

# Design and Technology Progression Map



	Generating ideas	Make	Evaluate	Food and Nutrition	Construction	Textiles	Mechanisms	Electrical Systems
<b>EYFS</b>	<ul style="list-style-type: none"> <li>➤ listen attentively and respond to what they hear with relevant questions, comments and actions</li> <li>➤ use their own experience to help generate their ideas</li> <li>➤ express their ideas and feelings about their experiences using verbal sentences</li> <li>➤ use gestures, talking and arrangements of materials and components to show design</li> <li>➤ use language of designing and making (join, build, shape, longer, shorter, heavier etc.)</li> </ul>	<ul style="list-style-type: none"> <li>➤ construct with a purpose, using a variety of resources</li> <li>➤ use simple tools and techniques</li> <li>➤ discuss how to make an activity safe and hygienic</li> <li>➤ record experiences by drawing, writing, voice recording</li> <li>➤ understand different media can be combined for a purpose</li> </ul>	<ul style="list-style-type: none"> <li>➤ adapt work if necessary</li> <li>➤ dismantle, examine, talk about existing objects/structures</li> <li>➤ practice some appropriate safety measures independently</li> <li>➤ talk about how things work</li> <li>➤ look at similarities and differences between existing objects / materials / tools</li> <li>➤ offer explanations for why things might happen</li> <li>➤ share their creations, explaining the process they have used</li> </ul>	<ul style="list-style-type: none"> <li>➤ begin to understand some food preparation tools, techniques and processes</li> <li>➤ practise stirring, mixing, pouring, blending</li> <li>➤ discuss how to make an activity safe and hygienic</li> <li>➤ discuss use of senses</li> <li>➤ understand need for variety in food</li> <li>➤ begin to understand that eating well contributes to good health</li> </ul>	<ul style="list-style-type: none"> <li>➤ replicate structures with materials / components</li> <li>➤ build / construct with a wide range of objects</li> <li>➤ learn how everyday objects work</li> <li>➤ start to build structures, joining components together</li> <li>➤ to learn how to use a range of tools, e.g. scissors, hole punch, stapler etc.</li> </ul>	<ul style="list-style-type: none"> <li>➤ explore different fabric with their hands</li> <li>➤ use scissors to cut and trim fabric, yarn and string</li> <li>➤ spread glue and stick fabric, yarn and wool on to a chosen surface</li> <li>➤ develop threading experiences</li> <li>➤ decorate textiles using a number of techniques (such as adding sequins or beads or additional fabric)</li> </ul>	<ul style="list-style-type: none"> <li>➤ look at simple hinges, wheels and axles</li> <li>➤ begin to incorporate moving parts into models. For example, use split pins to make body parts move</li> </ul>	

