Progression of skills and knowledge				Design		
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Select appropriate resources. Use gestures, talking and arrangements of materials and components to show design. Use contexts set by the teacher and myself. Use language of designing and making (join, build, shape, longer, shorter, heavier etc.).	Use pictures and words to convey what they want to design/make. Propose more than one idea for their product. Use kits/reclaimed materials to develop more than one idea. Model ideas/make prototypes with kits, reclaimed materials. Select appropriate technique, explaining why they will use this method. Explore ideas by rearranging materials/ingredients. Select pictures to help develop ideas. Use drawings to record ideas as they are developed. Explain how their products will look and work through talking and simple annotated drawings.	Use their knowledge of existing products and their own experiences to help generate their ideas. Design products that have a purpose and are aimed at an intended user. Explain how their products will look and work through talking and simple annotated drawings. Plan and test ideas using templates and prototypes. Understand and follow simple design criteria. Choose the best tools and materials, explaining the reasons for their choices.	Develop more than one design or adaptation of an initial design. State reasons as to why they have selected to make one of their designs. Plan, with support from a partner, a sequence of actions to make a product. Record the plan by drawing, using annotated sketches. Use prototypes to develop, test and share ideas. Choose the best tools and materials, explaining the reasons for their choices. Propose realistic suggestions as to how they can achieve their design criteria. Consider aesthetic qualities of materials/ingredients chosen.	Identify the design features of their products that will appeal to intended customers. Use their knowledge of a broad range or existing products to help generate their ideas. Design innovative and appealing products that have a clear purpose. Explain how particular parts of their products work. Use prototypes to develop, test and share ideas. Develop more than one design or adaptation of an initial design, giving reasons for final selection. Develop and follow simple design criteria.	List tools needed before starting the activity and understanding the impact. Design innovative and appealing products that have a clear purpose, recording their ideas throughout this process. Use prototypes to develop, test and share ideas, explaining how this process has refined design ideas for the final product. Devise step by step plans/instructions for others. Use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market. Decide which design idea to develop.	Use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market. Use their knowledge of a broad range of existing products to help generate their ideas, conducting their own research in the process. Design innovative and appealing products that have a clear purpose, recording their ideas throughout this process. Consider the availability and costings of resources when planning out designs. Devise step by step plans/instructions for others. Confidently and accurately articulate which design idea to develop.

Progression of skills and knowledge — Make

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Construct with a purpose, using a variety of resources. Use simple tools and techniques. Build / construct with a wide range of objects. Start to select tools and techniques to shape, assemble and join. Replicate structures with materials / components. Discuss how to make an activity safe and hygienic. Record experiences by completing simple drawings.	Discuss their work as it progresses. Select materials/ingredients from a limited range that will meet the design criteria and match their design. Select and name the tools needed to work the materials/ingredients. Explain what they are making and name the materials they are using. Name the tools they are using and understand how they can use those tools safely.	Learn how to use hand tools and kitchen equipment safely and appropriately and learn how to follow hygiene procedures. Select materials/ingredients from a limited range that will meet the design criteria and match their design. Use a range of materials and components, including textiles and food ingredients. With help, measure out and mark out. Cut shape, join and score materials with some accuracy, including ingredients and fabrics. Begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.	Prepare pattern pieces as templates for their design. Select from a range of tools for cutting, shaping, joining and finishing. Use tools with accuracy. Select from techniques for different parts of the process. Select from materials according to their functional properties. Plan and explain the stages of the making process. Use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.	With growing confidence, carefully select from a range of tools and equipment, explaining their choices. Select from a range of materials and components according to their functionality and aesthetic qualities, using simple finishing techniques. Understand the stages and sequence of the making process. Learn how to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures. With growing independence, measure and mark out to the nearest cm and mm. Cut, shape, assemble, join and combine materials with some degree of accuracy.	Use researched information to inform decisions in the making process. Produce detailed lists of ingredients, components, materials and tools needed. Select from a wide range of tools and equipment, explaining their choices. Select from a range of materials and components according to their functionality and aesthetic qualities, using simple finishing techniques. Cut accurately and safely to a marked line. Create step-by-step plans as a guide to making. Independently plan by suggesting what to do next.	With growing confidence, select from a wide range of tools and equipment, explaining their choices. Use a full range of materials and components, including construction materials and kits, textiles and mechanical components. Create step-by-step plans as a guide to making. Independently plan by suggesting what to do next. Independently take exact measurements and mark out to within 1 mm. Cut, shape, assemble, join and combine materials with accuracy. Refine the finish using techniques to improve the appearance of their product.

