

Year 1

Unit of Work	Structures (Free standing structures) DATA Project: 'Whose Home'	Food (Preparing Food Items) DATA Project: 'Fantastic Fruit'
Prior Learning	Children have some experience of using construction kits to build walls and towers; using tools such as scissors or hole punches with plastic, paper or card; and some experience of different methods of folding and joining card and paper.	Children will likely have some experience of eating a variety of fruits. They will likely have some experience of using table knives, table forks and table spoons to prepare their own food when eating it.
Core Learning	<ul style="list-style-type: none"> - Suggest an appropriate product to design and construct for a given user. - Identify multiple features of existing homes: door, windows, roof, fence, chimney, pipes, ariel. - Label existing homes and diagrams of existing homes. - Compare and evaluate existing homes. - Suggest improvements for existing homes. - Use pencil and ruler to mark out window frames and door outlines. - Use scissors to construct a hinged door. - Use scissors, masking tape and cellophane to construct a transparent window. - Construct a mock-up of the front of a home. - Use masking tape, Sellotape and PVA glue to attach and secure objects. - Compose a design specification and design drawing for an original model home. - Use a range of tools and materials to construct a model home. - Evaluate a model home. 	<ul style="list-style-type: none"> - Closely observe and feel a variety of fruits. - Describe the texture of a variety of fruits. - Correctly identify a variety of fruits. - Describe the taste of a variety of fruits. - Identify basic food preparation techniques. - Identify a range of food preparation equipment. - Practise food preparation techniques such as: washing fruit, pulling grapes from a bunch, peeling and separating satsumas, cutting dried apricots with scissors, scooping pomegranate seeds with a spoon and slicing a banana with a table knife. - Assemble a layered fruit dish. - Design an original layered fruit dish for a specific user. - Select appropriate ingredients to create a layered fruit dish. - Complete a design specification for an original layered fruit dish. - Create an original layered fruit dish. - Evaluate one's own original layered fruit dish.
Vocabulary	Cut, Fold, Join, Fix, Structure, Wall, Tower, Weak, Strong, Base, Top, Underneath, Side, Edge, Surface, Thinner, Thicker, Corner, Point, Straight, Curved, Metal, Wood, Plastic, Circle, Triangle, Square, Rectangle, Cuboid, Cube, Cylinder, Design, Make, Evaluate, User, Purpose, Ideas, Design criteria, Product, Function, Structure, Shell structure, Hinge, Mock-up.	Fruit, Healthy, Taste, Shape, Smell, Texture, Soft, Hard, Smooth, Spiky, Bumpy, Hairy, Long, Round, Colourful, Furry, Squashy, Crunchy, Squeaky, Fruity, Sweet, Juicy, Bitty, Sour, Apple, Banana Kiwi, Strawberry, Raisins, Mango, Grapes, Diced apricots, Pineapple, Anti-bacterial spray, Apron, Basin, Chopping board, Cleaning cloths, Knife, Mixing bowl, Peeler, Table knife, Table fork, Table spoon.
Resources	Photographs of various homes and other structures. Paper, card, plastic sheet, paper and plastic straws, pipe cleaners. Reclaimed materials including: small containers, card boxes, cotton reels, string, masking tape, PVA glue, Plasticine, left and right-handed scissors, hole punch, stapler, Finishing media and materials.	A variety of fruits for children to observe, feel, smell and taste. A variety of fruits for children to use as ingredients for their own fruit dishes. Plastic containers for children to practise layering with. Anti-bacterial spray, aprons, basins, chopping boards, cleaning cloths, knives, mixing bowls, peelers, table knives, table forks, table spoons.
Final Product	A standing model home that utilises hinged doors and transparent windows.	A layered fruit dish that contains at least two '5 a day' portions.