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<b>Year 1</b>	<ul style="list-style-type: none"> <li>➤ use their knowledge of existing products and their own experience to help generate their ideas</li> <li>➤ to design products for themselves following design criteria</li> <li>➤ to use pictures and words to plan</li> <li>➤ work in a range of contexts (imaginary, home, school, wider community, story based)</li> </ul>	<ul style="list-style-type: none"> <li>➤ explain what is being made and why</li> <li>➤ select appropriate tools and equipment for the purpose</li> <li>➤ use a range of materials and components</li> <li>➤ select tools &amp; techniques to shape, assemble and join</li> <li>➤ try to use finishing techniques to make product look good</li> <li>➤ work in a safe and hygienic manner</li> </ul>	<ul style="list-style-type: none"> <li>➤ say whether the product does what it is meant to (does it fit the design criteria?)</li> <li>➤ talk about existing products considering: use, materials, how they work, audience, where they might be used</li> <li>➤ talk about existing products, and say what is and isn't good</li> <li>➤ begin to talk about what could make product better (improvements)</li> </ul>	<ul style="list-style-type: none"> <li>➤ describe textures</li> <li>➤ wash hands &amp; clean surfaces</li> <li>➤ think of interesting ways to decorate food</li> <li>➤ say where some foods come from, (i.e. plant or animal)</li> <li>➤ describe differences between some food groups</li> <li>➤ discuss how fruit and vegetables are healthy</li> <li>➤ cut, peel and grate safely, with support</li> </ul>	<ul style="list-style-type: none"> <li>➤ build simple structures, exploring how they can be made stronger</li> <li>➤ begin to measure and mark out materials with some support</li> <li>➤ cut, shape and score materials with some support</li> <li>➤ assemble, join and combine materials with some support</li> <li>➤ describe differences in materials</li> </ul>	<ul style="list-style-type: none"> <li>➤ measure, cut and join textiles to make a product, with some support</li> <li>➤ choose suitable textile</li> <li>➤ how to thread a needle and use a basic stitch</li> <li>➤ decorate textiles with glue or stitching, to add colour and detail</li> </ul>	<ul style="list-style-type: none"> <li>➤ begin to know about movement of simple mechanisms such as sliders and levers</li> </ul>	
<b>Year 2</b>	<ul style="list-style-type: none"> <li>➤ use their knowledge of existing products and their own experience to help generate their ideas</li> <li>➤ to design products for themselves and others based on design criteria that have a purpose</li> <li>➤ explain purpose of product, how it will work and how it will be suitable for the user</li> <li>➤ describe own ideas by talking, drawing, templates, mock-ups and, where appropriate, ICT.</li> <li>➤ work confidently in a range of context</li> </ul>	<ul style="list-style-type: none"> <li>➤ explain what is being made and why it fits the purpose</li> <li>➤ choose suitable materials and explain choices depending on characteristics</li> <li>➤ choose appropriate tools and equipment, describing and explaining why they are being used</li> <li>➤ use finishing techniques to make product look good</li> <li>➤ work safely and hygienically</li> </ul>	<ul style="list-style-type: none"> <li>➤ describe how their own and pre-existing products work, evaluating what went well and what could be done differently</li> <li>➤ say whether their own product does what it is meant to (does it fit the design criteria?) and suggest ways to improve or do things differently</li> <li>➤ talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion</li> </ul>	<ul style="list-style-type: none"> <li>➤ explain hygiene and keep a hygienic kitchen</li> <li>➤ describe properties of ingredients and importance of varied diet</li> <li>➤ say where food comes from (animal, underground etc.)</li> <li>➤ describe how food is farmed, home-grown, caught</li> <li>➤ draw eat well plate; explain there are groups of food</li> <li>➤ describe "five a day"</li> <li>➤ cut, chop, peel and grate with increasing confidence</li> </ul>	<ul style="list-style-type: none"> <li>➤ build simple structures, exploring how they can be made stronger, stiffer and more stable</li> <li>➤ use joining, rolling or folding to make it stronger</li> <li>➤ use own ideas to try to make product stronger</li> <li>➤ measure and mark out materials</li> <li>➤ cut, shape and score materials</li> <li>➤ assemble, join and combine materials or components in different ways</li> <li>➤ describe some characteristics of materials</li> </ul>	<ul style="list-style-type: none"> <li>➤ measure, cut and join textiles to make a product with a purpose</li> <li>➤ how to thread a needle and use glue, staples, tape, running stitch or over stitch</li> <li>➤ decorate with a range of items (buttons, sequins, bead etc.) thinking about how to secure them effectively</li> <li>➤ manipulate fabrics in simple ways to create the desired effect</li> <li>➤ explain choices of textile</li> <li>➤ understand that a 3D textile structure can be made from two identical fabric shapes</li> </ul>	<ul style="list-style-type: none"> <li>➤ know about and use movement of simple mechanisms such as sliders and levers</li> <li>➤ begin to understand how to use wheels and axles</li> </ul>	

