ● Discuss types of motion and link to their use in industry ● Identify tools and recall their names and use them safely and correctly to complete an activity with a successful outcome. ● Create a mind map identifying the ley differences through discussion ● State, describe and explain key points about a designer and link to own opinions	● Watch teacher demonstration and apply knowledge verbally and physically ● Set up the workshop ready to manufacture, ensuring everyone is safe and ready to learn ● Watch teacher demonstrations and apply knowledge in practical and explain in own words ● Be able to use tools and equipment accurately and develop a product in line with the WAGOLL provided ● Manufacture a product with awareness of how to use the tools and equipment correctly whilst being safe. ● Be able to create a stitched shape that houses the LED ● Be able to create flying leads from teacher demonstration and WAGOLL provided Watch teacher demonstration on how to solder safely	● Label and organise the Eatwell Guide, linking commodities from each section to their key nutrients and their function in our bodies ● Demonstrate effective and safe cooking skills throughout a range of practical lessons ● Identifying hazards and demonstrating the preventative control measures. ● Explaining the function ingredients in recipes such as scones, Cous Cous Salad, flapjack and chicken goujons ● Demonstrate the use of a variety of cooking methods including use of the kettle, grill, hob and oven. ● Analysing and reviewing a series of food packaging in groups to present opinions on food legislation and marketing ● Read a newspaper article and make specific links about the effects of excess salt and fat in our diet ● Identifying the benefits of eating seasonal foods and proposing a seasonal menu suitable for a restaurant based on your research	● Used Chromebook to research existing products and analysed using ACCESSFM ● Discuss materials and annotate findings ● Explain environmental impacts and provide justifications ● Annotate designs with ACCESSFM links ● A range of drawings created ● Sketches or drawings are original and developed through peer discussion ● A design specification is created linking to ACCESSFM and justified ● Developments identified through research and peer discussion. ● Be able to use tools and equipment accurately and develop a product in line with the WAGOLL provided ● Manufacture a product with awareness of how to use the tools and equipment correctly whilst being safe. ● Be able to model an idea using specialist materials and equipment

Vocabulary			
• Blanket stitch • cross stitch • straight stitch or running • border • Negative spacing • filler • Needle • Sewing • Sharp pencil • Steel rule • Pine • Softwoods • Hardwoods • Manufacture boards • Template • Hazard • Prevention • Sketch • creative • TMG • felt	• Soldering iron • Hazard • Prevention • Design • Develop • Soldering • Snips • Solder sucker • Tin • Risk • LED • properties • characteristics • modify • improve • develop • Resistor • Sensor • Input • Process • Output	• Protein • Vitamins • Minerals • Fat • Carbohydrate • Antioxidant • Sensory analysis • Hygiene • Hazard • Diet • Food Seasonality • Macronutrient • Micronutrient • Diet • The Eatwell Guide • Whisk • Beat • Creaming method • Grill • Bridge • Claw • Sieve • Spatula • Palette Knife • Food probe • Raising agent	• Architecture • Design • Engineer • Construct • Model • Manufacture • Isometric • 1 point perspective • 2D Design • Primary and secondary research • Specification • Exploded drawing • Quality assurance • Quality Control • Modelling • Craft knife • Cutting mat • 6Rs • Sustainability • Aesthetics • Cost • Customer • Environment • Safety • Size
Assessment			
Baseline assessment – multiple choice Questioning, Self and Peer assessment FAR Marking – theory and practical tasks End of project assessment – multiple choice End of year assessment (covers all curriculum areas)			

Subject: Year 8 DT	
In Year 8 Design and Technology curriculum, students will develop on existing skills and gain a comprehensive understanding of health and safety protocols through practical lessons and theoretical study. They will learn technical language relevant to their projects, enhancing their ability to articulate design concepts and processes effectively. The focus will be on integrating theory with hands-on experience, allowing students to demonstrate their knowledge through the creation of high-quality products that emphasise aesthetics, functionality, and material suitability. This year is dedicated to learning and developing new skills that will lay a strong foundation for their future work in Design and Technology.	
Product Design	Food Technology
Acquire:	

