



The intention of the D&T curriculum

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To ensure that all pupils:

- use creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.
 - acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.
 - learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.
 - evaluate past and present design and technology in order to develop a critical understanding of its impact on daily life and the wider world.
- acquire the skills and knowledge to make a contribution to the creativity, culture, wealth and well-being of the nation as design technologists.

What are the key features of 'knowledge-rich' assessment for D&T?

At EYFS, the knowledge takes full account of the Early Years Framework main characteristics of:

- Physical Development
- Expressive Arts and Design

At key stage 1 and 2, the sticky knowledge takes full account of the national curriculum's main characteristics of:

- | | | |
|------------------------------------|---|--|
| <input type="checkbox"/> Designing | <input type="checkbox"/> Making | <input type="checkbox"/> Evaluating |
| | <input type="checkbox"/> Using technical language | <input type="checkbox"/> Food technology |

There are relatively few assessment statements as these knowledge statements should be what pupils retain for ever. In other words, this knowledge is within their long-term memory and will be retained.



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D&T: Foundation Stage 2			
	Three and Four-Year-Olds	Reception	ELG
Personal, Social and Emotional Development	<ul style="list-style-type: none"> Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them. 		
Physical Development	<ul style="list-style-type: none"> Use large-muscle movements to wave flags and streamers, paint and make marks. Choose the right resources to carry out their own plan. Use one-handed tools and equipment, for example, making snips in paper with scissors. 	<ul style="list-style-type: none"> Progress towards a more fluent style of moving, with developing control and grace. Develop their small motor skills so that they can use a range of tools competently, safely and confidently. use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. 	<ul style="list-style-type: none"> Use a range of small tools, including scissors, paintbrushes and cutlery.
Understanding the World	<ul style="list-style-type: none"> Explore how things work. 		
Expressive Arts and	<ul style="list-style-type: none"> Make imaginative and complex 'small worlds' with blocks and 	<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to 	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques,



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Design	<p>construction kits, such as a city with different buildings and a park.</p> <ul style="list-style-type: none"> • Explore different materials freely, in order to develop their ideas about how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them. • Create closed shapes with continuous lines, and begin to use these shapes to represent objects. 	<p>express their ideas and feelings.</p> <ul style="list-style-type: none"> • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills. 	<p>experimenting with colour, design, texture, form and function.</p> <ul style="list-style-type: none"> • Share their creations, explaining the process they have used.
Key Vocabulary	<p>Picture, drawing, use, experiment, change, tools, materials, use, materials, use, idea, improve, technology, tape, record, video, photograph, computer, food, meal, snack, healthy, diet</p>		
Assessment			



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D&T: Key Stage 1			
D&T	National Curriculum	Year 1	Year 2
Designing	<p><i>Design - purposeful, functional, appealing products for themselves and other users based on design criteria</i></p> <p><i>Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT</i></p>	<ul style="list-style-type: none"> • use own ideas to design a product based on given criteria • draw and label a simple plan of their intended product before making it • explain to someone else how they intend to make their product 	<ul style="list-style-type: none"> • use own ideas to design a product based on given criteria using templates, mock-ups and IT, where appropriate • draw a plan of the product and label the materials and components to be used • explain why they have chosen to use specific materials and components in their design
Key Vocabulary		<p>Structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved</p> <p>metal, wood, plastic</p> <p>circle, triangle, square, rectangle, cuboid, cube, cylinder</p> <p>design, make, user, purpose, ideas, design criteria, product, function</p>	<p>Design criteria, materials, template, mock-up, slider, lever, pivot, slot, bridge/guide</p> <p>card, masking tape, paper fastener, join</p> <p>pull, push, up, down, straight, curve, forwards, backwards</p> <p>design, make, user, purpose, ideas, design criteria, product, function</p>
iii Assessment			



