	Nursery	Reception	Year 1	Year 2	End of Key Stage Expectations
Design	Can I use various construction materials? (EAD 30-50) Am I beginning to construct, stacking blocks, making enclosures and creating spaces? (EAD 30-50) Can I join construction pieces together to build and balance? (EAD 30-50) Do I realise tools can be used for a purpose? (EAD 30-50)	Can I manipulate materials to achieve a planned effect? (EAD 40-60) Can I construct with a purpose in mind, using a variety of resources? (EAD 40-60) Can I use simple tools and techniques competently and appropriately? (EAD 40-60) Can I select appropriate resources and adapt work where necessary? (EAD 40-60)	As a design and technologist: Am I beginning to explore how products have been created? Can I design products that have a clear purpose and an intended user with support? Can I make simple diagrams to show my design? Can I develop design criteria with a group?	As a design and technologist: Can I explore how products have been created? Can I design products that have a clear purpose and an intended user? Can I use software to design? Can I make diagrams to show my design? Can I develop my own design criteria?	**Design** design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
Make		Can I select tools and techniques needed to shape, assemble and join materials I am using? (EAD 40-60)	As a design and technologist: Can I cut safely using tools provided? Am I beginning to demonstrate a range of cutting and shaping techniques such as tearing, cutting and folding? Am I beginning to demonstrate a range of joining techniques such as gluing and combining materials to strengthen? Am I beginning to join textiles using running stitch? Can I colour and decorate textiles using techniques such as dying or adding sequins? Am I beginning to use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products? Am I beginning to create products using levers, wheels and winding mechanisms? Am I beginning to refine the design as my work progresses? Am I beginning to choose the right materials for making a product according to the properties needed?	As a design and technologist: Can I cut materials safely using tools provided? Can I measure and mark out to the nearest centimetre? Can I demonstrate a range of cutting and shaping techniques such as tearing, cutting, folding and curling? Can I demonstrate a range of joining techniques such as gluing, hinges, or combining materials to strengthen? Can I join textiles using running stitch? Can I colour and decorate textiles using a number of techniques such as dying, adding sequins or printing? Can I use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products? Can I create products using levers, wheels and winding mechanisms? Can I make products, refining the design as my work progresses? Can I choose the right materials for making a product according to the properties needed?	**Make** select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

				As a design and technologist:	As a design and technologist:	Evaluate
Evaluate				Am I beginning to explore objects to identify likes and dislikes of the designs? Am I beginning to suggest improvements to existing designs? Can I evaluate my design or product against given design criteria? Am I beginning to show an understanding of how historical events or people have helped shape the technological world today?	Can I explore objects to identify likes and dislikes of the designs? Can I suggest improvements to existing designs? Can I evaluate my design or product against my own design criteria? Can I talk about how historical events or people have helped shape the technological world today?	explore and evaluate a range of existing products evaluate their ideas and products against design criteria
Technical Knowledge				As a design and technologist: Am I beginning to use my understanding of materials and their properties to strengthen, stiffen or reinforce products? Am I developing an understanding of how to use mechanical systems like gears, pulleys, levers and linkages in my designs and products? Am I developing an understanding of how use simple electrical circuits that include switches and bulbs? Am I beginning to develop my knowledge of computing to program, monitor or control my product?	As a design and technologist: Can I use my understanding of materials and their properties to strengthen, stiffen or reinforce products? Can I understand and use mechanical systems like gears, pulleys, levers and linkages in my designs and products? Can I understand and use simple electrical circuits that include switches, bulbs, buzzers or motors in my products? Can I use my knowledge of computing to program, monitor or control my product? Can I model designs using software?	Technical knowledge build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Cooking and Nutrition				As a design and technologist: Am I beginning to talk about how to be healthy? Am I beginning to show understanding of a varied diet? Can I show some understanding about where different foods come from? Can I cut, peel or grate ingredients safely and hygienically with some support? Am I beginning to measure or weigh using measuring cups or electronic scales? Am I beginning to assemble or cook ingredients? Can I show some understanding of safety when cooking ingredients?	As a design and technologist: Can I talk about how to be healthy? Can I show understanding of a varied diet? Can I talk about where different foods come from? Can I cut, peel or grate ingredients safely and hygienically? Can I measure or weigh using measuring cups or electronic scales? Can I assemble or cook ingredients? Can I show understanding of safety when cooking ingredients?	Cooking use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from.

