



Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Everyday products	<ul style="list-style-type: none"> <li>Some books have moving parts.</li> <li>Name and explore a range of everyday products and explore how things work.</li> </ul>	<ul style="list-style-type: none"> <li>Everyday products are objects that we use every day. These objects have a specific use. Name and explore a range of everyday products and begin to talk about how they are used.</li> </ul>	<ul style="list-style-type: none"> <li>An axle is a rod that is connected to the centre of a wheel, which allows it to turn.</li> <li>A chassis is the frame of a vehicle.</li> <li>A shelter is a structure designed to give protection from weather or danger.</li> <li>Name and explore a range of everyday products and describe how they are used.</li> </ul>	<ul style="list-style-type: none"> <li>There are many home products made from fabric.</li> <li>Examples of fabric based products in the home include cushions, curtains, blinds and carpets.</li> <li>Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive.</li> <li>Explain how an everyday product could be improved.</li> </ul>	<ul style="list-style-type: none"> <li>Particular products are designed for specific tasks. For example designing a product to help grow plants will require certain materials.</li> <li>Explain how an existing product benefits the user.</li> </ul>	<ul style="list-style-type: none"> <li>Design features are the aspects of a product's design that the designer would like to emphasise. For example, the use of a particular material or a feature that makes the product durable.</li> <li>A switch makes or breaks a circuit.</li> <li>When a switch is closed or 'on', the circuit is complete.</li> <li>When a switch is open or 'off', the circuit is incomplete.</li> <li>A programmable device is a machine that is provided with coded instructions for the automatic performance of a task.</li> <li>Investigate and identify the design features of a</li> </ul>	<ul style="list-style-type: none"> <li>The design of products needs to take into account the culture of the target audience.</li> <li>The ancient Greeks developed the Classical form of architecture that has been copied for thousands of years.</li> <li>Explain how the design of a product has been influenced by the culture or society in which it was designed or made.</li> </ul>	<ul style="list-style-type: none"> <li>Make Do and Mend was a campaign run by the Ministry of Information during the Second World War to encourage people to recycle and repurpose their old clothes rather than buy new.</li> <li>The Make Do and Mend campaigns aimed to limit the amount of labour and materials used in clothes production, so that it could be used to support the greater war effort.</li> <li>A processed food is changed during preparation and includes processes, such as cooking, freezing, pasteurising, or the addition of ingredients.</li> <li>Processed foods can be</li> </ul>

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						familiar product.		<p>convenient and increase availability, but often lack of nutrients and contain unhealthy ingredients when compared to whole foods.</p> <ul style="list-style-type: none"> <li>● Sliced bread is processed. It can contain many more ingredients than homemade bread, including preservatives and artificial ingredients.</li> <li>● Bridge structures have changed over time. This is due to factors such as technology, design innovation and new and better access to materials.</li> <li>● Analyse how an invention or product has significantly changed or improved people's lives.</li> </ul>
<b>Staying safe</b>	<ul style="list-style-type: none"> <li>● It is important to listen to adults and follow simple rules and procedures when using equipment</li> </ul>	<ul style="list-style-type: none"> <li>● Rules keep us safe when using equipment.</li> <li>● Follow rules and instructions to keep safe.</li> </ul>	<ul style="list-style-type: none"> <li>● Rules are made to keep people safe from danger.</li> <li>● Safety rules include always listening carefully,</li> </ul>	<ul style="list-style-type: none"> <li>● Hygiene rules include washing hands before handling food, cleaning surfaces, tying long hair</li> </ul>	<ul style="list-style-type: none"> <li>● Safety rules must be followed when using electricity. Fingers and other objects must not be put into</li> </ul>	<ul style="list-style-type: none"> <li>● Chemicals are used in the home every day. They include cleaning products, such as bleach and</li> </ul>	<ul style="list-style-type: none"> <li>● Safety features are often incorporated into products that might cause harm. Some</li> </ul>	<ul style="list-style-type: none"> <li>● The safety of the user has to be taken into account when designing a new product.</li> </ul>

