



Skills	Year 3	Year 4
<p>Knowledge</p> <p><u>Developing, planning and communicating ideas.</u></p>	<ul style="list-style-type: none"> -Gather ideas by drawing on their own and other people's experiences -begin to research the needs of others and design meeting a range of requirements -Generate ideas for a product, describe its purpose for which they are designing. -Consider appearance, taste, texture and aroma for an appealing product -Use recipes to test or generate ideas for a sandwich -Set and follow criteria for a successful product. - Have at least one idea about creating the product, plan the order of their work before starting with basic listing of steps, equipment and tools -Describe design using accurately labelled sketch with words and explain how it will work -Begin to make prototypes and use computers where possible to show design. -Link structures with maths and language related to shape. -Develop an understanding of what a basic net is and how it links with structure. -Know key vocab: designer, purpose, product, functional, evaluate -Understand what a recipe is and generate own with ingredients and utensils -Use maths language related to shape when creating structures – 3D, cylinders, weight, triangular, base.... -Know what a shell structure is. -Know what a healthy sandwich is. -Identify textile examples. -Know how to construct a basic, stiff, shell structure 	<ul style="list-style-type: none"> -Gather ideas by drawing on their own and other people's experiences - Generate ideas through research, considering the purposes for which they are designing and meets needs of their users. -Consider appearance, taste, texture and aroma for an appealing product -Use recipes to test or generate ideas for pitta bread/ cultural bread and dips - Identify and create own criteria that can be used for their own designs and evaluate the product based on this, making suggestions for improvements. -Have an idea how to create the product, produce a plan and explain it to others. -Make annotated drawings from different views showing specific features and explain how they work. - Suggest alternative methods of making, if the first attempts fail - Begin to make prototypes and use computers where possible to show design. - Know key vocab: designer, purpose, product, user, criteria, features, evaluate -Understand what a recipe is and generate own with ingredients, utensils and steps -Know what a healthy sandwich is and can select examples -Know about fresh and processed ingredients and whether grown, reared or caught -Identify food from different cultures and countries -Use Science language related to electricity when creating torches -Understand the term mechanism -Identify the key components in a mechanism using language such as lever, pivot, slider, flap, rotate
<p><u>Working with tools, equipment, materials and components to make quality products (including food)</u></p>	<ul style="list-style-type: none"> -Select tools and techniques for making their product and explain choices -Begin to use names of tools and techniques - Use tools to measure, mark out, cut, score and assemble components with more accuracy -Work safely with a range of simple tools --Weigh and measure accurately (length, dry ingredients) -Measure, tape or pin, cut and join fabric with some accuracy, exploring basic stitches - Select and use appropriate fruit and vegetables. -Demonstrate basic hygienic food preparation and storage -Use finishing techniques with some accuracy to strengthen and improve the appearance of their product using a range of equipment including ICT -Name and identify different basic stitches. -Name the tools and materials they have used. -Know what a pattern/template is and how to use one. -Know how to strengthen, stiffen or reinforce when using textiles or creating structures -Explain how to securely join two pieces of material together -Understand about healthy eating and provide food examples based on food groups -Name utensils and ingredients -Identify between fresh and processed foods 	<ul style="list-style-type: none"> -Select appropriate tools and techniques for making their product and explain choices of tool in relation to techniques -Use correct name of tools and techniques with growing confidence -Accurately measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques - Join and combine materials and components accurately in temporary and permanent ways -Work safely and accurately with a range of simple tools -Weigh and measure accurately (length, dry ingredients, time) -Sew using a range of different stitches, weave and knit -Measure, tape or pin, cut and join fabric with some accuracy - Select and use appropriate fruit and vegetables to meet specific criteria and user needs. -Demonstrate hygienic food preparation and understand the reasons for safe storage, know safe chopping and slicing techniques -Accurately use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT -Name a broader range of stitches such as zig-zag and chain. -Name and match the tool to the material and explain its use. -Name utensils, ingredients and techniques being used – sliced, diced... -Identify between fresh and processed foods and know why some foods are processed -Know and identify the electrical components in a circuit and the purpose of each part -Name how to construct a simple circuit with a switch and bulb -Know how to construct a lever and linkage system and the movement created -Explain the differences between fixed and loose pivots
<p><u>Evaluating processes and products</u></p>	<ul style="list-style-type: none"> -Use criteria to evaluate finished product and state improvements -Investigate a range of textile/3D products/shells and structures relevant to the project -Evaluate and test their product against original design criteria -Disassemble and evaluate familiar products -Explain the sensory characteristics of a product -Understand how products are made: by whom, when and where – consider inventors/designers/engineers/chefs/ground breaking products/ethically made products -Know and use relevant sensory and technical vocabulary -Explain how the product compares with the design -Identify sensory characteristics when describing a product 	<ul style="list-style-type: none"> -Use design criteria while designing and making – using it to evaluate product -Explain how you could improve original design whilst using criteria to evaluate product -Evaluate existing products, considering: how well they've been made, whether they work, -Discuss the maker – made by whom, when and where products were designed -Research whether products can be recycled or reused -know about some inventors/designers/ engineers/chefs/manufacturers of ground -breaking product -Investigate and analyse a range of existing battery powered products/torches/pop-up books -Evaluate their work both during and at the end of the assignment -Evaluate their product carrying out appropriate tests against original design criteria and state the successes/development points -Disassemble and evaluate familiar products looking at key components -Know and use relevant sensory and technical vocabulary to describe texture and aroma of food -Know and use technical vocabulary relevant to circuits and torches -Identify levers and linkages within books, using relevant vocabulary when discussing the mechanisms