	Generating ideas	Make	Evaluate	Food and Nutrition	Construction	Textiles	Mechanisms	Electrical Systems
Year 3	<ul style="list-style-type: none"> <li>➤ begin to research others' needs</li> <li>➤ design innovative and appealing products that have a clear purpose and are aimed at a specific user</li> <li>➤ show design meets a range of requirements</li> <li>➤ follow a given design criteria</li> <li>➤ create a plan which shows order, equipment and tools</li> <li>➤ describe design using an accurately labelled sketch and words</li> <li>➤ make design decisions explain how product will work</li> <li>➤ begin to use computers to show design</li> </ul>	<ul style="list-style-type: none"> <li>➤ select suitable tools/equipment, explain choices; begin to use them accurately</li> <li>➤ select appropriate materials, fit for purpose</li> <li>➤ work through plan in order</li> <li>➤ consider how good product will be</li> <li>➤ begin to apply a range of finishing techniques</li> </ul>	<ul style="list-style-type: none"> <li>➤ use design criteria to evaluate finished product</li> <li>➤ explain how the original design could be improved, considering the appearance and usability</li> <li>➤ begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose</li> <li>➤ begin to understand by whom, when and where products were designed</li> <li>➤ learn about some inventors/designers/engineers/chefs/manufacturers of groundbreaking products</li> </ul>	<ul style="list-style-type: none"> <li>➤ carefully select ingredients</li> <li>➤ use equipment safely</li> <li>➤ think about how to grow plants to use in cooking</li> <li>➤ begin to understand food comes from UK and wider world</li> <li>➤ use the Eatwell Guide and be able to apply these principles when planning and cooking dishes</li> <li>➤ prepare and cook predominantly savoury dishes safely and hygienically</li> <li>➤ with support, use a heat source to cook ingredients</li> <li>➤ grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading and baking</li> </ul>	<ul style="list-style-type: none"> <li>➤ apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>➤ with support, measure and mark out to the nearest cm and millimetre</li> <li>➤ cut, shape and score materials with some degree of accuracy</li> <li>➤ assemble, join and combine material and components with some degree of accuracy</li> <li>➤ apply knowledge of different characteristics of materials to make informed choices</li> </ul>	<ul style="list-style-type: none"> <li>➤ use appropriate decoration techniques including applique</li> <li>➤ join fabrics in different ways using running stitch, over stitch or back stitch</li> <li>➤ choose textiles considering appearance and functionality</li> <li>➤ begin to understand that a simple fabric shape can be used to make a 3D textiles project</li> </ul>	<ul style="list-style-type: none"> <li>➤ select appropriate tools / techniques</li> <li>➤ alter product after checking, to make it better</li> <li>➤ begin to try new/different ideas</li> <li>➤ use simple lever and linkages to create movement</li> <li>➤ begin to use mechanical systems in their products</li> </ul>	<ul style="list-style-type: none"> <li>➤ use a simple circuit in product</li> <li>➤ learn about how to program a computer to control product</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>➤ use research for design ideas</li> <li>➤ show design meets a range of requirements and is fit for purpose</li> <li>➤ plan, research and decide the most appropriate tools, equipment and materials that match the design criteria</li> <li>➤ have at least one idea about how to create product and suggest improvements for design</li> <li>➤ produce a plan and explain it to others</li> <li>➤ include an annotated sketch</li> <li>➤ make and explain design decisions considering availability of resources</li> <li>➤ explain how product will work</li> <li>➤ make a prototype</li> <li>➤ begin to use computers to show design</li> </ul>	<ul style="list-style-type: none"> <li>➤ select suitable tools and equipment, explain choices in relation to required techniques and use accurately</li> <li>➤ select appropriate materials, fit for purpose; explain choices and explore their functional properties and aesthetic</li> <li>➤ independently work through plan in order</li> <li>➤ realise if product is going to be good quality</li> <li>➤ apply a range of finishing techniques with some accuracy and explain choices</li> </ul>	<ul style="list-style-type: none"> <li>➤ explain how the original design could be improved, considering the appearance and usability and linking this to the design brief</li> <li>➤ use criteria to evaluate product</li> <li>➤ evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose</li> <li>➤ discuss by whom, when and where products were designed</li> <li>➤ research whether products can be recycled or reused</li> <li>➤ know about some inventors/designers/engineers/chefs/manufacturers of groundbreaking products</li> </ul>	<ul style="list-style-type: none"> <li>➤ prepare and cook predominantly savoury dishes safely and hygienically</li> <li>➤ think about presenting product in interesting/attractive ways</li> <li>➤ understand ingredients can be fresh, pre-cooked or processed</li> <li>➤ begin to understand about food being grown, reared or caught in the UK or wider world</li> <li>➤ start to understand seasonality</li> <li>➤ use the Eatwell Guide and be able to apply these principles when planning and cooking dishes and justify ingredients</li> <li>➤ use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li> <li>➤ measure and weigh ingredients to the nearest gram and millilitre</li> </ul>	<ul style="list-style-type: none"> <li>➤ apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products.</li> <li>➤ measure and mark out to the nearest cm and millimetre accurately so mistakes are avoided</li> <li>➤ cut, shape and score materials with some degree of accuracy so mistakes are avoided</li> <li>➤ assemble, join and combine material and components with some degree of accuracy so mistakes are avoided</li> <li>➤ use knowledge of different characteristics of materials to make accurate choices</li> </ul>	<ul style="list-style-type: none"> <li>➤ think about user when choosing textiles</li> <li>➤ think about how to make product strong</li> <li>➤ begin to devise a template</li> <li>➤ explain how to join things in a different way</li> <li>➤ explore fastenings</li> <li>➤ begin to embellish work</li> <li>➤ understand that a simple fabric shape can be used to make a 3D textiles project</li> </ul>	<ul style="list-style-type: none"> <li>➤ select most appropriate tools / techniques</li> <li>➤ explain alterations to product after checking it</li> <li>➤ grow in confidence about trying new / different ideas</li> <li>➤ use levers and linkages to create movement</li> <li>➤ use pneumatics to create movement</li> <li>➤ use mechanical systems in their products</li> </ul>	<ul style="list-style-type: none"> <li>➤ use a number of components in a circuit</li> <li>➤ program a computer to control product</li> </ul>

