Design and Technology End Assessment Point

St Mary's CE (VA) Primary School	
EYFS: **ELG**	Use a range of small tools, including scissors, paintbrushes and cutlery (PD) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (EAD) Share their creations, explaining the process they have used (EAD)

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Developing, planning and communicating ideas	Design a product for myself, following design criteria. *Work in a range of contexts :* home and school (Healthy Eating Local area (Houses) Imaginary (Storybooks) Generate develop, model and communicate their ideas through **talking and drawings**	Design a product for myself **and others,** following design criteria. *Work in a range of contexts :* Industry (Mechanisms) Wider World - (Food from other cultures) Generate develop, model and communicate their ideas through **pictures,templates, mock-ups, words and where appropriate ICT.**	Create a design that is functional, innovative, and appealing and is fit for purpose. *Work in a range of contexts :* home and school (Healthy Eating) Culture (Structures) Generate develop, model and communicate their ideas through **discussion annotated sketches .**	Generate more than one idea for how to create a product which is functional, innovative, appealing. *Work in a range of contexts :* Industry (Electrical) Enterprise (Food - biscuits) Culture (Textiles) Generate develop, model and communicate their ideas through a detailed plan with **labelled diagrams, and templates**	Generate their design based upon research and design criteria ensuring it is functional, innovative, appealing and fit for purpose. *Work in a range of contexts :* Leisure (textiles) Industry (Structures) Home - (Food) Generate develop, model and communicate their ideas through **pattern pieces, , computer generated designs and prototypes.**	Generate their design based upon research including a range of information to inform a design (market research using surveys, interviews, questionnaires or web based resources). *Work in a range of contexts :* Industry, Leisure and enterprise (Control) Wider environment and culture (Structures) Industry (Electrical and mechanical) Generate develop, model and communicate their ideas through **a detailed plan, with cross-sectional diagrams, computer generated designs and prototypes**

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Working with tools, equipment, materials and components to make quality products	Select appropriate tools and equipment for the task: cutting, shaping, joining and finishing	Select from and use a wide range of materials and components	Select from and use a wider range of tools to perform tasks: cutting, shaping, joining and finishing	Select from a wider range of tools and equipment and use with accuracy: Cutting, shaping, joining and finishing	Consider the aesthetic qualities and functionality of my work when selecting materials and components for their design: construction materials, textiles and ingredients	Consider the aesthetic qualities and functionality of my product when selecting materials and components for their design: construction materials and textiles

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Evaluating processes and products	Explore and evaluate a range of existing products	Suggest what went well and what would be done differently when evaluating their own product against the design criteria.	Evaluate by investigating and analysing their own and pre-existing products.	Evaluate how the original design could be improved, considering the appearance and usability and linking this to the design brief.	Evaluate the appearance and function of a product (own and pre-existing) against the original criteria, and consider the viewpoints of others, saying whether it is fit for purpose.	Evaluate the product suggesting improvements that could be made, Eg considering materials, methods, sustainability, cost of the product.

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

Food and Nutrition	Understand that everyone should eat at least five portions of fruit and vegetables every day to keep healthy.	Understand where food comes from Eg plants or animals. Know that food has to be farmed, grown or caught**.**	Understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' **Know how Nadyia Hussain has helped to shape the food we prepare.**	Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world. **Know how George Washington Carver has helped to shape agriculture and food.**	Begin to understand that seasons may affect the food available. Know how to prepare and cook a variety of predominantly savoury dishes.	
Textiles		Join textiles using running stitch		Join textiles with appropriate stitching, running stitch and Introduce cross stitch as appropriate	Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). **Know and recognise the work of William Morris and how this has influenced the world of design**	
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Structures	Demonstrate a range of joining techniques to strengthen, make stiffer and more stable to build structures.		Apply their understanding of how to strengthen, stiffen and reinforce more complex structures			Show an understanding of the qualities of materials chosen to strengthen, stiffen and reinforce more complex structures **Know how Fazlur Rahman Khan has shaped the world by using tubular designs for skyscrapers**
Electronics				Understand and use electrical systems in their products Eg **series circuits.**		Understand and use electrical systems in their products Eg **motors, switches**
Computing					Generate , develop, model and communicate their ideas through prototypes, pattern pieces and computer aided design.	Apply their understanding of computing to monitor and control and monitor their models or products (EG lego wedo)
Mechanical	Explore and use mechanisms **eg levers and sliders** in their products	Explore and use mechanisms **eg wheels and axles** in their products	Understand and use mechanical systems in their product (such as **levers, and linkages**)			Understand and use mechanical systems in their product (such as **gears**)-