Year 2

Unit of Work	Mechanisms (Wheels and Axels) DATA Project: 'Working with wheels and axles'	Textiles (2d Shapes to 3d Product) DATA Project: 'Bendy Bags'
Prior Learning	Children have experience of marking lines and shapes to cut on card and paper. They also have experience of using scissors to cut along marked lines and to cut freely. Children have experience of using glue, tape and other materials to attach and secure card.	Children have some experience of measuring and marking out shapes before cutting them. They also have experience of evaluating existing products and their own products.
Core Learning	<ul style="list-style-type: none"> - Investigate existing examples, (toys, models, real-world examples, etc.), of vehicles that use wheels. - Understand and accurately use the terms: chassis, fixed axel, moving axel, fixed wheel and moving wheel. - Identify the chassis, axels and wheels seen on existing examples of vehicles. - Gain experience at using cardboard to create a basic vehicle chassis. - Experiment with making chassis that have different sizes and shapes. - Use wooden dowl and wheels to move a chassis using fixed axels and wheels. - Use wooden dowl and wheels to move a chassis using moving axels and wheels. - Experiment with combinations of fixed axels, moving axels, fixed wheels and moving wheels and identify the positives and challenges of using different construction approaches. - Use a range of materials, (adhesive tack, tape, glue, etc.), to secure wheels to an axel. - Produce a design criteria for a carrier vehicle on wheels for a particular purpose and for a particular user, e.g. a new trolley for the school cleaner, a float for a carnival, etc. - Produce an annotated design drawing of a potential vehicle design. - Working with original design criteria and sketches, construct a carrier vehicle. The vehicle should have a chassis and it should utilise axels and wheels. - Test the finished carrier vehicle, focusing on its carrying ability and its movement. - Evaluate the finished carrier vehicle and those of peers. 	<ul style="list-style-type: none"> - Example simple textile containers: pens, wallets, spectacles cases, etc. - Examine seams, seam allowances of existing textile containers. - Suggest possible purposes of existing textile containers. - Idnetify a variety of fabrics. - Practise textile joining techniques, (running stitch, backstitch, starting/finishing), by joining two pieces of fabric together. - Test different joining methods to identify which is the most secure. - Carry out simple fabric tests to identify which would be best suited to a given function. - Practise simple decorative techniques: applique, embroidery, fabric paints. - Experiment with bending and flexing plastic strips. - Create a design specification for a bag to be used by a specific user for a specific purpose. - Create a mock-up to test a design prior to construction of a final product. - Create a simple action plan detailing how the construction of a product has been planned. - Construct a 'bendy bag' using textile joining and decorating techniques. - Evaluate a final product, identifying strengths and areas for development against the original design specification.
Vocabulary	Vehicle, Wheel, Axle, Axle holder, Chassis, Body, Cab assembling, Cutting, Joining, Shaping, Finishing, Fixed, Free, Moving, Mechanism, Design, Make, Evaluate, Test, Purpose, User, Criteria, Functional	User, Purpose, Model, Mock-up, Evaluating, Labelled drawings, Stiffening, Reinforcing, Coins, notes, Pattern/Templates, Strength, Weaknesses, Accurate, Finishing, Fabric, Stitch, Seam, Seam allowance,

		Embroidery, Applique, Strength, Hard-wearing, Stretch, Fray, Flexible, Stiff
Resources	<p>Selection of toy vehicles with differently fixed axles Card boxes, Card, Cotton reels, Plastic tubing, Dowel, Clothes pegs, Paper sticks/dowel, paper/plastic straws, Card discs, MDF wheels</p> <p>Single hole punch, Card drill, Cutting mat, Masking tape, PVA Glue, Paint, Thin/thick paint brushes, Felt tip pens, Decorative paper, Double sided sticky fixers, Junior hacksaw, Vice, Left/right handed scissors.</p>	<p>A collection of paper bags of different sizes. Some sunglasses cases with flexible top closing. A selection of loosely woven fabrics, some with stripes or checks. Redundant plastic (polypropylene) folders to be cut into strips and/or plastic plant label 'canes'. Scissors for fabric, thread, transparent sticky tape, needles. Materials for decorative techniques eg embroidery thread and needles, dye, fabric crayon and paints.</p> <p>Downloadable resources including PowerPoint, teacher notes and children's worksheets.</p>
Final Product	A working carrier vehicle that has a clear chassis, working axels and wheels. The vehicle should be able to move and carry an object or objects.	A self-closing 'bendy bag' constructed primarily from fabric.