● Recap health and safety expectations, specific to specialist areas. ● Introduction to measuring, marking and creating lines. ● Introduction to safe working practices in the workshop ● Know how to identify hazards and be able to implement prevention methods ● Know how to convert units to achieve the correct measurement ● Work with some independence in the lesson to develop a product safely ● Understand the difference between different types of motion ● Identify and name the use of hand tools ● Identify the difference between manufactured woods and natural woods ● learn about a designer and their influence on the world ● PIES - understand about different people profiles and be able to consider them when designing ● Be able to create a range of design ideas using inspiration from design movements ● Identify design movements from their composition ● Be able to apply their own style to a design reflecting inspiration from a design movement ● Explore a range of materials and processes ● Use a jig and template to create a range of products	Nutrition and Health • Label and organise the Eatwell Guide, linking commodities from each section to their key nutrients and their function in our bodies Food safety • Demonstrate effective and safe cooking skills throughout a range of practical lessons • Identifying hazards and demonstrating the preventative control measures when cooking • Produce a time plan to follow in exam conditions, including contingencies and timings Food science • Explaining the function ingredients in recipes such as cheese and onion pasties, macaroni cheese with a bechamel sauce, bread rolls and pizza • Demonstrate accurate and confident use of a variety of cooking methods including use of the kettle, grill, hob, microwave and oven. • Carry out a sensory analysis to test how heat transfer affects the cooking of popcorn Food choice • Analysing a range of premium and value ingredients and costing a recipe to evaluate the total cost of a food product • Read a newspaper article and to make specific links about the sustainability of food production Food provenance • Identifying the benefits of eating seasonal foods and proposing a seasonal menu suitable for a restaurant based on your research
Apply	

• Identify hazards in the room and discuss prevention methods • Watch teacher demonstration and apply knowledge verbally and physically • Set up the workshop ready to manufacture, ensuring everyone is safe and ready to learn • Watch teacher demonstrations and apply knowledge in practical and explain in own words • Use tools and equipment accurately and develop a product in line with the WAGOLL provided • Manufacture a product with awareness of how to use the tools and equipment correctly whilst being safe. • Discuss types of motion and link to their use in industry • Identify tools and recall their names and use them safely and correctly to complete an activity with a successful outcome. • Create a mind map identifying the ley differences through discussion • State, describe and explain key points about a designer and link to own opinions • Create a product using batch production methods • Critique their product and provide developments and improvements	• Nutrition and Health • Label and organise the Eatwell Guide, linking commodities from each section to their key nutrients and their function in our bodies Food safety • Demonstrate effective and safe cooking skills throughout a range of practical lessons • Identifying hazards and demonstrating the preventative control measures when cooking • Produce a time plan to follow in exam conditions, including contingencies and timings Food science • Explaining the function ingredients in recipes such as cheese and onion pasties, macaroni cheese with a bechamel sauce, bread rolls and pizza • Demonstrate accurate and confident use of a variety of cooking methods including use of the kettle, grill, hob, microwave and oven. • Carry out a sensory analysis to test how heat transfer affects the cooking of popcorn Food choice • Analysing a range of premium and value ingredients and costing a recipe to evaluate the total cost of a food product • Read a newspaper article and to make specific links about the sustainability of food production Food provenance • Identifying the benefits of eating seasonal foods and proposing a seasonal menu suitable for a restaurant based on your research
Vocabulary	
● Drilling jig ● Tolerance ● Coping saw ● Fret saw ● Bench hook ● Sharp pencil ● Steel rule ● Try square ● Pine ● Plywood ● Panel pins	● Protein ● Vitamins ● Minerals ● Fat ● Carbohydrate ● Antioxidant ● Sensory analysis ● Hygiene ● Hazard ● Food Seasonality ● Macronutrient

• Centre punch • Softwoods • Hardwoods • Manufacture boards • MDF • panel pin • Template • Pin hammer • Bench vice • Hazard • Prevention • Belt sander • Batch • Mass • One off production • Isometric	• Micronutrient • The Eatwell Guide • Whisk • Beat • Creaming method • Grill • Bridge • Claw • Food provenance • Food miles • Starch • Gelatinisation • Cuisine • Conduction • Convection • Radiation • Cross contamination • Poultry • El Dente • Pathogens • Listeria • Salmonella • Staphylococcus • Campylobacter
Assessment	
Baseline assessment – multiple choice Questioning, Self and Peer assessment FAR Marking – theory and practical tasks End of project assessment – multiple choice End of year assessment (covers all curriculum areas)	

Subject: Year 9 DT

In Year 9 Design and Technology curriculum, students will develop on existing skills with a keen focus on independence with an established understanding of health and safety protocols through practical lessons and theoretical study. They will learn technical language relevant to their projects, enhancing their ability to articulate design concepts and processes effectively. The focus will be on integrating theory with hands-on experience, allowing students to demonstrate their knowledge through the creation of high-quality products that emphasise aesthetics, functionality, and material suitability. This year is dedicated to learning and developing new skills that will lay a strong foundation for their future work in Design and Technology. Students will build on knowledge learnt from previous years and create an innovative product.

