Year 5 Curriculum subject plan
Design and Technology

YEAR 5	**Food** Celebrating Culture and Seasonality	**Structures** Frame Structures	**Textiles** Combining Different Fabric Shapes	**Electrical Systems** More Complex Switches and Circuits
Component Knowledge	• Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. • Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. • Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas. • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Make, decorate and present the food product appropriately for the intended user and purpose. • Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. • Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. • Understand how key chefs have influenced eating habits to promote varied and healthy diets. • Know how to use utensils and equipment including heat sources to prepare and cook food. • Understand about seasonality in relation to food products and the source of different food products. • Know and use relevant technical vocabulary eg, at, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality. • Generate innovative ideas by carrying out research including surveys, interviews and questionnaires. • Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. • Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. • Produce detailed lists of equipment and fabrics relevant to their tasks. • Formulate step-by-step plans and, if appropriate, allocate tasks within a team. • Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost. • Investigate and analyse textile products linked to their final product. • Compare the final product to the original design specification.			

	• Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. • A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Understand how to strengthen, stiffen and reinforce 3-D frameworks. • Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. • Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams. • Understand and use electrical systems in their products. • Apply their understanding of computing to program, monitor and control their products. • Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product.