Design TECHNOLOGY – Each year group has a design focus and a food technology project.

St Michael's use resources and planning from a subscription to the design and technology association.

EYFS	**Textiles** Templates and joining techniques Three Bears Picnic Blanket - Joining fabrics to make a blanket for teddy bears' picnic	Baking project linked with topic .
YEAR 1	**Structures** Freestanding structures Garden Party - Focus on movement and structures with strong links to Science and ICT. Includes a garden seat design booklet, wind spinner instructions, unit of work adapted from Playgrounds, science and ICT links, help sheet, homework activities and PowerPoint.	**Food** Preparing fruit and vegetables Choose project on the resources under this heading in KS1- Liaise with other key stage teacher so no duplication Key learning Designing appealing products for a user; investigating fruit and vegetables and generating ideas; communicating through talk and drawings. Selecting a range of fruits and vegetables; using simple utensils and equipment. Tasting and evaluating evaluating ideas and finished products against original criteria. Understand where ingredients come from and the basis of a healthy and varied diet.
YEAR 2	**Mechanisms** Sliders and levers Moving pictures (links to Literacy) Key learning - Generating, modelling and communicating ideas. Planning making, selecting tools and using finishing techniques. Exploring books and products; evaluating own product against original criteria. Exploring sliders and levers; understanding types of movement; technical vocabulary.	**Textiles** Templates and joining techniques Choose project on the resources under this heading in KS1- Liaise with other key stage teacher so no duplication Design a functional, appealing product for a chosen user and purpose. Generate, develop, and communicate ideas. Use a range of textiles, tools and equipment to perform practical tasks. Explore and evaluate existing textile products and their own ideas and products. Understand how 3-D textile products are made, using joining, templates and finishing to Create two identical shapes.
YEAR 3	**Structures** Shell structures - box packaging or a pencil tidy Key learning -Generate and develop realistic ideas and design criteria collaboratively and through analysis of existing products. Order the stages of making; selecting tools and using with some accuracy. Investigate and evaluate shell structures,	**Food** Healthy and varied diet Choose project on the resources under this heading in LKS2- Liaise with other key stage teacher so no duplication Generate ideas and develop design criteria for an appealing product for a user and purpose. Plan the main stages of a recipe, listing

	and construct strong, stiff shell structures. Test and Evaluate own products against design criteria and intended user and purpose.	ingredients, utensils and equipment. Select from a range of ingredients to make appropriate food products. Carry out and record evaluations of a variety of ingredients and products. Know a range of appropriate ingredients, and whether they are grown, reared or caught.
YEAR 4	**Electrical Systems** Simple circuits and switches - 4 project options or choose from computer aided electrical systems Key learning - Use annotated sketches, cross- sectional and exploded diagrams to develop And communicate ideas. Select and use tools with some accuracy to Cut, shape, join and finish. Use construction materials and electrical components according to their functional properties and aesthetic qualities. Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers.	**Food** Healthy and varied diet Choose project on the resources under this heading in LKS2- Liaise with other key stage teacher so no duplication Generate ideas and develop design criteria for an appealing product for a user and purpose. Plan the main stages of a recipe, listing Ingredients, utensils and equipment. Select from a range of ingredients to make appropriate food products. Carry out and record evaluations of a variety of ingredients and products. Know a range of appropriate ingredients, and whether they are grown, reared or caught.
YEAR 5	**Mechanical Systems Cams** **3 project choices** Key learning -Generate a design from research; develop a specification, model and communicate ideas. Produce lists of tools and materials and plans to make accurately assembled and well finished products within constraints. Compare final product to the original specification; test products with the intended user and critically evaluate the product, considering the views of others. Investigate famous manufacturing and engineering companies relevant to the project.	**Food** Celebrating culture and seasonality Choose project on the resources under this heading in UKS2 - Liaise with other key stage teacher so no duplication Key learning - Generate and explore innovative ideas through research and discussion to develop a design brief. Write a step-by-step recipe, including a list of ingredients, equipment and utensils. Using appropriate utensils and equipment accurately, make, decorate and present a food product for the intended user and purpose. Evaluate a range of relevant products and ingredients and the final product with reference to the design brief and specification. Understand seasonality and the source of different food products.
YEAR 6	**Textiles** Using computer-aided design (CAD) in textiles **3 project choices** Key learning - Generate innovative ideas through research and develop these using mock-ups and prototypes including using computer-aided design. Design functional, appealing products for the intended user that are fit for purpose based on a simple design specification. Select and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.	**Food** Celebrating culture and seasonality Choose project on the resources under this heading in UKS2- Liaise with other key stage teacher so no duplication Choose project on the resources under this heading in UKS2 Key learning - Generate and explore innovative ideas through research and discussion to develop a design brief. Write a step-by-step recipe, including a list of ingredients, equipment and utensils. Using appropriate utensils and equipment accurately, make, decorate and present a food product for the intended user and purpose. Evaluate a range of relevant products and ingredients and the final product with reference

		to the design brief and specification. Understand seasonality and the source of different food products.