	Year 3	Year 4	Year 5	Year 6	End of Key Stage Expectations
Design	As a design and technologist: Can I show that my design meets a range of requirements? Can I put together a plan which shows the equipment and tools I need? Can I describe a design using an accurately labelled diagram?	As a design and technologist: Can I design with purpose by identifying opportunities to design? Can I create cross-sectional diagrams to demonstrate my design?	As a design and technologist: Can I come up with a range of ideas after I have collected information? Can I take a user's view into account when designing? Can I produce a detailed step-by-step plan? Can I use cross sectional planning to show my design? Can I produce prototypes to show my ideas?	As a design and technologist: Can I design with the user in mind, motivated by the service a product will offer (rather than simply for profit)? Can I use prototypes, cross-sectional diagrams and computer aided designs to represent designs? Can I create innovative designs that improve upon existing products?	• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
Make	As a design and technologist: Can I use a range of tools and equipment accurately? Can I measure, mark out, assemble and join materials and components with some accuracy?	As a design and technologist: Can I cut materials accurately and safely by selecting appropriate tools? Can I measure and mark out to the nearest millimetre? Can I understand the need for a seam allowance? Can I join textiles with appropriate stitching? Can I make products by working efficiently (e.g. by carefully selecting materials)?	As a design and technologist: Can I cut materials more accurately? Can I measure and mark out accurately to the nearest millimetre? Can I ensure my product has a seam allowance? Can I join textiles efficiently using a simple stitch? Can I use a range of tools and equipment expertly?	As a design and technologist: Can I cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape)? Can I create objects that need a seam allowance? Can I join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decorations)?	• select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate	As a design and technologist: Am I able to look at products and talk about how they work? Can I practise my evaluation skills by evaluating existing products? Can I evaluate my own products? Can I suggest a change that could be made to improve a product?	As a design and technologist: Can I disassemble products to understand how they work? Can I refine work and techniques as my work progresses, continually evaluating the product design? Can I improve upon existing designs, giving reasons for choices? Can I identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs?	As a design and technologist: Can I test and evaluate my final product? Can I evaluate the design to suggest improvements, considering the materials and methods that have been used? Can I evaluate the appearance and function against the original criteria? Can I practise my evaluation skills by evaluating existing products against criteria which I have set? Can I explain why my finished product is going to be of good quality? Can I explain how my product will appeal to the audience? Can I think about the aesthetic qualities of my work? Can I think about the functionality of my work?	As a design and technologist: Can I make products through stages of prototypes, making continual refinements? Can I ensure products have a high quality finish, using art skills where appropriate? Can I evaluate the design of products so as to suggest improvements to the user experience? Can I combine elements of design from a range of inspirational designers throughout history, giving reasons for choices?	• investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world
Technical Knowledge	As a design and technologist: Can I choose textiles for a purpose? Can I join textiles of different types in a different ways? Can I explain how to join things in a different way? Can I think about how to make my product strong? Can I devise a template?	As a design and technologist: Can I choose suitable techniques to construct products? Can I strengthen materials using suitable techniques? Can I apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs)? Can I select appropriate joining techniques? Can I select the most appropriate techniques to decorate textiles? Can I create series and parallel circuits? Can I use scientific knowledge of the transferences of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears)? Can I control and monitor models using software designed for this purpose? Can I use software to design and represent product designs?	As a design and technologist: Can I choose appropriate tools to cut and shape and justify choices with my knowledge (such as the nature of fabric may require sharper scissors than would be used to cut paper)? Am I beginning to use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles? Am I beginning to create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)? Am I beginning to develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding)? Am I beginning to use innovative combinations of electronics (or computing) and mechanics in product designs? Can I write code to control and monitor models or products?	As a design and technologist: Can I show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper)? Can I use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles? Can I create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips)? Am I developing a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding)? Can I convert rotary motion to linear using cams? Can I use innovative combinations of electronics (or computing) and mechanics in product designs? Can I write code to control and monitor models or products?	• apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition	As a design and technologist: Can I choose the right ingredients for a product? Can I say what to do to be hygienic and safe? Can I use equipment safely? Can I make sure that my product looks attractive? Can I describe how my combined ingredients come together?	As a design and technologist: Can I prepare ingredients hygienically using appropriate utensils? Can I measure ingredients to the nearest gram accurately? Can I follow a recipe? Can I assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking)?	As a design and technologist: Do I understand the importance of correct storage and handling of ingredients? Am I beginning to measure accurately and calculate ratios of ingredients to scale up or down from a recipe? Am I beginning to demonstrate a range of baking and cooking techniques? Am I beginning to create and refine recipes, including ingredients, methods, cooking times and temperatures?	As a design and technologist: Do I understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms)? Can I measure accurately and calculate ratios of ingredients to scale up or down from a recipe? Can I demonstrate a range of baking and cooking techniques? Can I create and refine recipes, including ingredients, methods, cooking times and temperatures?	• understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.