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	<p>and tools.</p> <ul style="list-style-type: none"> <li>● Show an understanding that tools and equipment need to be used safely and collaborate with others when moving large equipment.</li> </ul>		<p>following instructions and using equipment only when told to.</p> <ul style="list-style-type: none"> <li>● Follow the rules to keep safe during a practical task.</li> </ul>	<p>back, storing food appropriately and wiping up spills.</p> <ul style="list-style-type: none"> <li>● Work safely and hygienically in construction and cooking activities.</li> </ul>	<p>electrical outlets, anything with a cord or plug should never be used around water and a plug should never be pulled out by its cord.</p> <ul style="list-style-type: none"> <li>● Use appliances safely with adult supervision.</li> </ul>	<p>disinfectant, but also paints, glues, oils, pesticides and medicines.</p> <ul style="list-style-type: none"> <li>● Chemicals should only be used under adult supervision.</li> <li>● Work safely with everyday chemical products under supervision, such as disinfectant hand wash and surface cleaning spray.</li> </ul>	<p>examples include the child-safety caps on medicine bottles, seatbelts in cars, covers for electrical sockets and finger guards on doors.</p> <ul style="list-style-type: none"> <li>● Explain the functionality and purpose of safety features on a range of products.</li> </ul>	<ul style="list-style-type: none"> <li>● Demonstrate how their products take into account the safety of the user.</li> </ul>
<b>Mechanisms and movement</b>	<ul style="list-style-type: none"> <li>● Lots of vehicles have wheels to help them move.</li> <li>● Explore, build and play with a range of resources and construction kits with wheels.</li> </ul>	<ul style="list-style-type: none"> <li>● Vehicles and machines have wheels and axles to help them move.</li> <li>● Wheels help vehicles move.</li> <li>● An axle is a rod that goes through the middle of the wheel to help it stay in place.</li> <li>● Vehicles have wheels and axles to help them move.</li> <li>● Explore, build and play with a range of resources and construction kits with wheels and axles.</li> </ul>	<ul style="list-style-type: none"> <li>● Most vehicles that move on land have axles and wheels that are fixed to a chassis.</li> <li>● An axle fixed to a chassis has freely moving wheels.</li> <li>● A freely moving axle has fixed wheels.</li> <li>● Use wheels and axles to make a simple moving model.</li> </ul>	<ul style="list-style-type: none"> <li>● People build machines to make their work easier.</li> <li>● A machine is made up of different parts that all work together to perform a task.</li> <li>● Individual parts of a machine are called components.</li> <li>● The part of a machine that brings about movement is called the mechanism.</li> <li>● A slider mechanism moves in a straight line.</li> <li>● Real-life examples</li> </ul>	<ul style="list-style-type: none"> <li>● Cams are devices that can convert circular motion into up-and-down motion.</li> <li>● The cam is fixed to the axle and the follower sits on the cam. When the axle is rotated, the follower moves up and down, following the shape of the cam.</li> <li>● Different shaped cams produce different patterns of movement in the follower.</li> <li>● Explore and use a range of mechanisms (levers, sliders,</li> </ul>	<ul style="list-style-type: none"> <li>● Simple machines make physical jobs easier by changing the strength or direction of a force.</li> <li>● There are six simple machines: pulley, lever, wheel and axle, wedge, inclined plane and screw.</li> <li>● Simple machines can be combined to make complex, compound machines. For example, a wheelbarrow combines a lever with a wheel and axle.</li> <li>● Explore and use a</li> </ul>	<ul style="list-style-type: none"> <li>● A pneumatic system uses compressed air to exert a force.</li> <li>● Pneumatic systems can be used to lift heavy loads, raise and lower platforms or soften a force by acting as a shock absorber.</li> <li>● Use mechanical systems in their products, such as pneumatics.</li> </ul>	<ul style="list-style-type: none"> <li>● Mechanical systems can include sliders, levers, linkages, gears, pulleys and cams. Other mechanisms include pneumatics and hydraulics.</li> <li>● Explain and use mechanical systems in their products to meet a design brief.</li> </ul>

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				<p>of slider mechanisms include door bolts and drawers.</p> <ul style="list-style-type: none"> <li>● A lever mechanism is a bar that moves around a fixed point called a pivot.</li> <li>● Real-life uses of levers include scissors and seesaws.</li> <li>● A linkage mechanism combines levers and sliders.</li> <li>● Real-life uses of linkages include toolboxes and scissor lifts.</li> <li>● Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.</li> </ul>	<p>axles, wheels and cams) in models or products.</p>	<p>range of mechanisms (levers, axles, cams, gears and pulleys) in models or products.</p>		
<b>Electricity</b>	<ul style="list-style-type: none"> <li>● Batteries power some objects. A switch turns them off and on.</li> <li>● Explore battery-powered objects using switches to turn them off and on.</li> </ul>	<ul style="list-style-type: none"> <li>● Microwaves, toasters and blenders are machines. Machines need power to make them work.</li> <li>● Identify products that use electricity to make them work.</li> </ul>	<ul style="list-style-type: none"> <li>● Electricity is a form of energy. Many household appliances use electricity, such as kettles, televisions and washing machines. They can be switched on by completing the circuit to allow the flow of</li> </ul>	<ul style="list-style-type: none"> <li>● A series circuit is made up of an energy source, such as a battery or cell, wires and a bulb. The circuit must be complete for the electricity to flow.