Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
1	• Can they think of some ideas of their own? • Can they explain what they want to do? • Can they use pictures and words to plan?	• Can they explain what they are making? • Can they explain which tools are they using?	• Can they describe how something works? • Can they talk about their own work and things that other people have done?
Breadth of Study			
	Cooking and nutrition • Can they describe the texture of foods? • Do they wash their hands, put on aprons and make sure that surfaces are clean? Do they know that everyone should eat at least five portions of fruit and vegetables every day? (sci link) **With close supervision:** • Use the claw grip to cut soft foods using a serrated vegetable knife (eg tomato) • Mash cooked food (eg potatoes with a masher) • Peel soft vegetables using a peeler (eg cucumber) • Use a lemon squeezer	**Textiles** • Can they describe how different textiles feel? • Can they make a product from textiles by gluing? Can they use simple stitches (running stick, over sewing) using large plastic needles? Can they decorate their product with a range of items (buttons, sequins, beads, ribbons etc)? • Can they measure textile? • Can they join textiles together to make something? • Can they cut textiles? • Can they explain why they chose a certain textile?	
Exceeded			
Emerging			

<table>
<tr><th>Year</th><th>Developing, planning and communicating ideas</th><th>Working with tools, equipment, materials and components to make quality products</th><th>Evaluating processes and products</th></tr>
<tr><td>2</td><td>• Can they think of ideas and plan what to do next?
• Can they choose the best tools and materials? Can they give a reason why these are best?
• Can they describe their design by using pictures, diagrams, models and words?</td><td>• Can they join things (materials/ components) together in different ways?</td><td>• Can they explain what went well with their work?
• If they did it again, can they explain what they would improve?</td></tr>
<tr><td colspan="4">Breadth of Study</td></tr>
<tr><td></td><td colspan="2">Cooking and nutrition
• Can they explain what it means to be hygienic?
Can they use appropriate equipment to weigh and measure ingredients? (maths link)
Can they explain where the ingredients come from?
With close supervision:
• Use the bridge hold to cut harder foods using a serrated vegetable knife (eg apple)
• Cut food into evenly sized largish pieces (eg potatoes) With moderate supervision:
• Using physical guidance if necessary, peel harder food (eg apple, potato)
With moderate supervision:
• Mix, stir and combine liquid and dry ingredients (eg muffins)
• Use hands to rub fat into flour (eg rock buns)
• Crack an egg and beat together using a fork
• Use a small table knife for spreading soft spreads on to bread
• Use hands to shape dough in to small balls or shapes
• Assemble and arrange cold ingredients (eg sandwich, fruit kebabs, bruschetta)
Independently:
• Sift flour into bowl</td><td>Construction materials

Mechanisms
• Can they use split pins and hole punches to make moving parts?
• Can they use and investigate wheels and axles?
• Can they investigate and make simple levers and sliders?
• Can they use simple stitching using needles and felt – running stitch?
Use of materials
• Can they measure materials to use in a model or structure? (maths link)
• Can they use joining, folding or rolling to make it stronger?
• Can they investigate stable structures and find ways to strengthen them?
• Can they investigate joining using a variety of materials e.g. PVA, glue, glue stick, sticky tape, treasury tags, split pins?
• Can they cut materials using scissors?</td></tr>
<tr><td>Exceeded</td><td></td><td></td><td></td></tr>
<tr><td>Emerging</td><td></td><td></td><td></td></tr>
</table>

Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
3	• Can they show that their design meets a range of requirements? • Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? • Can they describe their design using an accurately labelled sketch and words? • How realistic is their plan?	• Can they use equipment and tools accurately?	• Can they explain what they changed which made their design even better?
Breadth of Study			
	Textiles • Can they join textiles of different types in different ways? • Can they choose textiles both for their appearance and also qualities? • Do they think what the user would want when choosing textiles? • Have they thought about how to make their product strong? • Can they devise a template? • Can they explain how to join things in a different way? Can they use running stitch, over sewing, back stitch and fastenings? Can they create a simple pattern? Do they understand seam allowances? Can they create simple patterns and appropriate decoration techniques (e.g. applique)?	**Cooking and nutrition** **With moderate supervision:** •Mix, stir and combine wet and dry ingredients uniformly (eg to form a dough) •Crack an egg and beat with balloon whisk •Cream fat and sugar together using a mixing spoon • Use a rolling pin to flatten and roll out dough (eg scones) • use biscuit cutters • Coat food with egg and breadcrumbs (eg fish cakes) Independently: • Sieve flour, raising agents and spices together in to a bowl • Use hands to rub fat into flour (eg scones, apple crumble) • Knead and shape dough in to evenly sized shapes • Assemble and arrange ingredients for simple dishes (eg apple crumble, scrambled egg on toast) **With close supervision:** • begin to use a toaster or microwave (e.g beans on toast) • Using physical guidance when necessary, handle hot food safely once adults have removed food from the hob or oven (e.g. use oven gloves and a fish slice to remove scones from the baking tray)	
Exceeded			
Emerging			

Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
4	• Can they come up with at least one idea about how to create their product? • Do they take account of the ideas of others when designing? • Can they produce a plan and explain it to others? • Can they suggest some improvements and say what was good and not so good about their original design?	• Can they tell if their finished product is going to be good quality? • Are they conscience of the need to produce something that will be liked by others? • Can they show a good level of expertise when using a range of tools and equipment? • Do they work at their product even though their original idea might not have worked?	• Have they thought of how they will check if their design is successful? • Can they begin to explain how they can improve their original design? • Can they evaluate their product, thinking of both appearance and the way it works? • Do they take time to consider how they could have made their idea better?
Breadth of Study			
	Cooking and nutrition • Do they know what to do to be hygienic and safe (Sci link) ? Can they follow a recipe to create a range of savoury dishes (Eng link)? Can they measure accurately using grams (maths link)? **With moderate supervision**: • Use the claw grip to cut harder foods using a serrated vegetable knife (eg carrot) • Use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) • Use a masher to mash hot food to a fairly smooth texture • Cut foods into evenly sized strips or cubes (eg peppers, cheese) Independently: • Peel harder food (eg apple, potato) • Crush garlic using a garlic press • Grate harder food using a grater (eg apples, carrots)	**Electrical and mechanical components** • Do they select the most appropriate tools and techniques to use for a given task? • Can they make a product which uses both electrical and mechanical components? • Can they use a simple circuit? • Can they use a number of components? • Can they add things to their circuits? • How have they altered their product after checking it? • Are they confident about trying out new and different ideas? **Construction Materials:** • Can they measure carefully so as to make sure they have not made mistakes? • Can they join materials accurately and precisely? • Can they work accurately to make cuts and holes? • Do they use the most appropriate materials?	
Exceeded			
Emerging			

Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
5	• Can they come up with a range of ideas after they have collected information? • Do they take a user's view into account when designing? • Can they produce a detailed step-by-step plan? • Can they suggest some alternative plans and say what the good points and drawbacks are about each?	• Can they explain why their finished product is going to be of good quality? • Can they explain how their product will appeal to the audience? • Can they use a range of tools and equipment expertly? • Do they persevere through different stages of the making process?	• Do they keep checking that their design is the best it can be? • Do they check whether anything could be improved? • Can they evaluate appearance and function against the original criteria?
Breadth of Study			
	Cooking and nutrition • Can they describe what they do to be both hygienic and safe? **moderate supervision:** • With help begin to separate eggs • whisk using an electric hand mixer (eg eggs) • cream fat and sugar together using an electric hand mixer • Use a rolling pin to roll out dough to a specific thickness (eg pizza) • Use biscuit cutters accurately to assemble, arrange and layer more advanced dishes (eg apple sponge pudding, shepherd's pie) **Independently:** • Use finger tips to rub fat into flour to make fine 'bread crumbs' (eg apple crumble) • Sieve wet and dry ingredients with precision • Confidently crack an egg • Knead and shape dough in to a variety of shapes **With close supervision:** • With help, begin to use the hob or electric saucepan (wok or stock pot) to cook simple dishes (eg burgers, soup) • handle hot food safely, using oven gloves to carefully remove cooked food with a fish slice from a baking tray on to a cooling rack	**Textiles** • Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first? • Can they use a range of joining techniques? **Textiles** • Have they thought about how their product could be sold? • Have they given considered thought about what would improve their product even more?
Eceeded			
Emerging			

Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
6	• Can they use a range of information to inform their design? • Can they use market research to inform plans? • Can they work within constraints? • Can they follow and refine their plan if necessary? • Can they justify their plan to someone else? • Do they consider culture and society in their designs?	• Can they use tools and materials precisely? • Do they change the way they are working if needed?	• How well do they test and evaluate their final product? • Is it fit for purpose? • What would improve it? • Would different resources have improved their product? • Would they need more or different information to make it even better? • Does their product meet all design criteria? • Did they consider the use of the product when selecting materials?
Breadth of Study			
	Cooking and nutrition • Can they explain how their product should be stored with reasons? • Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods? **With moderate supervision:** • Finely grate hard foods (eg zesting, parmesan cheese) • With support, use a can opener and open ring-pull tin • Dice foods and cut them into evenly sized, fine pieces (eg garlic, vegetable batons, herbs) **Independently:** • Confidently use the claw grip to cut harder foods using a serrated vegetable knife (eg carrot) • Confidently use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) •Confidently peel harder food using a peeler (eg apple, potato) **With close supervision:** • use a food processor or electric hand blender to mash, blend or puree hard ingredients or hot food (eg chickpeas for hummus or vegetables for soup) With • With help, begin to use the hob or electric saucepan (wok or stock pot) to cook simple dishes (eg burgers, soup) • handle hot food safely, using oven gloves to carefully remove cooked food with a fish slice from a baking tray on to a cooling rack	**Electrical and mechanical components** • Can they incorporate a switch into their product? • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? • Can they use different kinds of circuit in their product? • Can they think of ways in which adding a circuit would improve their product? **Stiff and flexible sheet materials / Mouldable materials** • Are their measurements accurate enough to ensure that everything is precise? • How have they ensured that their product is strong and fit for purpose? Can they justify why they selected specific materials? • How have they ensured that their work is precise and accurate? • Can they hide joints so as to improve the look of their product? • Can they justify design in relation to the audience? • Are they motivated enough to refine and further improve their product using mouldable materials?	

Exceeded			
Emerging			