Hawkesley Church Primary Academy
Design Technology - KS2 to KS3 Bridging Document

KS2 National Curriculum End points	How do we prepare children at the end of Year 6?	Year 7 End points
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts. When designing and making, pupils should be taught to: **Design** - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** - investigate and analyse a range of existing products	In Year 6 students are equipped with important skills and foundational concepts that will allow them to flourish as they progress into the Secondary phase of their school life. To support children in their readiness for their local secondary school children need an understanding in the following: • Look at the use of sustainable materials in the world around us • Draw on teaching in Science and how materials and their properties are used • Begin to look at working with wood / timber and being introduced to different hand tools • Looking at finishing methods when working with wood • Look at the transition from hand sewing to machine sewing • Using computing knowledge and skills to aid in computer design	• Identifying design opportunities. • Designing to a brief and specification. • Responding to client feedback. • Iterative design. • Identifying sustainable materials. • Material properties and characteristics. • Drawing and modelling techniques. • Understanding properties of materials. • Measuring and marking out onto timber and boards. • Developing skills with hand tools and basic machinery. • Finishing methods for timber and boards. • Products that last and planned obsolescence. • Making quality products. • Pattern design. • Image making in textile. • Machine sewing and embellishments. • Types of energy. • Computer aided design. • 3D modelling. • Iterative design. • Forces. • Computer aided design. • 3D modelling. • Presenting design ideas.

evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world **<u>Technical knowledge</u>** - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] - apply their understanding of computing to program, monitor and control their products.		