</li> <li>● Create an operational, simple series circuit.</li> </ul>	<ul style="list-style-type: none"> <li>● An electric circuit can be used in a model, such as a lighthouse. It can be controlled using a switch.</li> <li>● Incorporate a simple series circuit into a model.</li> </ul>	<ul style="list-style-type: none"> <li>● Components can be added to circuits to achieve a particular goal. These include bulbs for lighthouses and torches, buzzers for burglar alarms and electronic games, motors for fairground rides and</li> </ul>	<ul style="list-style-type: none"> <li>● Electrical circuits can be controlled by a simple on/off switch, or by a variable resistor that can adjust the size of the current in the circuit. Real-life examples are a dimmer switch for lights or volume control on a</li> </ul>	<ul style="list-style-type: none"> <li>● Computer programs can control electrical circuits that include a variety of components, such as switches, lamps, buzzers and motors.</li> <li>● Understand and use electrical circuits that incorporate a</li> </ul>

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			<p>electricity or off by breaking the circuit to prevent electricity from flowing. This can be a switch on the appliance or a wall socket switch.</p> <ul style="list-style-type: none"> <li>● Identify products that use electricity to make them work and describe how to switch them on and off.</li> </ul>			<p>motorised vehicles and switches for lights and televisions.</p> <ul style="list-style-type: none"> <li>● Incorporate circuits that use a variety of components into models or products.</li> </ul>	<p>stereo.</p> <ul style="list-style-type: none"> <li>● Use electrical circuits of increasing complexity in their models or products, showing an understanding of control.</li> </ul>	<p>variety of components (switches, lamps, buzzers and motors) and use programming to control their products.</p>
<b>Generation of ideas</b>	<ul style="list-style-type: none"> <li>● Develop their own ideas and explore a variety of resources, including blocks and construction kits to create 'small worlds' and objects linked to their interests.</li> </ul>	<ul style="list-style-type: none"> <li>● It is important to share resources and communicate our ideas in order to get on with others.</li> <li>● Create collaboratively, share ideas and use a variety of resources to make products inspired by existing products, stories or their own ideas, interests or experiences.</li> </ul>	<ul style="list-style-type: none"> <li>● A product or project is usually guided by a set of design criteria.</li> <li>● The project or product must meet the design criteria to be successful.</li> <li>● Create a design to meet simple design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>● Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.</li> <li>● Generate and communicate their ideas through a range of different methods.</li> </ul>	<ul style="list-style-type: none"> <li>● Design criteria are the exact goals a project must achieve to be successful.</li> <li>● These criteria might include the product's use, appearance, cost and target user.</li> <li>● Develop design criteria to inform a design.</li> </ul>	<ul style="list-style-type: none"> <li>● Annotated sketches and exploded diagrams show specific parts of a design, highlight sections or show functions. They communicate ideas in a visual, detailed way.</li> <li>● Use annotated sketches and exploded diagrams to test and communicate their ideas.</li> </ul>	<ul style="list-style-type: none"> <li>● Computer-aided design (CAD) is the use of specialised computer software to design objects.</li> <li>● CAD designs can also be made into objects using 3-D printers.</li> <li>● Use pattern pieces and computer-aided design packages to design a product.</li> </ul>	<ul style="list-style-type: none"> <li>● Ideas can be communicated in a range of ways, including through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</li> <li>● Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.</li> </ul>

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<b>Structures</b>	<ul style="list-style-type: none"> <li>●A bridge is a structure that crosses a space.</li> <li>●There are lots of different materials. Wood, stone and pebbles are hard and strong.</li> <li>●Make simple structures using a range of materials.</li> </ul>	<ul style="list-style-type: none"> <li>●A bridge is a structure that allows people and vehicles to cross over an open space.</li> <li>●There are lots of different types of puppets. Some puppets have moving parts.</li> <li>●There are lots of different types of puppets including finger puppets.</li> <li>●Construct simple structures and models using a range of materials.</li> </ul>	<ul style="list-style-type: none"> <li>●Different materials can be used for different purposes, depending on their properties.</li> <li>●Construct simple structures, models or other products using a range of materials.</li> </ul>	<ul style="list-style-type: none"> <li>●Structures can be made stronger, stiffer and more stable by using cardboard rather than paper and triangular shapes rather than squares.</li> <li>●Explore how a structure can be made stronger, stiffer and more stable.</li> </ul>	<ul style="list-style-type: none"> <li>●Diagonal struts create triangular shapes within a frame structure.