Year 3

Unit of Work	Mechanical systems (Levers and Linkages) DATA project: 'Moving history book - levers and linkages'	Mechanical systems (pneumatic systems) DATA Project: 'Make a Mascot'
Prior Learning	Children have explored and used mechanisms such as flaps, sliders and levers. Children have gained experience of basic cutting, joining and finishing techniques with paper and card.	Children have knowledge of how materials can be joined to allow movement. They have also got experience of joining and combining materials using simple hand tools. In previous projects, children have generated and communicated ideas in a variety of ways and evaluated their work as it progresses and at the end.
Core Learning	<ul style="list-style-type: none"> - Investigate, analyse and evaluate books and, where available, other products which have a range of lever and linkage mechanisms. - Identify the following when observing existing example products: potential user, purpose, moving parts, mechanisms and materials. - Evaluate existing example products. - View and analyse a range of lever and linkage mechanisms. - Recognise a lever and a linkage. - Recognise loose pivots and fixed pivots. - Practise accurate use of measuring, marking out, cutting, joining and finishing skills and techniques. - Produce a range of different lever and linkage mechanisms using existing templates. - Respond to a design brief that calls for the manufacturing of an interactive information book. - Determine the key themes/pages of the final product. - Compose a design criteria that can be used to guide the development of the final product. - Create and test prototype pages for the final product. - Evaluate prototypes and using annotated sketches continue to develop, model and communicate ideas. - Consider the main stages in making before assembling a high quality product, drawing on the knowledge, understanding and skills learnt previously. - Construct the final product. - Evaluate the final product against the intended purpose and with the intended user, drawing on the design criteria previously agreed. 	<ul style="list-style-type: none"> - Observe simple pneumatic systems and explain how they work using appropriate vocabulary. - Construct a simple pneumatic system by joining a balloon to 5mm tubing and then to a washing-up liquid bottle. - Construct pneumatic systems by joining two syringes with plastic tubing. - Experiment further with different volumes of syringe. - Recognise that simple levers can be used in conjunction with balloons or syringes to control movement. - Investigate ways of using pneumatic systems with other materials to control movement. - Develop a design criteria for a final mascot product, identifying a specific user and a specific purpose. - Produce design sketches indicating how the mascot could be made. - Produce a list of the materials and tools that will be required to construct a final product. - Work safely and accurately with a range of simple hand tools and materials to manufacture a final mascot product. - Evaluate final mascot product against the original design specification criteria.
Vocabulary	Mechanism, Lever, Linkage, Pivot, Slot, Bridge, Guide System, Input, Process, Output Linear, Rotary, Oscillating, Reciprocating User, Purpose, Function Prototype, Design criteria, Innovative, Appealing, Design brief	Mind-map, Research, Suggestion, Evaluate, Ideas, Constraints, Appropriate, Investigate, Sort, Order, Set, Label, Title, List, Probable, Possible, Impossible, Planning, Storyboard, Components, Fixing, Tubing, Syringe, Plunger, Attaching, Split pin, Paper fastener, Finishing, Control, Pneumatic system, Compression, Pressure, Inflate, Deflate, Input, Output,

