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	Electronics	Food Technology	**DEC after school**
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 understand the difference between different types of motion ● 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	● 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 how more advanced electrical and electronic systems can be powered and used in their products like circuits with lights. ● 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. ● Complete third party feedback	● 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 howe 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			
• Motion • Linear • Reciprocating • Oscillating • Rotary • Coping saw • Fret saw • Bench hook • Sharp pencil • Steel rule • Try square • Pine • Plywood • Panel pins • Centre punch • Softwoods • Hardwoods • Manufacture boards • Template • Pin hammer • Bench vice • Hazard • Prevention • Belt sander	• older • Soldering iron • Stitch • Straight stitch • Felt • Hazard • Prevention • Design • Develop • Needle • Sewing • Soldering • Snips • Wire stripper • Solder sucker • Tin • Risk • LED • properties • characteristics • modify • improve • develop • Resistor	• 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)			