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<p>Making</p>	<p><i>select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing]</i> <i>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</i></p>	<ul style="list-style-type: none"> choose appropriate resources and tools join materials and components 	<ul style="list-style-type: none"> choose tools and materials and explain why they have chosen them join materials and components in different ways measure materials to use in a model or structure
<p>Key Vocabulary</p>		<p>Cut, join, glue, sew, fix, tape, mix, staple, glue, safety pin</p>	<p>Choose, explain, measure, centimetres,</p>
<p>iii Assessment</p>		<p>Structures – Assemble, join and combine materials and components together using a variety of temporary methods.</p> <p>Tools (T2) Structure (T2) Design (T2)</p> <p>Can you describe why you chose this certain structure for this model?</p> <p>Mechanisms – With some support, begin to explore and use simple mechanisms.</p>	<p>Structures – Assemble, join and combine materials in order to make a product</p> <p>Tools (T2) Structure (T2) Design (T2)</p> <p>Can you describe why you chose this certain structure for this model?</p> <p>Mechanisms – With some independence explore and use</p>



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		<p>For example, use sliders in moving pictures, hinges into models etc.</p> <p>Tools (T2) Structure (T2) Design (T2)</p> <p>Can you describe why you chose this certain mechanism for this model?</p>	<p>winding mechanisms. Begin to incorporate wheels and axles into their products.</p> <p>Tools (T2) Structure (T2) Design (T2)</p> <p>Can you describe why you chose this certain mechanism for this model?</p>
Evaluating	<p><i>explore and evaluate a range of existing products</i> <i>evaluate their ideas and products against design criteria</i></p>	<ul style="list-style-type: none"> • explain what works well in existing products • explain what works well in the model they have made • explain what they would do differently next time 	<ul style="list-style-type: none"> • explain what works well and not so well in existing products • describe how an existing product works • explain what works well and not so well in the model they have made • suggest one improvement they could make to their finished product and give a reason why
Key		evaluate	Improvement, reason, evaluate



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Vocabulary			
iii Assessment			
Technical Knowledge	<p><i>build structures, exploring how they can be made stronger, stiffer and more stable</i> <i>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i></p>	<p>Construction</p> <ul style="list-style-type: none"> • Know how to make a sturdy product. Know what happens when we build walls with different patterns and tap away the centre brick in the bottom row of each wall. • Know that as a freestanding structure becomes taller its centre of gravity rises. Stability in a structure can generally be increased by making the base wider, making the base heavier or adding buttresses. <p>Textiles</p> <ul style="list-style-type: none"> • Know how to join two pieces of material together using glue or a lace in pre-cut holes 	<p>Construction</p> <ul style="list-style-type: none"> • Know how to use levers and sliders in a moving storyboard <p>Textiles</p> <ul style="list-style-type: none"> • Know how to join two pieces of material together using a running stitch • Know how to use a template <p>Know how to decorate a hand puppet</p>
Key Vocabulary		<p>Strong, stable, stiff, sturdy, template, pattern pieces, mark out, join, decorate, finish, glove puppet</p>	<p>mechanism, rotate, lever, slider, fixed, back tack, template, eye (of the needle), pattern piece, mark out, knot, appliqué, embroider, fray, glove puppet, mock, seam,</p>



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lii Assessment			
Food Technology	<i>use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from</i>	<ul style="list-style-type: none"> • cut fruit safely • know how to wash hands before preparing food and to maintain cleanliness throughout the process • know that food originates from places other than the shop (<i>fruit from farms/gardens, packaged/mass produced in a factory</i>) 	<ul style="list-style-type: none"> • weigh ingredients from a recipe, if appropriate • describe the ingredients used when making egg and cress salad. (soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard) • know how to prepare surfaces and keep them clean when preparing food • know the original sources of some common foods - egg from a chicken (links to science and lifecycles) carrots and cress from the ground, lemons from trees
Key Vocabulary		<p>Water, soap, clean, cut, chop, knife, blade, safely, ingredients, fruit and vegetable names, names of equipment and utensils</p> <p>sensory vocabulary e.g. soft, juicy, crunchy, sweet sticky, smooth, sharp, crisp, sour, hard</p>	<p>Weigh, measure, recipe, hygiene, texture, taste, water, soap, clean, cut, chop, knife, peel, juice, slice, dice, grate, blade, safely, ingredients, fruit and vegetable names, names of equipment and utensils</p> <p>sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard</p>