</li> <li>●Adding diagonal struts to a frame structure adds strength and stability.</li> <li>●Create shell or frame structures using diagonal struts to strengthen them.</li> </ul>	<ul style="list-style-type: none"> <li>●A prototype is a mock-up of a design that will look like the finished product but may not be full size or made of the same materials.</li> <li>●Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them.</li> </ul>	<ul style="list-style-type: none"> <li>●Support, stiffness and stability can be created by using triangular shapes to create strong frameworks, columns to support roofs and overlapping brickwork patterns.</li> <li>●Mechanisms and systems can work together to perform a function.</li> <li>●A strong and stable structure is necessary to support mechanisms in a machine.</li> <li>●Build a framework using a range of materials to support mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>●Strength can be added to a framework by using multiple layers or changing its shape.</li> <li>●Triangles do not collapse or distort easily and so are used in architecture to provide support and stability.</li> <li>●Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.</li> </ul>
<b>Use of ICT</b>	<ul style="list-style-type: none"> <li>●A camera or tablet can be used to take photographs.</li> <li>●Seek support from adults to use digital devices to create a digital record of their creations.</li> </ul>	<ul style="list-style-type: none"> <li>●Digital devices can be used to share information about creations with others.</li> <li>●Use digital devices to take digital images or recordings of their creations to share with others.</li> </ul>	<ul style="list-style-type: none"> <li>●Computer-aided design is when computers are used to help design products. It has advantages over paper design in that it will show how finished products will look. Different colours and textures can also be trialled.</li> </ul>	<ul style="list-style-type: none"> <li>●Computer software can be used to help design or plan a product. Advantages include identifying and solving problems before the product is made and experimenting with different</li> </ul>	<ul style="list-style-type: none"> <li>●A program is a set of instructions written to perform a specified task on a computer.</li> <li>●Write a program to make something move on a tablet or computer screen.</li> </ul>	<ul style="list-style-type: none"> <li>●Remote control is controlling a machine or activity from a distance. Computers can be used to remotely control a device. Write a program to control a physical device, such as a light, speaker or</li> </ul>	<ul style="list-style-type: none"> <li>●Equipment and devices can be controlled by pressing buttons on a control panel, such as on a washing machine or microwave.</li> <li>●Link a physical device to a computer or tablet so that it</li> </ul>	<ul style="list-style-type: none"> <li>●Many devices that we see in our homes and elsewhere use programmable sensors that monitor environmental variables, such as light, sound, movement and temperature.</li> <li>●Use a sensor to</li> </ul>

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			<ul style="list-style-type: none"> <li>● Use design software to create a simple plan for a design.</li> </ul>	<p>materials and colours. Labels can be added to designs for clarity.</p> <ul style="list-style-type: none"> <li>● Use design software to create a simple labelled design or plan.</li> </ul>		buzzer.	can be controlled (such as changing motor speed or turning an LED on and off) by a program.	monitor an environmental variable, such as temperature, sound or light.
<b>Investigation</b>	<ul style="list-style-type: none"> <li>● Tools have different purposes. For example, scissors are used for cutting and glue is used for sticking.</li> <li>● Explore simple tools within practical tasks and experiment with joining materials.</li> </ul>	<ul style="list-style-type: none"> <li>● There are different ways to join materials together.</li> <li>● Sewing is stitching things using a needle and thread.</li> <li>● Choose and explore appropriate tools for simple practical tasks.</li> </ul>	<ul style="list-style-type: none"> <li>● Some foods need to be prepared before eating.</li> <li>● Peeling, slicing, chopping, grating, tearing or mashing are different methods of preparing foods.</li> <li>● Select the appropriate tool for a simple practical task.</li> </ul>	<ul style="list-style-type: none"> <li>● Tools have characteristics that make them suitable for specific purposes. For example, a knife is good for cutting food because it has a sharp metal edge.</li> <li>● Select the appropriate tool for a task and explain their choice.</li> </ul>	<ul style="list-style-type: none"> <li>● Specific tools can be used for cutting, such as saws. Wood can be joined using glue, nails, staples, or a combination of these. Safety rules must be followed to prevent injury from sharp blades. These rules include using a bench hook to keep the wood still, using a junior hacksaw with a pistol grip and working under adult supervision.</li> <li>● Use tools safely for cutting and joining materials and components.</li> </ul>	<ul style="list-style-type: none"> <li>● Useful tools for cutting include scissors, craft knives, junior hacksaws with pistol grip and bench hooks. Useful tools for joining include glue guns. Tools should only be used with adult supervision and safety rules must be followed.