Mellers Primary School: Skills Progression Framework for Design Technology

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cooking and nutrition	 Taste and describe different healthy foods. Know where the food they use comes from Follow a simple recipe Prepare a healthy dish using tools safely 	 Recognise healthy and unhealthy food choices Explain where food comes from Select a healthy recipe Design and make a healthy dish 	 Know where and how ingredients are grown, reared, caught and processed. Follow a recipe and use simple cooking techniques accuratley Design a menu that is varied and healthy. 	 Know the difference between food that is grown and food that is processed. Write a simple recipe Use a range of techniques to create the dish 	 Identify recipes that use ingredients appropriate for the season. Follow detailed recipes Design a recipe that is varied and healthy. 	 Design a healthy menu using given ingredients. Prepare using a range of skills one of the dishes from the menu. Evaluate the meal and discuss what flavours could be used to improve it
Design	 Describe the purpose of a product Explain the features of the product being designed and made Develop ideas by exploring using a variety of materials 	 Use a design plan to help create a product. Develop ideas by exploring creating 'mock ups' of the final product 	 Develop ideas using prototypes and pattern pieces. Explain how design features of the product will work. Describe the purpose of designed products. 	 Create fit for purpose products by researching the needs of the user. Identify whether a product is appealing and if it needs improving by changing certain features. 	 Develop ideas using annotated sketches, cross-sectional drawings and exploded diagrams. Design innovative, functional and appealing products aimed at a particular group. 	Use computer-aided design to develop and communicate ideas.
Make	 Select the materials and tools I need to make a product. Measure, mark, cut and shape materials appropriately. 	 Select from, and use, a range of materials and components e.g. construction material, textiles and ingredients. Explain why tools were used for certain purposes. 	 Discuss the benefits to using certain materials. Begin to plan accurate measurements. Measure accurately and form the sections of a product. 	 Add finishing touches to a product. Discuss why certain tools and materials have been selected for products. 	Select and use appropriate tools and materials for products and understand why these are being used.	List the tools and materials needed to create a product and write a step-by-step guide for making it.





Evaluate	Evaluate current and own products to recognise what they are for, how they work and why.	 Explain ideas and evaluate if they will be effective. Discuss the materials used for existing products and recognise why. 	Adapt the design criteria as the product develops to ensure it meets the brief.	 Evaluate existing products and decide why and how they have been made. Consider the views of others as a product is developed. Know significant inventors and their contribution to design and technology. Understand where and how products were made. 	 Critically evaluate a product using the own views and feedback and that of others. Understand how inventors have been innovative with their products and the effect of this. 	 Explain where a product was made and the costs involved in its manufacture. Explain how innovative a product is and suggest improvements.
Technical knowledge	 Build a structure and explain why certain materials have been used to make its structure stronger Understand how to reinforce a structure. 	Use mechanisms to a product and explain the effect they have.	 Know how to strengthen, stiffen and reinforce a complex structure. Investigate and experiment with adding mechanical systems to products. 	Add a mechanical system to a product and evaluate its impact.	 Create a simple computer program to program, monitor and control a product. 	Create an electrical system e.g. using switches, bulbs, buzzers and motors.