Progression of skills and knowledge						Evaluate
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Dismantle, examine and talk about existing objects/structures. Consider and manage some risks. Talk about how things work. Look at similarities and differences between existing objects / materials / tools. Describe textures, materials and components	Explore and evaluate existing products. Decide how existing products do/do not achieve their purpose. Talk about their design as they develop and identify good and bad points. Say what they like and do not like about items they have made and attempt to say why. Discuss how closely their finished product meets their design criteria, how well it meets the needs of the user and any improvements that could be made. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.	Explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations. Explain the positives and things to improve from existing products. Explore what material products are made of. Talk about their design ideas and what they are making. Discuss and record how closely their finished product meets their design criteria, how well it meets the needs of the user and any improvements that could be made. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.	Investigate similar products to the one to be made to give starting points for a design. Draw/sketch products to help analyse and understand how products are made. Identify the strengths and weaknesses of their design ideas in relation to purpose/user. Decide which design idea to develop, giving reasons for this selection. Consider and explain how the finished product could be improved and how well it meets the design criteria. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.	Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose. Explore what materials/ingredients products are made from and suggest reasons for this. Consider their design criteria as a process and use evaluation throughout the project to change and improve their product. Evaluate their product against their original design criteria, suggesting improvements and changes that could be made. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.	Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose. Identify the strengths and weaknesses of their design ideas, giving a report using correct technical vocabulary. Consider and explain how the finished product could be improved related to design criteria. Evaluate their product against their original design criteria, suggesting improvements and changes that could be made. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.	Complete an analysis of other products on the market. Critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make. Suggest improvements to the design criteria that can develop the product in the future. Evaluate their product against their original design criteria, suggesting improvements and changes that could be made. Discuss the links that a chosen inventor/chef/designer has to the given project, whilst commenting and making evaluations on their products and designs.

Progression of skills and knowledge				Technical Knowledge		
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Begin to understand some food preparation tools, techniques and processes. Practise stirring, mixing, pouring and blending. Discuss how to make an activity safe and hygienic. Discuss use of senses. Understand need for variety in food. Begin to understand that eating well contributes to good health.	Build simple structures, exploring how they can be made stronger, stiffer and more stable. Talk about and start to understand the simple working characteristics of materials and components. Explore and create products using different mechanisms. Develop a food vocabulary using taste, smell, texture and feel. Group familiar food products e.g. fruit and vegetables, explaining where food comes from. Work safely and hygienically. Understand the need for a variety of foods in the diet.	Build simple structures, exploring how they can be made stronger, stiffer and more stable. Talk about and start to understand the simple working characteristics of materials and components. Explore and create products using different mechanisms. Explain where food comes from. Cut, peel, grate and chop a range of ingredients. Work safely and hygienically. Understand the need for a variety of foods in the diet. Measure and weigh food items using non-statutory measures e.g. spoons, cups.	Understand that materials have both functional properties and aesthetic qualities. Apply understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. Understand and demonstrate simple mechanical systems. Explain how mechanical systems such as levers and linkages create movement. Use mechanical systems in their products. Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. Analyse the taste, texture and smell of foods. Follow instructions.	Understand that materials have both functional properties and aesthetic qualities. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. Understand and demonstrate simple mechanical systems. Describe how a pneumatic system can make something move and suggest where these systems are used in the manufacture process of products. Explain how mechanical systems such as levers and linkages create movement. Use mechanical systems in their products.	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. Understand and demonstrate mechanical systems. Describe how recipes can be adapted to change appearance, taste, texture and aroma. Explain how to be safe / hygienic and follow own guidelines. Know how to use utensils and equipment including heat sources to prepare and cook food.	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. Understand and demonstrate that mechanical and electrical systems have an input, process and output. Use different types of circuit in a product, incorporating a switch. Confidently use a number of components in a circuit, suggesting ways to add to the circuit to make improvements. Understand that a recipe can be adapted by adding / substituting ingredients. Explain the seasonality of foods.

			Prepare and cook using a range of cooking techniques.			