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Year 5	<ul style="list-style-type: none"> <li>➤ use internet and questionnaires for research and design idea</li> <li>➤ take a user's view into account when designing</li> <li>➤ begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose</li> <li>➤ create own design criteria</li> <li>➤ have a range of ideas</li> <li>➤ produce a logical, realistic plan and explain it to others</li> <li>➤ use cross-sectional planning and annotated sketches</li> <li>➤ make design decisions considering time and resources.</li> <li>➤ clearly explain how parts of product will work</li> <li>➤ model and refine design ideas by making prototypes and using pattern pieces</li> <li>➤ use computer-aided designs</li> </ul>	<ul style="list-style-type: none"> <li>➤ use selected tools/equipment with good level of precision</li> <li>➤ produce suitable lists of tools, equipment/materials needed</li> <li>➤ select appropriate materials, fit for purpose; explain choices, considering functionality</li> <li>➤ create and follow detailed step-by-step plan</li> <li>➤ explain how product will appeal to an audience</li> <li>➤ use techniques that involve a small number of steps</li> <li>➤ begin to be resourceful with practical problems</li> </ul>	<ul style="list-style-type: none"> <li>➤ evaluate quality of design while designing and making</li> <li>➤ evaluate ideas and finished product against specification, considering purpose and appearance.</li> <li>➤ test and evaluate final product</li> <li>➤ evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose</li> <li>➤ begin to evaluate how much products cost to make and how innovative they are</li> <li>➤ research how sustainable materials are</li> <li>➤ talk about some key inventors/designers/engineers/chefs/manufacturers of groundbreaking products</li> </ul>	<ul style="list-style-type: none"> <li>➤ explain how to be safe / hygienic and follow own guidelines</li> <li>➤ present product well - interesting, attractive, fit for purpose</li> <li>➤ explain seasonality of foods</li> <li>➤ name some types of food that are grown, reared or caught in the UK or wider world</li> <li>➤ describe how recipes can be adapted to change appearance, taste, texture, aroma</li> <li>➤ explain how there are different substances in food / drink needed for health</li> <li>➤ prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source</li> <li>➤ use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, frying, boiling kneading and baking</li> </ul>	<ul style="list-style-type: none"> <li>➤ select materials carefully, considering intended use of product and appearance</li> <li>➤ explain how product meets design criteria</li> <li>➤ measure accurately enough to ensure precision</li> <li>➤ ensure product is strong and fit for purpose</li> <li>➤ begin to reinforce and strengthen a 3D frame</li> <li>➤ mainly accurately measure, mark out, cut and shape to within 1 millimetre materials/ components</li> <li>➤ mainly accurately assemble, join and combine materials/ components</li> <li>➤ mainly accurately apply a range of finishing techniques</li> </ul>	<ul style="list-style-type: none"> <li>➤ think about user and aesthetics when choosing textiles</li> <li>➤ use own template</li> <li>➤ think about how to make product strong and look better</li> <li>➤ think of a range of ways to join things</li> <li>➤ select stitches most appropriate to join fabrics (blanket stitch, running stitch)</li> <li>➤ begin to understand that a single 3D textiles project can be made from a combination of fabric shapes</li> <li>➤ use plaiting, stapling, stitching, gluing and sewing techniques to decorate and embellish</li> </ul>	<ul style="list-style-type: none"> <li>➤ refine product after testing</li> <li>➤ grow in confidence about trying new / different ideas</li> <li>➤ begin to use cams, pulleys or gears to create movement</li> </ul>	<ul style="list-style-type: none"> <li>➤ incorporate switch into product</li> <li>➤ confidently use number of components in circuit</li> <li>➤ begin to be able to program a computer to monitor changes in environment and control product</li> </ul>