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		<p>flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, planning, investigating tasting, arranging, popular</p>	<p>flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, planning, investigating tasting, arranging, popular</p>
<p>lii Assessment</p>		<p>Cooking and nutrition – Children are beginning to spread and grate soft ingredients like cheese and margarine and chop some firmer ingredients. They are beginning to understand that all food comes from plants or animals and are developing their peeling and chopping skills.</p> <p>Variety (T1) Recipe (T1) Dishes (T1)</p> <p>Where do these ingredients come from? What is special about this dish?</p>	<p>Cooking and nutrition – Children are beginning to peel (using a peeler), chop food and mix with increasing thoroughness. they know that food has to be farmed, grown elsewhere (e.g. home) or caught. They understand how to name and sort foods into the five groups in 'The Eat well plate.'</p> <p>Variety (T1) Recipe (T1) Dishes (T1)</p> <p>Where do these ingredients come from? What is special about this dish?</p>



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D&T: Key Stage 2			
D&T	National Curriculum	Year 3	Year 4
Designing	<ul style="list-style-type: none"> • <i>use research & develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</i> • <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i> 	<ul style="list-style-type: none"> • use research to contribute to the development of shared design criteria • label on the design how the materials and components will be attached • choose materials and components for both their suitability and appeal • use 2paint or Microsoft Paint within a design • Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user. • Use annotated sketches and prototypes to develop, model and communicate at least two possibilities for appealing product, which fulfils the design criteria. 	<ul style="list-style-type: none"> • conduct research to contribute to the development of shared design criteria • Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas. • use annotated sketches to design at least <u>two</u> possibilities for an appealing product which fulfils the design criteria • label on the design how the materials and components will be attached and include the intended measurements • persevere and adapt work when original ideas are unsuccessful and annotate the original design with changes made throughout the making process • Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product.
Key Vocabulary		Research, annotate, sketch, attach, suitability, function, user, purpose, design criteria, innovative, appealing, design brief	prototype, adapt, measurements, centimetres, millimetres, design brief design criteria, innovative,



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lii Assessment			•
Making	<ul style="list-style-type: none"> • <i>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i> • <i>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</i> 	<ul style="list-style-type: none"> • work accurately to measure, shape and join materials and components resulting in a quality finished product • make a product which applies strengthening skills • Order the main stages of making. • Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. • Select from and use finishing techniques suitable for the product they are creating. 	<ul style="list-style-type: none"> • know which material is likely to give the best outcome to result in a quality finished product • make a prototype before making a final version if appropriate • measure accurately • Order the main stages of making. • Explain their choice of materials according to functional properties and aesthetic qualities. • Use finishing techniques suitable for the product they are creating. • Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing and tubing, syringes and balloons in pneumatics • Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern (Textiles)



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<p>Key Vocabulary</p>		<p>Appropriate, technique, accurately, quality, functional, purpose, function prototype</p>	<p>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,</p>
<p>iii Assessment</p>		<p>Structures - Work safely and accurately with a range of simple tools to assemble, join and combine materials.</p> <p>Evaluate (T2) Assemble (T2) Prototype (T2)</p> <p>Which part of the structure did you find most challenging and why?</p> <p>Mechanism – Begin to develop an understanding that mechanical systems such as levers and linkages or pneumatic systems can create movement. Begin to incorporate levers and linkages into their products.</p> <p>Evaluate (T2) Axel (T3) Prototype (T3)</p>	<p>Structures - Join and combine materials and components accurately in temporary and permanent ways</p> <p>Evaluate (T2) Assemble (T2) Prototype (T2)</p> <p>Which part of the structure did you find most challenging and why?</p> <p>Mechanism – With increasing independence produce models that incorporate mechanical systems such as levers, linkages or pneumatic systems to create movement.</p> <p>Evaluate (T2) Axel (T3) Prototype (T3)</p>



