

			Y1	Y2	Y3	Y4	Y5	Y6
Design and Evaluate	D1	Designing	Draw a simple picture of an intended design with basic labelling	Produce detailed, labelled drawings or models of products based on design criteria	Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose	Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fit for purpose and the end user	Use various sources of information, clarifying/sharing ideas through discussion, labelled sketches, cross-sectional diagrams and modelling, recognising that ideas have to meet a range of needs and criteria	Develop detailed criteria for designs for products aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams
	D2	Working from plans	With help, put ideas into practice	Think of ideas and plan what to do next	Make realistic plans, identifying processes, equipment and materials needed	Make realistic, step by step plans, refining designs as the product develops	Work from own detailed plans, modifying where appropriate	Check work as it develops and modify their approach in light of progress
	E1	Existing product evaluation	Describe how an existing product works (e.g the toy moves when I turn the handle')	Investigate a range of existing products and say what they are supposed to do	Investigate the design features (including identifying components or ingredients) of familiar existing products	Describe how an existing product works and why it is successful	Investigate the design features (including identifying components and ingredients) of a familiar existing product, understanding the targeted audience	Explain the form and function of familiar existing products, understanding the targeted audience and reasons why it is successful
	E2	Evaluation of own product	Talk about their own and others' work identifying strengths and/or weaknesses	Explain how closely finished products meet their design criteria and say what they could do better in the future	Suggest improvements to products made and describe how to implement them (taking the views of others into account)	Identify successes and difficulties throughout the process	Make and test a prototype, evaluating its effectiveness and relating it to the target audience Test and evaluate products against a detailed design specification and make adaptations as they develop their product	Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others
	E3	History and Influences	Order products or designs chronologically and begin to explain reasons why they are ordered in that way	Describe why a design, building or a designer is important	Compare and contrast designs, explaining why a particular design is significant in engineering history	Explain the impact of a design or designer on design history and how this has helped to shape the world	Create a timeline to sequence the development of a design over time and describe how technology has influenced it	Research designs from history, evidencing their influence in their own work and describing how designs have developed over time

Make	M1	Tools	Use suggested tools safely and effectively, with support	Use suggested tools safely and effectively, explaining why they have chosen a particular tool for the task	Use appropriate tools safely and effectively, explaining why they have chosen a particular tool for the task	Use appropriate tools safely and accurately, explaining why they have chosen a particular tool for the task	Use appropriate tools safely and accurately, explaining why they have chosen a particular tool for the task	Use appropriate tools safely and accurately, explaining why they have chosen a particular tool for the task
	M2	Materials	Select and explain their choice of materials, sometimes with help	Choose appropriate materials and suggest ways of manipulating them to achieve a desired effect	Plan which materials will be needed for a task and explain why	Choose from a range of materials, showing an understanding of their different characteristics	Select and combine materials with precision	Choose the best materials for a task, showing an understanding of their working characteristics
	M3	Health and Safety	Explain how to keep safe during a practical task	Work safely and hygienically in all construction, including cooking activities	Follow health and safety rules for all tasks, including cooking and baking activities	Identify potential risks and follow health and safety rules when working with materials and tools	Identify potential risks and co-create the health and safety rules to follow when working with materials and tools to reduce the risks	Identify potential risks and co-create the health and safety rules to follow when working with materials and tools to reduce the risks Demonstrate how their products take into account the safety of the user

Technical	T1	Textiles	Cut paper accurately and safely with scissors; cut out simple shapes from a range of fabrics and papers; join fabrics together using glue; begin to sew fabrics together using a needle and thread		Choose fabrics and thread for purpose and use patterns from different times, places and cultures as a starting point for design Weaving using different materials Use a variety of joining techniques (sewing, weaving, gluing, tying)	Choose fabrics and thread that match Cut out more complex shapes from a range of fabrics and papers accurately, including using patterns/templates Use a variety of basic stitches including running stitch, cross stitch and back stitch Use textile and sewing skills as part of a project including applique and/ or embroidery		Choose fabrics and thread that match Cut out more complex shapes from a range of fabrics and papers accurately, including using patterns/templates Use a variety of basic stitches including running stitch, cross stitch and back stitch Use textile and sewing skills as part of a project including applique and/ or embroidery
	T2	Structures		Build structures by making them strong, stiff and stable	Build a solid and stable structure using appropriate materials (e.g. wood, card and corrugated plastic)		Apply their understanding of how to strengthen, stiffen and reinforce structures	
	T3	Mechanisms	Create and use levers and sliders	Use wheels and axles; cut wood/dowel using a bench hook and hacksaw; create and use pivots and levers; attach features to a design		Create and use levers in their products		
	T4	Electricity					Design and create working circuits to a light bulb or buzzer	Design and create products incorporating the most appropriate electrical systems, including switches, bulbs, buzzers or motors

Food/Nutrition	F1	Preparing and cooking food	Measure and weigh food items using non-standard measures (e.g. spoons and cups)	Cut, peel, grate and chop a range of ingredients to make dishes	Cut, peel, grate and chop a range of ingredients to make dishes Combine a variety of ingredients using a range of cooking techniques	Measure and weigh ingredients appropriately to prepare and make a dish	Use appropriate tools and equipment, weighing and measuring with scales Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing)	Use appropriate tools and equipment, weighing and measuring with scales Combine food ingredients appropriately (e.g. kneading, rubbing in and mixing)
	F2	Nutrition	Identify the main food groups, including fruit and vegetables	Identify the main food groups, including fruit and vegetables	Recognise the need for a variety of foods in a diet Describe what a balanced diet is	Make healthy eating choices and explain why	Evaluate meals and consider if they contribute towards a balanced diet	Evaluate meals and consider if they contribute towards a balanced diet
	F3	Origins of food	Identify the source for common foods	Identify the source for common foods	Explain where the food they eat comes from (e.g. by referring to countries, counties, animals and plants)	Explain some of the processes that foods go through to preserve/make them more appealing Explain what times of year particular foods are in season and understand why importing of certain goods is needed	Explain how the ingredients were grown, reared, caught and processed	Explain how the ingredients were grown, reared, caught and processed