</li> <li>● Select, name and use tools with adult supervision.</li> </ul>	<ul style="list-style-type: none"> <li>● There are many rules for using tools safely and these may vary depending on the tools being used. For example, someone using a chisel should chip or cut with the cutting edge pointing away from their body. All tools should be cleaned and put away after use, and should not be used if they are loose or cracked.</li> <li>● Name and select increasingly appropriate tools for a task and use them safely.</li> </ul>	<ul style="list-style-type: none"> <li>● Deconstructing garments identifies how they were made, the materials used and their properties.</li> <li>● Hand stitches include running stitch, blanket stitch and whip stitch.</li> <li>● Select appropriate tools for a task and use them safely and precisely.</li> </ul>
<b>Evaluation</b>	<ul style="list-style-type: none"> <li>● Different aspects of designing and making can be discussed with others.</li> </ul>	<ul style="list-style-type: none"> <li>● Recognise that it is possible to change and alter their designs and ideas as they are</li> </ul>	<ul style="list-style-type: none"> <li>● A strength is a good quality of a piece of work.</li> <li>● A weakness is an area that could be</li> </ul>	<ul style="list-style-type: none"> <li>● A finished product can be checked against design criteria to see how successfully</li> </ul>	<ul style="list-style-type: none"> <li>● Asking questions can help others to evaluate their products. For example, asking</li> </ul>	<ul style="list-style-type: none"> <li>● Evaluation can be done by considering whether the product does</li> </ul>	<ul style="list-style-type: none"> <li>● Testing a product against the design criteria will highlight anything that needs</li> </ul>	<ul style="list-style-type: none"> <li>● An iterative process starts with requirements and continues by creating a</li> </ul>

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	<ul style="list-style-type: none"> <li>Share their creations with others and respond to questions and suggestions about how it was made.</li> </ul>	<p>making them.</p> <ul style="list-style-type: none"> <li>Adapt and refine their work as they are constructing and making.</li> </ul>	<p>improved.</p> <ul style="list-style-type: none"> <li>Talk about their own and each other's work, identifying strengths or weaknesses and offering support.</li> </ul>	<p>it has been made or to evaluate how well it works.</p> <ul style="list-style-type: none"> <li>Improvements can then be planned.</li> <li>Explain how closely their finished products meet their design criteria and say what they could do better in the future.</li> </ul>	<p>someone whether the materials selected helped achieve the purpose of the model.</p> <ul style="list-style-type: none"> <li>Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account.</li> </ul>	<p>what it was designed to do, whether it has an attractive appearance, what changes were made during the making process and why the changes were made.</p> <ul style="list-style-type: none"> <li>The evaluation process can include suggesting improvements and explaining why they should be made.</li> <li>Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements.</li> </ul>	<p>improvement or redesign.</p> <ul style="list-style-type: none"> <li>Test and evaluate products against a detailed design specification and make adaptations as they develop the product.</li> </ul>	<p>product, testing it, and revising it before creating a better version.</p> <ul style="list-style-type: none"> <li>The iterative process is a series of steps that are repeated, improving the product with each cycle.</li> <li>Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.</li> </ul>
<b>Cutting and joining textiles</b>			<ul style="list-style-type: none"> <li>A running stitch is made by passing a needle in and out of fabric.</li> <li>Running stitches are made at equal distances apart.</li> <li>Cut and join textiles using glue and simple stitches.</li> </ul>	<ul style="list-style-type: none"> <li>A running stitch is a basic stitch used to join two pieces of fabric.</li> <li>Use different methods of joining fabrics, including glue and running stitch.</li> </ul>	<ul style="list-style-type: none"> <li>Weaving involves interlacing pieces of thread or yarn or other materials.</li> <li>Cut and join wools, threads and other materials to a loom.</li> </ul>	<ul style="list-style-type: none"> <li>A hem runs along the edge of a piece of cloth or clothing. It is made by turning under a raw edge and sewing to give a neat and quality finish.</li> <li>Hand sew a hem or seam using a</li> </ul>	<ul style="list-style-type: none"> <li>A collage is artwork made by sticking materials, such as scraps of paper or fabric, onto a background.</li> <li>Combine stitches and fabrics with imagination to create a mixed</li> </ul>	<ul style="list-style-type: none"> <li>Pinning with dressmaker pins and tacking with quick, temporary stitches holds fabric together in preparation for and during sewing.</li> <li>Pin and tack fabrics in</li> </ul>

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						running stitch.	media collage.	preparation for sewing and more complex pattern work.