Year 6	<ul style="list-style-type: none"> <li>➤ draw on market research to inform design</li> <li>➤ use research of user's individual needs, wants, requirements for design</li> <li>➤ identify features of design that will appeal to the intended user</li> <li>➤ create own design criteria and specification</li> <li>➤ come up with innovative design ideas</li> <li>➤ follow and refine a logical plan</li> <li>➤ use annotated sketches, cross sectional planning and exploded diagrams</li> <li>➤ make design decisions, considering, resources and cost</li> <li>➤ clearly explain how parts of design will</li> </ul>	<ul style="list-style-type: none"> <li>➤ use selected tools and equipment precisely</li> <li>➤ produce suitable lists of tools, equipment, materials needed, considering constraints</li> <li>➤ select appropriate materials, fit for purpose</li> <li>➤ explain choices, considering functionality and aesthetics</li> <li>➤ create, follow, and adapt detailed step-by-step plans</li> <li>➤ explain how product will appeal to audience</li> <li>➤ make changes to improve quality</li> <li>➤ use techniques that</li> </ul>	<ul style="list-style-type: none"> <li>➤ evaluate quality of design while designing and making; is it fit for purpose?</li> <li>➤ keep checking design is best it can be</li> <li>➤ evaluate ideas and finished product against specification, stating if it's fit for purpose</li> <li>➤ test and evaluate final product; explain what would improve it and the effect different resources may have had</li> <li>➤ do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose</li> <li>➤ evaluate how much products cost to make and how innovative they are</li> <li>➤ research and discuss how sustainable materials are</li> <li>➤ consider the impact of products beyond their</li> </ul>	<ul style="list-style-type: none"> <li>➤ understand a recipe can be adapted by adding / substituting ingredients</li> <li>➤ understand about seasonality, how this may affect the food availability and plan recipes according to seasonality</li> <li>➤ know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world</li> <li>➤ learn about food processing methods</li> <li>➤ adapt recipes to change appearance, taste, texture or aroma.</li> <li>➤ describe some of the different substances in food and drink, and how they can affect health</li> <li>➤ prepare and cook a</li> </ul>	<ul style="list-style-type: none"> <li>➤ select materials carefully, considering intended use of the product, the aesthetics and functionality</li> <li>➤ use a full range of materials and components, including construction materials and kits, textiles, and mechanical components</li> <li>➤ explain how product meets design criteria</li> <li>➤ reinforce and strengthen a 3D frame</li> <li>➤ accurately measure, mark out, cut and shape materials/ components</li> <li>➤ accurately assemble,</li> </ul>	<ul style="list-style-type: none"> <li>➤ think about user's wants/needs and aesthetics when choosing textiles</li> <li>➤ make product attractive and strong</li> <li>➤ make a prototype</li> <li>➤ use a range of joining techniques</li> <li>➤ think about how product might be sold</li> <li>➤ think carefully about what would improve product</li> <li>➤ understand that a single 3D textiles project can be made from a combination of fabric shapes</li> <li>➤ demonstrate experience in combining techniques to produce and end-pieces: embroidery over tie-</li> </ul>	<ul style="list-style-type: none"> <li>➤ refine product after testing, considering aesthetics, functionality and purpose</li> <li>➤ incorporate hydraulics and pneumatics</li> <li>➤ be confident to try new / different ideas</li> <li>➤ use cams, pulleys and gears to create movement</li> </ul>	<ul style="list-style-type: none"> <li>➤ use different types of circuits in product</li> <li>➤ think of ways in which adding a circuit would improve product</li> <li>➤ program a computer to monitor changes in environment and control product</li> </ul>