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		Which mechanism did you find the most challenging to build and why?	Which mechanism did you find the most challenging to build and why?
<p>Evaluating</p>	<ul style="list-style-type: none"> • <i>investigate and analyse a range of existing products</i> • <i>evaluate their ideas & products against their own design criteria and consider the views of others to improve their work</i> • <i>understand how key events and individuals in design and technology have helped shape the world</i> 	<ul style="list-style-type: none"> • Investigate and analyse books and, where available, other products with lever and linkage mechanisms. • Prove that their own products and ideas against criteria and user needs, as they design and make. • explain how to improve their finished product giving reasons why • Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences (Food) • Understand how a key event/individual has influenced the development of the chosen product and/or fabric (Textiles) 	<ul style="list-style-type: none"> • investigate and analyse a range of existing products • consider the views of others when evaluating their product for both its purpose, appearance and ability to meet the design criteria • suggest and justify improvements to the finished product made during the making process • Understand how a key event/individual has influenced the development of the chosen product and/or fabric (Textiles)

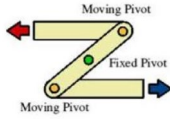


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Key Vocabulary		Investigate, analyse, successful, criteria, sensory evaluations (Food Technology)	Purpose, appearance, views, justify, evaluating,
lii Assessment			
Technical Knowledge	<ul style="list-style-type: none"> • <i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i> • <i>understand and use mechanical systems in their products [e.g. gears, pulleys,</i> 	Construction <ul style="list-style-type: none"> • know how to strengthen a product by stiffening a given part or reinforce a part of the structure (e.g. folding, rolling, shaping, joining) • Understand and use lever and linkage mechanisms. • Distinguish between fixed and loose pivots. • Know and use technical vocabulary relevant to the project. 	Construction <ul style="list-style-type: none"> • Develop and use knowledge of how to construct strong, stiff shell structures • Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. • Understand and use pneumatic mechanisms.



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	<p><i>cams, levers and linkages]</i></p> <ul style="list-style-type: none"> • <i>understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers, motors]</i> • <i>apply their understanding of computing to program, monitor and control their products.</i> 	<p>Textiles</p> <ul style="list-style-type: none"> • Know how to securely join two pieces of material together using a running stitch 	 <p>Textiles</p> <ul style="list-style-type: none"> • Know how to create their own pattern or template • Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. • Understand the need for patterns and seam allowances. <p>Know and use technical vocabulary relevant to the project.</p>
<p>Key Vocabulary</p>		<p>Reinforce, strengthen, technique, folding, rolling, shaping, joining, mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating</p> <p>cross stitch, secure (the first/last stitch), overstitch</p>	<p>tubing, syringe, plunger, split pin, paper fastener, pneumatic system, input movement, process, output movement, control, compression, pressure, inflate, deflate, pump, seal, air-tight, linear, rotary, oscillating, reciprocating</p> <p>Fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance</p>



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lli Assessment			
Food Technology	<ul style="list-style-type: none"> • <i>understand and apply the principles of a healthy and varied diet</i> • <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> • <i>understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed</i> 	<ul style="list-style-type: none"> • know the difference between a savoury and sweet dish • Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. • Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. • Know how to use appropriate equipment and utensils to prepare and combine food. • know how to be both hygienic and safe when using food • follow a recipe to create a dish • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Know and use relevant technical and sensory vocabulary appropriately. 	<ul style="list-style-type: none"> • know which foods/ingredients contribute to a healthy and varied diet and use this knowledge to make a suitable dish • know the process involved in producing a variety of common ingredients (e.g. chicken, fruit and vegetables, fish, jam)



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<p>Key Vocabulary</p>		<p>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, germs, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet</p>	<p>Varied, diet, protein, carbohydrates, dairy, fat, grown, reared, processed, caught</p>
<p>iii Assessment</p>		<p>Cooking and nutrition - Children can measure and weigh ingredients independently using scales and a measuring jug. They are beginning to know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Technical (T2) Savoury (T2) Nutrients (T2)</p> <p>Why have you chosen these ingredients? What technique have you used? Why is this procedure effective?</p>	<p>Cooking and nutrition - Children are becoming increasingly skilled at peeling at chopping with an understanding that food is grown, reared and caught in the UK, Europe and the wider world and understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically. They are further developing their skills including mixing, kneading and baking.</p> <p>Technical (T2) Savoury (T2) Nutrients (T2)</p> <p>Why have you chosen these ingredients? What technique have you used? Why is this procedure effective?</p>