		Pump, Seal, Air-tight, Pivot, Hinge, Fastest, Slowest, Often, Always, Sometimes, Never
Resources	<p>Museum site and collections</p> <p>Books and other products with lever and linkage mechanisms</p> <p>Lever and linkage teaching aids</p> <p>Card strips, card rectangles, paper, masking tape, paper fasteners, paper binders, stick glue</p> <p>Left/right handed scissors, cutting mats, card drill, finishing media and materials</p>	<p>Examples of products that use air <i>e.g. pneumatic toys, dentist chair model, excavator model, foot pump for inflating air mattress, balloon pump</i></p> <p>Washing-up liquid bottles, 5mm diameter plastic tubing, balloons, sterile syringes, t-connectors</p> <p>Construction kits</p> <p>Suitable reclaimed materials, card, plastic sheet, magazine pages</p> <p>Materials for finishing <i>e.g. coloured papers, paint, papier mâché, fabric, foil, pipe cleaners, raffia</i></p> <p>PVA glue, masking tape, parcel tape, lower temperature glue gun, pipe-cleaners, sticky pads, cable ties, elastic bands</p> <p>Scissors, snips, paper drills, hole punches, tube cutters</p>
Final Product	An interactive information text that utilises levers and linkages to create movable parts.	A movable, interactive, 3D mascot that is linked to a specific event, user and purpose.

Year 4

Unit of Work	Structure (shell structures including CAD) DATA Project: 'Packaging'	Electrical systems (simple circuits and switches) DATA Project: 'Torches, Lamps and Lanterns'
Prior Learning	Children should have experience of different joining, cutting and finishing techniques with paper and card. They should also have an understanding of 2-D and 3-D shapes (mathematics) and the physical properties and everyday uses of materials (science).	Children can identify electrical appliances, distinguishing between those which are powered by mains and battery and recognising that electricity can be used to produce light, sound, heat and movement. They have experience of making simple series circuits with cells, wires, bulbs, buzzers and motors, learning the names of the components.
Core Learning	<ul style="list-style-type: none"> - Understand that the four main purposes of food packaging: protect, present, contain, preserve. - Observe examples of food packages and rate their protection and presentation abilities. - Take apart food packages to examine their net structures. - Identify the parts of net structures: faces, tabs and aperture/s (windows). - Examine graphics on packaging, focussing on colours, style, size and font. - Practise scoring, cutting out and assembling using pre-drawn nets. - Practise making nets out of card, joining the flat faces with masking tape and glue to create 3-D shapes. - Practise graphic techniques using both computer programs and hand drawn work. e.g. print out the name of a product using different font sizes and styles. - Experiment with different ways of stiffening and strengthening their shell structures e.g. by folding and shaping, corrugating, ribbing, laminating. - Practise using computer-aided design (CAD) software to design the net, text and graphics for their products according to purposes. - Carry out testing to find out where their structures might need to be stiffened and strengthened. - Agree on design criteria that can be used to guide the development and evaluation of a product. - Use annotated sketches and prototypes to develop, model and communicate their ideas for the product. - Identify the main stages of making and the appropriate tools required to create a final product. - Work with accuracy, using computer-aided design (CAD) where appropriate. 	<ul style="list-style-type: none"> - Observe and examine a selection of existing torches and lamps and state their purpose and potential users. - Name a selection parts of existing torches. - Use basic circuit equipment to construct a simple electrical circuit that powers a bulb. - Create simple electrical circuits that include bulbs and switches. - Create simple electrical circuits that include multiple bulbs. - Add labels to simple electrical circuit to make clear what the individual components are. - Practise connecting wires together by stripping, twisting and covering wires. - Create simple electrical circuits using wires that don't have crocodile clips. - Cut and fold Tetra Brik packaging to create reflective cones. - Practise constructing cases/bodies to hold circuit components using glue to roll suitable materials into tubes. - Use card/Tetra Brik packaging to construct holders for small bulbs. - Use paper fasteners to fix existing bulb holders in place. - Identify a potential user for an original torch. - Compose a design specification for an original torch. - Compose a labelled design sketch for an original torch, including a labelled circuit diagram. - Construct a circuit based on a specific design. - Construct an original torch body and embed a working circuit within it. - Test and evaluate an original torch.