<b>Materials for purpose</b>	<ul style="list-style-type: none"> <li>● Explore and choose freely from a variety of materials when making.</li> </ul>	<ul style="list-style-type: none"> <li>● Different materials are suitable for different purposes, such as construction kits for modelling and ingredients for baking.</li> <li>● Select appropriate materials when constructing and making.</li> </ul>	<ul style="list-style-type: none"> <li>● Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, so it is suitable to be used for windows. Select and use a range of materials, beginning to explain their choices.</li> </ul>	<ul style="list-style-type: none"> <li>● Properties of components and materials determine how they can and cannot be used.</li> <li>● Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.</li> </ul>	<ul style="list-style-type: none"> <li>● Materials for a specific task must be selected on the basis of their properties. For example greenhouses need transparent or translucent materials. Availability and cost have also got to be considered.</li> <li>● Plan which materials will be needed for a task and explain why.</li> </ul>	<ul style="list-style-type: none"> <li>● Characteristics of materials, such as rigidity, strength and smoothness will affect the success of a working model.</li> <li>● Visual qualities of a yarn can include its colour, elasticity, pattern and texture.</li> <li>● Fabrics can be natural or synthetic.</li> <li>● Natural fabrics include cotton, silk and wool.</li> <li>● Synthetic fabrics include Lycra, polyester and nylon.</li> <li>● Choose from a range of materials, showing an understanding of their different characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>● Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.</li> <li>● Select and combine materials with precision.</li> </ul>	<ul style="list-style-type: none"> <li>● It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability.</li> <li>● Choose the best materials for a task, showing an understanding of their working characteristics.</li> </ul>
<b>Decorating and embellishing textiles</b>			<ul style="list-style-type: none"> <li>● Decorations can be attached to fabric by glueing, stapling or tying.</li> <li>● Use glueing, stapling or tying to decorate fabric,</li> </ul>	<ul style="list-style-type: none"> <li>● Embellishment is a decorative detail or feature added to something to make it more attractive.</li> <li>● Add simple</li> </ul>	<ul style="list-style-type: none"> <li>● A loom weaving is a piece of fabric that has been woven on a loom by interlacing threads. An embellishment is</li> </ul>	<ul style="list-style-type: none"> <li>● Block printing and fabric paint are used to create decorative, repeated patterns on fabrics.</li> <li>● Create detailed</li> </ul>	<ul style="list-style-type: none"> <li>● Applique is a technique where pieces of material are attached to another material by stitching or glueing.</li> </ul>	<ul style="list-style-type: none"> <li>● Fastenings hold a piece of clothing together. Types of fastenings include zips, press studs, Velcro and buttons.</li> </ul>

Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			including buttons and sequins.	decorative embellishments, such as buttons, prints, sequins and appliqué.	a decorative detail or feature, such as a silk flower, tassel or bow, added to something to make it more attractive. ●Decorate a loom weaving using embellishments, such as natural or silk flowers, tassels and bows.	decorative patterns on fabric using printing techniques.	●Use applique to add decoration to a product or artwork.	●Use different methods of fastening for function and decoration, including press studs, Velcro and buttons.
<b>Food preparation and cooking</b>		<ul style="list-style-type: none"> <li>●When people celebrate they sometimes eat special food.</li> <li>●A recipe is a set of instructions that tells us how to make food.</li> <li>●Recipes show us how to make meals and snacks.</li> <li>●Follow instructions, including simple recipes, that include measures and ingredients.</li> </ul>	<ul style="list-style-type: none"> <li>●Fruits and vegetables can be mixed to make a healthy salad.</li> <li>●Salad dressings can improve the flavour of salads.</li> <li>●Measure and weigh food items using non-standard measures, such as spoons and cups.</li> </ul>	<ul style="list-style-type: none"> <li>●Some ingredients need to be prepared before they can be cooked or eaten. There are many ways to prepare ingredients: peeling skins using a vegetable peeler, such as potato skins; grating hard ingredients, such as cheese or chocolate; chopping vegetables, such as onions and peppers; and slicing foods, such as bread and apples.</li> <li>●Prepare ingredients by peeling, grating, chopping and</li> </ul>	<ul style="list-style-type: none"> <li>●Preparation techniques for savoury dishes include peeling, chopping, deseeding, slicing, dicing, grating, mixing and skinning.</li> <li>●Prepare and cook a simple savoury dish.</li> </ul>	<ul style="list-style-type: none"> <li>●Cooking techniques include baking, boiling, frying, grilling and roasting.</li> <li>●Identify and use a range of cooking techniques to prepare a simple meal or snack.</li> </ul>	<ul style="list-style-type: none"> <li>●Sweet dishes are usually desserts, such as cakes, fruit pies and trifles. Savoury dishes usually have a salty or spicy flavour rather than a sweet one.</li> <li>●Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish.</li> </ul>	<ul style="list-style-type: none"> <li>●Ingredients can usually be bought at supermarkets, but specialist shops may stock different items such as specialist vegetables or coffees.</li> <li>●Greengrocers sell fruit and vegetables, butchers sell meat, fishmongers sell fresh fish and delicatessens usually sell some unusual prepared foods, as well as cold meats and cheeses.</li> <li>●Follow a recipe that requires a variety of techniques and source the</li> </ul>

Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				slicing.				necessary ingredients independently
<b>Nutrition</b>	<ul style="list-style-type: none"> <li>●Fruit and vegetables are healthy foods.</li> <li>●Help to prepare a range of healthy snacks.</li> </ul>	<ul style="list-style-type: none"> <li>●Fruit and vegetables are healthy foods.</li> <li>●We need to eat at least five portions of fruit and vegetables a day.</li> <li>●Heating food can change its appearance, taste, texture and colour.</li> <li>●Fruit and vegetables are healthy foods.</li> <li>●Suggest healthy ingredients that can be used to make simple snacks.</li> </ul>	<ul style="list-style-type: none"> <li>●Fruit and vegetables are an important part of a healthy diet.</li> <li>●It is recommended that people eat at least five portions of fruit and vegetables every day.</li> <li>●Select healthy ingredients for a fruit or vegetable salad.</li> </ul>	<ul style="list-style-type: none"> <li>●A healthy diet should include meat or fish, starchy foods (such as potatoes or rice), some dairy foods, a small amount of fat and plenty of fruit and vegetables.</li> <li>●Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal.</li> </ul>	<ul style="list-style-type: none"> <li>●There are five main food groups: fruit and vegetables; carbohydrates (potatoes, bread, rice and pasta); proteins (beans, pulses, fish, eggs and meat); dairy and alternatives (milk, cheese and yoghurt) and fats (oils and spreads).</li> <li>●Foods high in fat, salt and sugar should only be eaten occasionally as part of a healthy, balanced diet</li> <li>●Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars)</li> </ul>	<ul style="list-style-type: none"> <li>●Foods need packaging to keep them fresh, safe to eat and free from damage.</li> <li>●Food packaging also provides nutritional information about the food inside.</li> <li>●Design a healthy snack or packed lunch and explain why it is healthy.</li> </ul>	<ul style="list-style-type: none"> <li>●A balanced diet gives your body all the nutrients it needs to function correctly. This means eating a wide variety of foods in the correct proportions.</li> <li>●Evaluate meals and consider if they contribute towards a balanced diet.</li> </ul>	<ul style="list-style-type: none"> <li>●Eating a balanced diet is a positive lifestyle choice that should be sustained over time.</li> <li>●Food packaging provides important nutritional information about the food inside.</li> <li>●Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet.</li> </ul>
<b>Origins of food</b>	<ul style="list-style-type: none"> <li>●A recipe is a set of instructions that tells us how to make food.</li> <li>●Explore and try a range of foods and suggest where they come from.</li> </ul>	<ul style="list-style-type: none"> <li>●Food can be from plants such as fruit, vegetables, nuts and seeds.</li> <li>●Animals provide meat and also produce food such as milk, eggs and honey.</li> </ul>	<ul style="list-style-type: none"> <li>●Some foods come from animals, such as meat, fish and dairy products.</li> <li>●Some come from plants, such as fruit and vegetables.</li> </ul>	<ul style="list-style-type: none"> <li>●Food comes from two main sources: animals and plants.</li> <li>●Milk comes mainly from cows but also from goats and sheep.</li> <li>●Eggs belong to</li> </ul>	<ul style="list-style-type: none"> <li>●The types of food that will grow in a particular area depend on a range of factors, such as the rainfall, climate and soil type. For example, many</li> </ul>	<ul style="list-style-type: none"> <li>●Particular areas of the world have conditions suited to growing certain crops, such as coffee in Peru and citrus fruits in California in the United States of</li> </ul>	<ul style="list-style-type: none"> <li>●Buying seasonal food is beneficial for many reasons. These include the food having higher nutritional value, reducing transportation and supporting</li> </ul>	<ul style="list-style-type: none"> <li>●Whole foods have not been changed from their natural form.</li> <li>●Organic whole foods are grown without the use of man-made fertilisers,</li> </ul>

Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		<ul style="list-style-type: none"> <li>● Begin to identify the origins of some foods.</li> </ul>	<ul style="list-style-type: none"> <li>● Sort foods into groups by whether they are from an animal or plant source.</li> </ul>	<p>the animal product category.</p> <ul style="list-style-type: none"> <li>● They are laid by female animals. The most common types eaten by humans include chicken and duck eggs.</li> <li>● Honey is made by bees.</li> <li>● Most edible oils are made from plant parts.</li> <li>● Olive oil, vegetable oil and coconut oil are all made from plant sources.</li> <li>● Sugar is made from plants called sugar cane and sugar beet.</li> <li>● Plants also give us nuts, such as almonds, walnuts and hazelnuts.</li> <li>● Identify the origin of some common foods (milk, eggs, some meats, common fruit and vegetables).</li> </ul>	<p>crops, such as potatoes and sugar beet, are grown in the south-east of England. Wheat, barley and vegetables grow well in the east of England.</p> <ul style="list-style-type: none"> <li>● Identify and name foods that are produced in different places.</li> </ul>	<p>America.</p> <ul style="list-style-type: none"> <li>● Identify and name foods that are produced in different places in the UK and beyond.</li> </ul>	<p>local growers.</p> <ul style="list-style-type: none"> <li>● Seasonality is the time of year when the harvest or flavour of a type of food is at its best.</li> <li>● Describe what seasonality means and explain some of the reasons why it is beneficial.</li> </ul>	<p>pesticides, growth regulators or animal feed additives.</p> <ul style="list-style-type: none"> <li>● Explain how organic produce is grown.</li> </ul>