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D&T: Key Stage 2			
D&T	National Curriculum	Year 5	Year 6
Designing	<ul style="list-style-type: none"> • <i>use research & develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</i> • <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i> 	<ul style="list-style-type: none"> • conduct research using different sources to develop own design criteria and explain how it will appeal to a specific user • Investigate famous manufacturing and engineering companies relevant to the project. • use cross-sectional diagrams to design at least <u>two</u> possibilities for an appealing product which fulfils the design criteria • label on the design how the materials and components will be attached and include accurate measurements • produce a detailed, step-by-step plan of the chosen design including list of tools/materials • persevere and adapt work when original ideas are unsuccessful and annotate the step by step plan with changes made throughout the making process 	<ul style="list-style-type: none"> • Develop a design specification for a functional product that responds automatically to changes in the environment. • Generate, develop and communicate ideas through discussion, annotated sketches and pictorial representations of electrical circuits or circuit diagrams. • use exploded diagrams to design at least two possibilities for an appealing product which fulfils the design criteria • label on the design how the materials and components will be attached and include accurate measurements • produce a detailed, step-by-step plan of the chosen design persevere and adapt work when original ideas are unsuccessful and annotate the step by step plan with changes made throughout the making process



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<p>Key Vocabulary</p>		<p>User, sources, cross-sectional, step-by-step, process, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype</p>	<p>Market research, culture, society, exploded diagram, function, innovative, design specification, design brief, user, purpose, authentic,</p>
<p>lii Assessment</p>			
<p>Making</p>	<ul style="list-style-type: none"> • <i>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i> • <i>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</i> 	<ul style="list-style-type: none"> • follow a step-by-step plan, choosing the right equipment and materials • use a range of tools and equipment/utensils competently to result in a quality and aesthetically pleasing finished product • measure accurately • make a product which uses mechanical components • If appropriate, allocate tasks within a team. • Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost. 	<ul style="list-style-type: none"> • Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components. • Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product. • Create and modify a computer control program to enable their electrical product to respond to changes in the environment. • Create and modify a computer control program to enable their electrical product to respond to changes in the environment.



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<p>Key Vocabulary</p>		<p>Competently, aesthetically pleasing, pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram</p>	<p>See Technical Knowledge</p>
<p>iii Assessment</p>		<p>Structures - Measure and mark out accurately when joining and combining materials in temporary and permanent ways</p> <p>Evaluate (T2) Assemble (T2) Prototype (T2)</p> <p>Which part of the structure did you find most challenging and why?</p> <p>Mechanism – Begin to understand how mechanical systems such as cams create movement. Design and make a product that incorporates a cam mechanism</p> <p>Evaluate (T2) Axel (T3) Prototype (T3)</p>	<p>Structures – Y6 – Measure and mark out accurately when joining and combining materials in temporary and permanent ways, making modifications as they go along.</p> <p>Mastery - Consistently measure and mark out accurately when joining and combining materials in temporary and permanent ways, making modifications as they go along.</p> <p>Evaluate (T2) Assemble (T2) Prototype (T2)</p> <p>Which part of the structure did you find most challenging and why?</p> <p>Mechanism – Y6 – Develop a greater understanding of how cams, pulleys or gears create movement. Create and use prototypes. Design and make products with greater independence.</p>



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		<p>Which mechanism did you find the most challenging to build and why?</p>	<p>Mastery - Children are able to make quality products, evidencing a range of designing and making skills of a particularly high standard. They have an excellent understanding of a range of mechanisms.</p> <p>Evaluate (T2) Axel (T3) Prototype (T3)</p> <p>Which mechanism did you find the most challenging to build and why?</p>
<p>Evaluating</p>	<ul style="list-style-type: none"> investigate and analyse a range of existing products evaluate their ideas & products against their own design criteria and consider the views of others to improve their work <p>understand how key events and individuals in design and technology have helped shape the world</p>	<ul style="list-style-type: none"> Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. consider the views of others when evaluating their product for both its functionality and ability to meet the design criteria suggest and justify improvements to the finished product outlining the positive features and draw backs made during the making process 	<ul style="list-style-type: none"> Continually evaluate and modify the working features of the product to match the initial design specification. Test the system to demonstrate its effectiveness for the intended user and purpose. compare and analyse a range of existing products evaluate their product against clear criteria, linked to the appearance, functionality and ability to meet users' needs. suggest and justify improvements to the finished product outlining the positive features and draw backs made during the making process



