EYFS Year 1 Year 2 Year 3 Year 4 Year 5 Year 6

St. Marys Design and Technology Progression of skills

DESIGNING	MAKING	EVALUATING	TECHNICAL KNOWLEDGE	FOOD TECHNOLOGY
• design a product	• use own ideas to make a product	• talk about how something works • adapt a product to make improvements	• make a stable model	• use a knife and fork
• research different products and know which materials have been used. • begin to develop your own ideas through drawings • design an initial idea, which has one moving part	• make a product which is based on another but unique to you • build structures and know how they can be made stronger, stiffer and more stable • choose appropriate resources and tools to make your model • explore the use of different mechanisms (lever) in your products. • with help, measure, mark out and cut a range of materials. • begin to use simple finishing techniques to improve the appearance of their products.	• describe how your product works • talk about what works well and not so well • explain any changes you might make	• make your own model stronger • make a product that has at least one moving part • make a product that incorporates a lever	e.g make a sandwich (English)
• order the main stages of making a product and make a success criteria • explain your choices of materials and their function. • understand the purpose of your product	• choose tools carefully and explain why you are using them • build structures and know how they can be made stronger, stiffer, and more stable. • with help, measure, cut and score with some accuracy.	• evaluate your work against the success criteria you made • start to evaluate your products as they are developed, identifying strengths and possible changes you might make.	• make a model stronger and more stable • use wheels and axles	

• draw a simple design and label the parts of your product	• start to assemble, join and combine materials in order to make a product. • use simple sewing techniques including cutting, shaping and joining fabric			
• use research to create ideas and refine them to develop a success criteria • prove that a design meets a set criteria • draw an annotated design with labels that detail your material choices and suitability of the given materials • know about engineers who have developed ground breaking structures.	• follow a step-by-step plan, choosing the right equipment and materials • select the most appropriate tools and techniques for a given task • choose finishing techniques to improve the appearance of your product using a range of equipment • know that you can change things when making the product if they will help improve your work. • understand that mechanical systems (pulley) create movement.	• explain how to improve a finished model • know why a model has, or has not, been successful • evaluate your product against the original design criteria (e.g. how well does it meet its intended purpose).	• Create a product that incorporates a pulley mechanism. • use a simple IT program within the design	

• research Roman weapons before designing the product. • produce a plan and explain how the lever will work. • communicate ideas through annotated sketches that show different viewpoints of the product • produce a plan and explain the use of materials, equipment and processes	• know which material is likely to give the best outcome based on its properties • mark, measure and cut accurately a range of materials using appropriate tools, equipment and techniques. • start to join and combine materials and components accurately in temporary and permanent ways. • know how mechanical systems (such as levers) create movement. • understand how to reinforce and strengthen a 3D framework. • sew, weave or knit using a range of stitches 50 things – sew on a button • know how simple electrical circuit and components can be used to create functional products.	• evaluate your product, carrying out appropriate tests. • be able to disassemble and evaluate familiar products and consider the views of others to improve them.	• create a product that incorporates at least one lever. • use appropriate sewing techniques. • link scientific knowledge by using lights, switches or buzzers • use IT where appropriate to add to the quality of the product.	

• research products similar to the one they are intending to design • Evaluate other products strengths and weaknesses and incorporate this into your design • produce a detailed, step-by-step plan • create annotated 3D designs of their product (using squared paper) from a range of viewpoints.	• make a prototype before making a final version • carry out finishing techniques (including lights) to enhance the appearance and function of your product • Select appropriate materials, tools and techniques (e.g. cutting, shaping, joining and finishing) . • Incorporate mechanical systems (such as gears) to create movement • use finishing techniques to strengthen and improve the appearance of your products using a range of equipment including ICT.	• suggest alternative plans; outlining the positive features and draw backs • evaluate appearance and function against original criteria • seek evaluation from others.	• use a gear system within the watermill produced. • use a range of sewing techniques, including applique and various stitches.	

• use market research of existing products to inform your design • draw detailed 3D designs using exploded diagrams to display finer details • know how much products cost and make choices accordingly. • Choose materials relating to recycling and sustainability	• explain why a specific tool is best for a specific action • make modifications as you make your product explain your reasons • construct products using permanent joining techniques. • use mechanical systems such as levers, pulleys and gears competently to create movement	• test and evaluate designed products with specified audience • evaluate product against clear criteria • evaluate their work both during and at the end of the assignment.	• use knowledge to improve a made product by strengthening, stiffening or reinforcing • know when a product they have made is improved by either the use of gears.	• accurately follow a recipe • prepare and cook a savoury dish • know where and how a variety of ingredients are grown, reared caught and processed • explain nutritional similarities between different types of food eaten around the world and say why this is important