	- Evaluate their own and each other's work in a positive manner against their original design criteria, including its 'squashability' and graphic design.	
Vocabulary	Font, Lettering, Graphic, Decision, Evaluating, Criteria, Fit for purpose, Design brief, Design criteria, Innovative, Prototype, Marking out, Scoring, Tabs, Interlocking, Adhesives, Join, Assemble, Accuracy, Material, Stiff, Strong, Reduce, Reuse, Recycle, Corrugating, Ribbing, Laminating, Aperture, Three-dimensional (3D) shape, Face, Edge, Vertex, Two-dimensional, Corner, Cube, Cuboid, Prism, Net, Packaging, Shell structure, Capacity, Centimetre, Millimetre, Measure	Series circuit, Fault, Connection, Toggle switch, Push-to-make switch, Push-to-break switch, Battery, Battery holder, Bulb, Bulb holder, Wire, Insulator, Conductor, Crocodile clip Control, Program, System, Input device, Output device User, Purpose, Function, Prototype, Design criteria, Innovative, Appealing, Design brief
Resources	Craft knife, Rotary cutter, Perforation cutter, Cutting mat, Safety ruler, Scissors Correx in different colours, Corrugated card in different colours, Mirror card in different colours, Polypropylene sheet in different colours, Squared paper Masking tape, Clear adhesive tape, PVA glue, Glue spreaders, Rulers, Pencils, felt-tip pens, Computer with CAD software such as Techsoft 2D Primary or MS Word, Printer, Collection of packaging shell structures	Examples of existing torches: Reading lamps, Safety lamps, Handheld torches, Bicycle lights, Headlamps, etc. Crocodile clips, Side cutters, Pliers, Wire strippers, Batteries, Battery holders, Bulbs Scissors, Cards, Glue Sticks, Masking tape, PVA Glue, Paper fasteners, Wire, Electrical switches, Tetra Brik packaging.
Final Product	A functional food package g that is visually lively, accurately made and appropriate for its purpose	An electrical torch that utilises a switch and one or more bulbs.

Year 5

Unit of Work	Mechanical systems (pulleys, gears) DATA Project: Gears and Pulleys	Textiles (Combining Fabrics) DATA Project: 'Fancy A Bag?'
Prior Learning	Children should have prior experience of axles, axle holders and wheels that are fixed or free moving, and a basic understanding of electrical circuits, simple switches and components. They also have experience of cutting and joining techniques with a range of materials including card, plastic and wood and an understanding of strengthening and stiffening structures is also required for good outcomes.	Children have experience of discussing ideas with others, drawing products and evaluating products. They also have the following manufacturing experience: joining materials using glue, cutting fabric, basic experience of sewing.
Core Learning	<ul style="list-style-type: none"> - Investigate, analyse and evaluate existing everyday products and existing or pre-made toys that incorporate gear or pulley systems. - Use observational drawings and questions to develop understanding of each product in the collection. - Identify movements used, mechanical components used and positions used in examples of existing products. - Identify the inputs, processes and outputs of existing products. - Using a construction kit, investigate combinations of pulleys to learn about direction and speed of rotation. - Using a construction kit, explore combinations of two different size gears meshed together. Investigate the direction and speed of rotation focusing on how the size of the driver gear affects the speed of the follower gear. - Develop measuring, marking, cutting, shaping and joining skills using junior hacksaws, G-clamps, bench hooks, square section wood, card triangles and hand drills to construct wooden frames. - Develop a design specification for a product, carefully considering the purpose and intended user for their product. - Communicate ideas through detailed, annotated drawings from different views and/or exploded diagrams. - Produce detailed step-by-step plans and lists of tools, equipment and materials needed. - Produce a high quality final product, applying the knowledge, understanding and skills gathered through previous experience. - use a range of decorative finishing techniques to ensure a well finished final product that matches the intended user and purpose. - Evaluate throughout and the final product in use, comparing it to the original design specification. <p>Critically evaluate the quality of the design, the manufacture, functionality, innovation shown and fitness for the intended user and purpose</p>	<ul style="list-style-type: none"> - Observe and investigate examples of existing products, identifying the materials and techniques used to construct them. - Recognise the range of purposes and users that bags can be designed and used for. - Make clear, labelled drawings of existing products. - Practise joining using glue, staplers, pins, etc. - Practise basic sewing techniques: starting, ending, running stitch, etc. - Use templates to cut out identical pieces of fabric. - Experiment with adding decorative features. - Create a design criteria for a bag that includes the following features: a back and a front, must use strong joints and must not fall apart. - Create a labelled design sketch for a bag that will be a final product. - Create a mock up as a basis for a design. - Apply prior knowledge of effective template use to produce fabric components for a final product. - Apply prior knowledge of sewing and joining techniques to join fabric pieces together when constructing a final product. - Add decorative features to final product using appropriate materials and techniques . - Identify adaptations that may need to be made during the construction of a final product. - Evaluate a finished product by discussing strengths and areas that could be improved.