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Key Vocabulary		Functionality, positive features, draw backs, design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	function, innovative, design specification, design brief, user, purpose, authentic, purpose, evaluate, mock-up,
iii Assessment			
Technical Knowledge	<ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [e.g. gears, pulleys, cams, levers and linkages] 	Construction <ul style="list-style-type: none"> • Understand that mechanical and electrical systems have an input, process and an output. • Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. 	Construction <ul style="list-style-type: none"> • Understand and use electrical systems in their products. • Understand the use of computer control systems in products. • Apply their understanding of computing to program, monitor and control their products. • Know and use technical vocabulary relevant to the project.



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	<ul style="list-style-type: none"> understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers, motors] apply their understanding of computing to program, monitor and control their products. 	<ul style="list-style-type: none"> Know and use technical vocabulary relevant to the project. <p>Textiles</p> <ul style="list-style-type: none"> A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. <p>Fabrics can be strengthened, stiffened and reinforced where appropriate.</p>	<ul style="list-style-type: none"> Use IT to program (<i>e.g. Crumble, Micro:bit</i> THIS IS STILL TO BE DECIDED) and control their product in a more complex manner (<i>e.g. if, when, on input A</i>) <p>Textiles</p> <p>Select from and use a range of tools and equipment, including CAD, to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.</p>
<p>Key Vocabulary</p>		<p>pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram</p> <p>blanket stitch, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces</p> <p>name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper</p>	<p>reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch</p> <p>light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip</p> <p>control, program, system, input device, output device, series circuit, parallel circuit</p> <p>computer aided design (CAD), font, lettering, text, graphics, menu, scale, modify, repeat, copy, flip design brief, innovative, prototype,</p>



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			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
iii Assessment			



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<p>Food Technology</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Write a step-by-step recipe, including a list of ingredients, equipment and utensils • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Know how to use utensils and equipment including heat sources to prepare and cook food. • Understand about seasonality in relation to food products and the source of different food products. • Know and use relevant technical and sensory vocabulary. • Make, decorate and present the food product appropriately for the intended user and purpose. • know when food is ready to eat (e.g. ripe, cooked, frozen) • know which season various foods are available for harvesting know how to prepare a dish by combining the foods/ingredients (e.g. biscuits, scones, muffins) 	<ul style="list-style-type: none"> • Write a step-by-step recipe, including a list of ingredients, equipment and utensils • Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. • Know how to use utensils and equipment including heat sources to prepare and cook food. • Understand about seasonality in relation to food products and the source of different food products. • Know and use relevant technical and sensory vocabulary. • Make, decorate and present the food product appropriately for the intended user and purpose. • know when food is ready to eat (e.g. ripe, cooked, frozen) • know which season various foods are available for harvesting • know how to prepare a dish by combining the foods/ingredients (e.g. a savoury stew) • know how food ingredients should be stored and give reasons • know the difference between use by and best before dates • work within a budget to create a dish
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<p>Key Vocabulary</p>		<p>ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs</p> <p>fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality</p> <p>utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble Ripe, chilled, harvest, seasonal, seasoned,</p>	<p>spice, herbs</p> <p>fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality</p> <p>utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble Refrigerated, frozen, rancid, stale, mouldy, expiration date, budget,</p>
<p>iii Assessment</p>		<p>Cooking and nutrition - Children can grate, peel and chop with increasing accuracy. They understand that seasons may affect the food available and understand how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Technical (T2) Savoury (T2) Nutrients (T2)</p>	<p>Cooking and nutrition - Children use their knowledge and skills the children know how to prepare and cook a variety of dishes safely and hygienically.</p> <p>Technical (T2) Savoury (T2) Nutrients (T2)</p> <p>Why have you chosen these ingredients? What technique have you used? Why is this procedure effective?</p>



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		Why have you chosen these ingredients? What technique have you used? Why is this procedure effective?	
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