Acquire	Product Design - LED light	Food Technology
	● Recap on health and safety expectations, specific to specialist areas, students will know how to identify a risk and prevention and create a range of risk assessments. ● Develop knowledge of PIES and the sectors it links to. ● Introduction to measuring, marking and creating lines. ● Understand the difference between need and want and apply to the TMG. ● Know how to convert units to achieve the correct measurement working within tolerances ● Be able to work with independence in the lesson to develop a product safely ● Be able to understand the difference between different types of production ● Be able to identify and name the use of hand tools and machinery ● Be able to identify the difference between manufactured woods and natural woods ● Be able to learn about a designer and their influence on the world ● Understand how to identify a range of different drawing styles	Nutrition and Health; Advice for healthy diet • Revisit Eatwell guide Focus on: Proteins and fats • Further develop understanding of nutrients through the function and source of protein (HBV and LBV) and fats (trans, saturated and unsaturated) • Planning nutritional needs at different life stages including toddlers, older adults, teenagers and pregnancy. Food safety; Demonstrate effective and safe cooking skills; • Allergens and intolerances; symptoms and causes • Key temperatures when preparing, cooking and serving food, the effect temperature has on pathogens • The role of an Environmental Health Officer Food science; Functional properties and chemical processes of food ingredients; • Denaturation and coagulation of proteins • The effect cooking has on nutrient value Food choice; Factors which influence food choice: • Medical, moral and religious diets • Sensory analysis of a range of cooking methods
Apply	● Identify drawing styles and their application ● Watch teacher demonstration and apply knowledge verbally and physically ● Set up the workshop ready to manufacture, ensuring everyone is safe and ready to learn ● Watch teacher demonstrations and apply knowledge in practical and explain in own words	Nutrition and Health; Advice for a healthy diet. ● Organise a range of food commodities into the types of fats and proteins and discuss how to reduce fat intake during cooking and preparation, and create a meal using protein complementation. ● Research a particular life stages' nutritional needs and produce an infographic Food safety; Demonstrate effective and safe cooking skills;

	● Be able to use tools and equipment accurately and develop a product in line with the WAGOLL provided ● Manufacture a product with awareness of how to use the tools and equipment correctly whilst being safe. ● Understand how to use specialist equipment and machinery to create a desired outcome. ● Understand how to use the line bender and manipulate plastic to create a desired effect. ● Identify tools and recall their names and use them safely and correctly to complete an activity with a successful outcome. ● Create a diary of making explaining each step and issues overcome ● State, describe and explain key points about a designer and link to own opinion ● Evaluate and identify areas to modify and improve	● Demonstrate effective and safe cooking skills throughout a range of practical lessons including marinated kebabs, Salt & Pepper fakeaway, stuffed flatbreads, burger and wedges and mini quiches. ● Identifying hazards and demonstrating the preventative control measures when cooking. Independently testing foods following key temperatures during storage and cooking ● Produce a time plan for a special diet which will be followed in exam conditions, including contingencies and timings Food science; Functional properties and chemical processes of food ingredients ● Participate in a presentation challenge to cook an egg demonstrating your understanding of denaturation and coagulation ● Work as a group to conduct a sensory analysis whilst discussing the effect a variety of cooking methods have on the nutrients Food choice; Factors which influence food choice: ● Read a newspaper article and to make specific links about the effects of food allergens and intolerances ● Match a range of medical, moral and religious diets to their definitions
Vocabulary	● Metal ● Acrylic ● Portable drill ● Engineer ● Orthographic ● Mondrian art ● drill bit ● masking tape ● assembly line ● Isometric ● Coping saw ● Fret saw ● Bench hook ● Sharp pencil ● Steel rule ● Try square ● Pine ● Plywood	● Protein ● Vitamins ● Minerals ● Fat ● Carbohydrate ● Antioxidant ● Sensory analysis ● Hygiene ● Hazard ● Protein complementation ● Macronutrient ● Micronutrient ● The Eatwell Guide ● Whisk ● Denaturation ● Coagulation ● Vegan ● Allergen ● Intolerance

	• Panel pins • Centre punch • Softwoods • Hardwoods • Manufacture boards • Template • Pin hammer • Bench vice • Hazard • Risk • Prevention • Control measure • Belt sander	• Coeliac • Lactose • Amino Acid • Bridge • Claw • Food provenance • Cuisine • Cross contamination • Poultry • El Dente • Pathogens • Listeria • Salmonella • Staphylococcus • Campylobacter
Assessment	Baseline assessment – multiple choice Questioning, Self and Peer assessment FAR Marking – theory and practical tasks End of project assessment – multiple choice End of year assessment (covers all curriculum areas)	