<p>Vocabulary</p>	<p>Pulley, Drive belt, Gear, Rotation, Spindle, Driver, Follower, Ratio, Transmit, Axle, Motor, Circuit, Switch, Circuit diagram, Microcontroller, Annotated drawings, Exploded diagrams, Mechanical system, Electrical system, Input, Process, Output, Design decisions, Functionality, Innovation, Authentic, User, Purpose, Design specification, Design brief.</p>	<p>Designing, User, Purpose, Label, Drawing, Ideas, Mock up, Choose, Decide, Evaluate, Cost, Aesthetics (looks), Function, Ergonomics (size), Quality 3Rs: Reducing, Reusing and Recycling Plan, Template, Fabric, Cutting out, Sewing, Running stitch, Needle, Gluing, Accurate, Textiles, Seam, Stitch, Thread, Strong, Flexible</p>
<p>Resources</p>	<p>Construction kits that can be used to demonstrate how gears mesh and how pulleys operate. A range of different sized pulleys and gears; axels, elastic bands. Batteries, battery holders, wires, crocodile clips, switches, aluminium foil, paper fasteners, paper clips, card, motors, motor clips, dowel, paper sticks. Junior hacksaws, glass paper, G-clamps, bench hooks, hand drill, automatic wire strippers. PVA glue, sticky pads, masking tape, dowel, double-sided tape, card triangles, square section wood, card, corrugated plastic, finishing media. Crumble microcontroller, wheels, motors, battery box, connectors and optional inputs</p>	<p>Examples or pictures of a variety of bags for different users and purposes Fabric for learning sewing techniques eg binca, hessian Fabric for bags eg cotton, felt, fleece (easy to cut) Fabric scissors, card, paper, needles, thread, glue, stapler, paper clips, safety pins, felt tip pens, decorative materials</p>
<p>Final Product</p>	<p>A small, working model of a fairground ride with gears or pulleys e.g. carousel or Ferris wheel.</p>	<p>A fabric bag that fulfils a specific purpose and has been designed with a specific user in mind. The bag will have the following features: a back and a front, must use strong joints and must not fall apart.</p>