<b>Compare and contrast</b>	<ul style="list-style-type: none"> <li>● Share their creations with others and begin to notice how the work of others is the same or different to their own.</li> </ul>	<ul style="list-style-type: none"> <li>● Aspects of designing and making can be compared with others, including inspiration for making a product and the tools and</li> </ul>	<ul style="list-style-type: none"> <li>● Two products can be compared by looking at a set of criteria and scoring both products against each one.</li> <li>Describe the</li> </ul>	<ul style="list-style-type: none"> <li>● A brand is a name, term, design, or symbol identifying a seller's products or services.</li> <li>● Compare different or the same</li> </ul>	<ul style="list-style-type: none"> <li>● Work from different designers can be compared by assessing specific criteria, such as their visual impact, fitness for</li> </ul>	<ul style="list-style-type: none"> <li>● A comparison table is an organised way to compare products.</li> <li>● Create and complete a comparison table</li> </ul>	<ul style="list-style-type: none"> <li>● Evaluations can be made by asking product users a selection of questions to obtain data on how the product has met its design</li> </ul>	<ul style="list-style-type: none"> <li>● Products and inventions can be compared using a range of criteria, such as the impact on society, ease of use, appearance</li> </ul>

Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		<p>techniques used.</p> <ul style="list-style-type: none"> <li>Describe what, why and how something was made and compare with others.</li> </ul>	<p>similarities and differences between two products.</p>	<p>products from the same or different brands.</p>	<p>purpose and target market.</p> <ul style="list-style-type: none"> <li>Explain the similarities and differences between the work of two designers.</li> </ul>	<p>to compare two or more products.</p>	<p>criteria.</p> <ul style="list-style-type: none"> <li>Survey users in a range of focus groups and compare results.</li> </ul>	<p>and value for money.</p> <ul style="list-style-type: none"> <li>Create a detailed comparative report about two or more products or inventions.</li> </ul>
<b>Significant people</b>	<ul style="list-style-type: none"> <li>Important products are those that help people.</li> <li>Begin to talk about important products.</li> </ul>	<ul style="list-style-type: none"> <li>A scarecrow is a model of a person dressed in old clothes and put in a field of growing crops to frighten birds away.</li> <li>Explore significant products.</li> </ul>	<ul style="list-style-type: none"> <li>The importance of a product may be that it fulfils its goals and performs a useful purpose.</li> <li>Describe why a product is important.</li> </ul>	<ul style="list-style-type: none"> <li>School kitchen staff are important people because they design and provide healthy meals.</li> <li>The Cath Kidston brand was an important British brand which began in the 1990s.</li> <li>It was easily recognisable for its floral patterned fabric and use of classic British iconography including the Red London Bus and London black cab.</li> <li>Explain why a designer or inventor is important.</li> </ul>	<ul style="list-style-type: none"> <li>Key inventions in design and technology have changed the way people live.</li> <li>Describe how key events in design and technology have shaped the world.</li> </ul>	<ul style="list-style-type: none"> <li>Food deteriorates due to the growth of microorganisms.</li> <li>Significant scientists such as Louis Pasteur and inventors such as Nicolas Appert have ensured decay can be prevented or delayed by preservation methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.</li> <li>The 'use by' date shows when the food is no longer safe to eat.</li> <li>The 'best before' date shows the date after which the food will lose some flavour or texture.</li> <li>William Morris was a British textile designer, artist and socialist</li> </ul>	<ul style="list-style-type: none"> <li>A Roman architect called Vitruvius said that successful buildings should have firmitas (stability), utilitas (useful space) and venustas (an attractive appearance).</li> <li>Describe the social influence of a significant designer or inventor.</li> </ul>	<ul style="list-style-type: none"> <li>Significant engineers have improved safety, people's lives and trade through their constructions.</li> <li>Significant bridges include: the Menai Bridge, Clifton Suspension Bridge and Forth Bridge.</li> <li>Present a detailed account of the significance of a favourite designer or inventor.</li> </ul>

Aspect	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						<p>activist associated with the British Arts and Crafts Movement.</p> <ul style="list-style-type: none"> <li>● William Morris was a significant contributor to the revival of traditional British textile arts and methods of production.</li> <li>● William Morris' motifs consisted mainly of leaves, flowers, fruits and birds.</li> <li>● Explain how and why a significant designer or inventor shaped the world.</li> </ul>		