	<p>work, and how they are fit for purpose</p> <ul style="list-style-type: none"> <li>➤ independently model and refine design ideas by making prototypes and using pattern pieces</li> <li>➤ use computer-aided designs</li> </ul>	<p>involve a number of steps</p> <ul style="list-style-type: none"> <li>➤ be resourceful with practical problems</li> </ul>	<p>intended purpose</p> <ul style="list-style-type: none"> <li>➤ discuss some key inventors/designers/engineers/chefs/manufacturers of groundbreaking products</li> </ul>	<p>variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source</p> <ul style="list-style-type: none"> <li>➤ use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, griddling, grilling, frying, boiling kneading and baking</li> </ul>	<p>join and combine materials/components</p> <ul style="list-style-type: none"> <li>➤ accurately apply a range of finishing techniques</li> </ul>	<p>dye</p>		
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## Vocabulary

<b>EYFS</b>	<p><b>Food</b> - preparation, ingredients, stir, mix, pour, blend, safe, hygienic, sense, variety, healthy</p> <p><b>Construction</b> - copy (replicate), structures, material, build, construct, objects, join, scissors, hole punch, stapler</p> <p><b>Textiles</b> - fabrics, yarn, string, scissors, cut, trim, spread, glue, stick, surface, thread, decorate</p> <p><b>Mechanisms</b> - hinges, wheels, axles, movement, models, split pins</p> <p><b>design, make, evaluate, purpose, ideas, product</b></p>
<b>Year 1</b>	<p><b>Food</b> - fruit and vegetable names, names of equipment and utensils, sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p> <p><b>Construction</b> - cut, fold, join, fix, structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder</p> <p><b>Textiles</b> - tools, fabrics and components, template, measure, cut, join, textiles, product, suitable, thread, needle, basic stitch, decorate, glue, stitching, detail</p> <p><b>Mechanisms</b> - slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards</p> <p><b>design, make, evaluate, user, purpose, ideas, design criteria, product, function</b></p>
<b>Year 2</b>	<p><b>Food</b> - fruit and vegetable names, names of equipment and utensils, sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria.</p> <p><b>Construction</b> - build, structures, stronger, stiffer, more stable, joining, rolling, folding, measure, mark out, materials, cut, shape, score, assembly, join, combines, components, describe, characteristics</p> <p><b>Textiles</b> - names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish features</p> <p><b>Mechanisms</b> - vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism, names of tools, equipment and materials used.</p> <p><b>suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function</b></p>
<b>Year 3</b>	<p><b>Food</b> - name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet, sensory evaluations</p> <p><b>Construction</b> - shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating font, lettering, text, graphics, decision evaluating, design brief design criteria, innovative, prototype</p> <p><b>Textiles</b> - fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces</p> <p><b>Mechanisms</b> - select, appropriate, tools, techniques, alter, ideas, lever, linkages, movement, mechanical systems</p> <p><b>Electrical systems</b> - circuit, electric, current, switch, bulb, motor, buzzer, conductor/insulator, symbols, generate</p> <p><b>user, purpose, design, model, evaluate, planning, design criteria, purpose, user, annotated sketch, sensory evaluations</b></p>
<b>Year 4</b>	<p><b>Food</b> - name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet, sensory evaluations</p> <p><b>Construction</b> - strengthen, stiffen, reinforce, complex, characteristics, measure, mark out, cm, millimeter, mistakes, cut, shape, score, materials, accuracy, assemble, join, combine, components, choices</p> <p><b>Textiles</b> - textiles, strong, template, join, fastenings, embellish, fabrics, shape, 3D</p> <p><b>Mechanisms</b> - mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating</p> <p><b>Electrical Systems</b> - series circuit, fault, connection, toggle switch push-to-make switch, push-to-break switch, battery, battery holder, light emitting diode (LED), bulb, bulb holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, process user, purpose function, prototype, design criteria, innovative, appealing, design brief.</p> <p><b>user, purpose, function prototype, design criteria, innovative, appealing, design brief</b></p>
<b>Year 5</b>	<p><b>Food</b> - ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs, fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble</p> <p><b>Construction</b> - frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent</p> <p><b>Textiles</b> - user, aesthetics, textiles, template, strong, appealing, join, stitches, appropriate, blanket stitch, running stitch, 3D, combine, fabric, shapes, plaiting, stapling, stitching, gluing, sewing, decorate, embellish</p> <p><b>Mechanisms</b> - systems pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram, annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief</p> <p><b>Electrical Systems</b> - same as Year 4, switch, components, circuit, program, computer</p> <p><b>design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, evaluate</b></p>

## Year 6

**Food** - ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs, fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble

**Construction** - select, materials, careful, product, aesthetics, functionality, range, components, construction, mechanical components, design criteria, reinforce, strengthen, 3D, accurately, measure, mark out, cut, shape, assemble, join, combine, finishing techniques

**Textiles** - computer aided design (CAD), computer aided manufacture (CAM), font, lettering, text, graphics, menu, scale, modify, repeat, copy, flip design brief, design criteria, design decisions, innovative, prototype seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, names of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, annotate, functionality,

**Mechanisms** - systems pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram, annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief

**Electrical systems** - series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart function, innovative, design specification, design brief, user, purpose

**innovation, authentic, user, purpose, evaluate, mock-up, prototype**