Year 6

Unit of Work	Electrical systems (programming, control) DATA Project: 'Alarming vehicles'	Food (culture and seasonality) DATA Project: 'Soups - Celebrating culture and seasonality'
Prior Learning	Children have some experience of writing and modifying a program to make a light turn on or flash on and off. They have an understanding of the essential characteristics of a series circuit and experience of creating a battery powered, functional, electrical product.	Children have knowledge and understanding about food hygiene, nutrition, healthy eating and a varied diet. They are able to use appropriate equipment and utensils, and apply a range of techniques for measuring out, preparing and combining ingredients.
Core Learning	<ul style="list-style-type: none"> - Examine and analyse examples of existing alarm systems. - Identify a range of purposes that alarms could fulfill: provide information, to warn of danger or disturbance, to prevent damage, to keep things safe. - Recognise a range of input switches utilised in circuits to trigger alarms: Toggle, Push-to-make, Push-to-break, Micro-switch, Light-dependent resistor. - Recognise a range of outputs utilised in alarm circuits such as sirens and flashing lights. - Suggest different uses for specific switches and outputs. - Draw pictorial representations of circuits and draw circuit diagrams using correct symbols. - Demonstrate the accurate use tools and equipment including cutting and stripping wire and making secure electrical connections. - Experiment with incorporating programming and control, using for example the Crumble microcontroller with light or motion sensors and a buzzer and/or 'sparkle' LED flashing lights. - Produce a design criteria for an original alarm system to be fitted for a vehicle. - Identify potential users and purposes for an original alarm system. - Generate innovative ideas through research using surveys, interviews, questionnaires and web-based research. - Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. - Sketch possible ideas of how their alarm circuit can be fitted into the car, before making an accurate labelled drawing of their ideas. - Produce a detailed step by step plan and list the tools, equipment and materials needed. - Produce a high quality alarm product, applying the knowledge, understanding and skills they have developed through their research and practise tasks. - Use a range of decorative finishing techniques to ensure a well finished final product that matches the intended user and purpose. 	<ul style="list-style-type: none"> - Carry out sensory evaluations of a range of existing soup products and record observations. - Develop sensory vocabulary related to savoury soups. - Name foods available in each season. - Recognise that climate and conditions affect when and where food is produced. - Use a range of cooking techniques such as peeling, grating, chopping and slicing vegetables safely and hygienically. - Accurately follow an existing recipe for making soup. - Create a design criteria for an original soup recipe. - Use results of previous research when developing design ideas. - Produce an original soup recipe. - Identify the ingredients and equipment needed to manufacture a final soup product. - Produce a step-by-step plan to guide the production of a final soup product. - Use a range of preparation techniques for vegetables when producing a final soup product. - Demonstrate an understanding of safety and hygiene rules for food preparation. - Evaluate an original soup product against the initial design criteria.

	<ul style="list-style-type: none"> - Compare their final product to the original design specification. - Test the final product with the intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. - 	
Vocabulary	<p>Reed switch, Toggle switch, Push-to-make switch, Push-to-break switch, Light dependent resistor (LDR), Tilt switch Light emitting diode (LED), Bulb, Bulb holder, Battery, Battery holder, USB cable, Wire, Insulator, Conductor, Crocodile clip Control, Program, System, Input device, Output device, Series circuit, Parallel circuit Function, Innovative, Design specification, Design brief, User, Purpose</p>	<p>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 Design specification, Innovative, Research, Evaluate, Design brief, Peel, Chop, Dice, Grate, Dissolve, Bridge hold, Claw grip, Simmer.</p>
Resources	<p>Microcontroller or standalone control box or interface box. Collection of battery powered, manually controlled and programmable products. Batteries, battery holders, crocodile leads. Different output devices including bulbs with bulb holders, buzzers, light emitting diodes (LEDs), motors. Different input devices including micro switches, reed switches and magnets, light dependent resistors (LDRs). Wire, automatic wire strippers, masking tape, construction materials and tools as required.</p>	<p>Information about food from around the world. Range of relevant examples of foods to taste and evaluate. Basic recipes. Suitable equipment and utensils to make and cook recipes such as: weighing scales, measuring jugs, bowls, spoons – various sizes, baking trays, parchment paper, plastic film. Food a Fact of Life website Plastic cups and spoons microwave oven hob aprons kettle.</p>
Final Product	<p>A 3D model of a vehicle that has been fitted with a functioning alarm system triggered by a switch style input.</p>	<p>A soup, or multiple soups, that are intended for specific consumers. The soup should be linked to a cultural or historical event.</p>