



Aspect		Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Human kind	Everyday products	<p>Skill Name and explore a range of everyday products and explore how things work.</p>	<p>Skill Name and explore a range of everyday products and begin to talk about how they are used.</p>	<p>Skill Name and explore a range of everyday products and describe how they are used.</p>	<p>Skill Explain how an everyday product could be improved.</p>	<p>Skill Explain how an existing product benefits the user.</p>	<p>Skill Investigate and identify the design features of a familiar product.</p>	<p>Skill Explain how the design of a product has been influenced by the culture or society in which it was designed or made.</p>	<p>Skill Analyse how an invention or product has significantly changed or improved people's lives.</p>
		<p>Knowledge Some books have moving parts.</p>	<p>Knowledge Everyday products are objects that we use every day. These objects have a specific use.</p>	<p>Knowledge . An axle is a rod that is connected to the centre of a wheel, which allows it to turn. . A chassis is the frame of a vehicle. . A shelter is a structure designed to give protection from weather or danger.</p>	<p>Knowledge . There are many home products made from fabric. . Examples of fabric-based products in the home include cushions, curtains, blinds and carpets. . Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive.</p>	<p>Knowledge Particular products are designed for specific tasks. For example, designing a product to help grow plants will require certain materials.</p>	<p>Knowledge . 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. . A switch makes or breaks a circuit. . When a switch is closed or 'on', the circuit is complete. . When a switch is open or 'off', the circuit is incomplete. . A programmable device is a machine that is provided with coded instructions for the automatic performance of a task</p>	<p>Knowledge . The design of products needs to consider the culture of the target audience. . The ancient Greeks developed the Classical form of architecture that has been copied for thousands of years</p>	<p>Knowledge . 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. . 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. . A processed food is changed during preparation and includes processes, such as cooking, freezing, pasteurising, or the addition of ingredients. . Processed foods can be convenient and increase availability, but often lack of nutrients and contain unhealthy ingredients when compared to whole foods. . Sliced bread is processed. It can contain many more ingredients than homemade bread,</p>

									including preservatives and artificial ingredients. . Bridge structures have changed over time. This is due to factors such as technology, design innovation and new and better access to materials.
	Staying safe	Skill Show an understanding that tools and equipment need to be used safely and collaborate with others when moving large equipment.	Skill Follow rules and instructions to keep safe.	Skill Follow the rules to keep safe during a practical task. Core knowledge	Skill Work safely and hygienically in construction and cooking activities.	Skill Use appliances safely with adult supervision.	Skill Work safely with everyday chemical products under supervision, such as disinfectant hand wash and surface cleaning spray.	Skill Explain the functionality and purpose of safety features on a range of products.	Skill Demonstrate how their products consider the safety of the user.
		Knowledge It is important to listen to adults and follow simple rules and procedures when using equipment and tools.	Knowledge Rules keep us safe when using equipment.	Knowledge . Rules are made to keep people safe from danger. . Safety rules include always listening carefully, following instructions and using equipment only when told to.	Knowledge Hygiene rules include washing hands before handling food, cleaning surfaces, tying long hair back, storing food appropriately and wiping up spills.	Knowledge Safety rules must be followed when using electricity. Fingers and other objects must not be put into 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.	Knowledge . Chemicals are used in the home every day. They include cleaning products, such as bleach and disinfectant, but also paints, glues, oils, pesticides and medicines. . Chemicals should only be used under adult supervision.	Knowledge . Safety features are often incorporated into products that might cause harm. Some examples include the child-safety caps on medicine bottles, seatbelts in cars, covers for electrical sockets and finger guards on doors.	Knowledge The safety of the user has to be considered when designing a new product.
Processes	Mechanisms & movement	Skill Explore, build and play with a range of resources and construction kits with wheels.	Skill Explore, build and play with a range of resources and construction kits with wheels and axles.	Skill Use wheels and axles to make a simple moving model.	Skill Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.	Skill Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products.	Skill Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products.	Skill Use mechanical systems in their products, such as pneumatics.	Skill Explain and use mechanical systems in their products to meet a design brief.
		Knowledge Lots of vehicles have wheels to help them move.	Knowledge . Vehicles and machines have wheels and axles to help them move. . Wheels help vehicles move. . An axle is a rod that goes through the middle of the wheel to help it stay in place.	Knowledge . Most vehicles that move on land have axles and wheels that are fixed to a chassis. . An axle fixed to a chassis has freely moving wheels. . A freely moving axle has fixed wheels	Knowledge . People build machines to make their work easier. . A machine is made up of different parts that all work together to perform a task. . Individual parts of a machine are called components.	Knowledge . Cams are devices that can convert circular motion into up-and-down motion. . 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,	Knowledge . Simple machines make physical jobs easier by changing the strength or direction of a force. . There are six simple machines: pulley, lever, wheel and axle, wedge, inclined plane and screw.	Knowledge . A pneumatic system uses compressed air to exert a force. . Pneumatic systems can be used to lift heavy loads, raise and lower platforms or soften a force by	Knowledge <u>Mechanical systems can include sliders, levers, linkages, gears, pulleys and cams. Other mechanisms include pneumatics and hydraulics</u>

			<p>. Vehicles have wheels and axels to help them move.</p>		<p>. The part of a machine that brings about movement is called the mechanism. . A slider mechanism moves in a straight line. . Real-life examples of slider mechanisms include door bolts and drawers. . A lever mechanism is a bar that moves around a fixed point called a pivot. . Real-life uses of levers include scissors and seesaws. . A linkage mechanism combines levers and sliders. . Real-life uses of linkages include toolboxes and scissor lifts</p>	<p>following the shape of the cam. . Different shaped cams produce different patterns of movement in the follower.</p>	<p>. Simple machines can be combined to make complex, compound machines. For example, a wheelbarrow combines a lever with a wheel and axle.</p>	<p>acting as a shock absorber.</p>	
Electricity	<p>Skill Explore battery-powered objects using switches to turn them off and on.</p>	<p>Skill . Identify products that use electricity to make them work.</p>	<p>Skill Identify products that use electricity to make them work and describe how to switch them on and off.</p>	<p>Skill Create an operational, simple series circuit.</p>	<p>Skill Incorporate a simple series circuit into a model. Broad knowledge</p>	<p>Skill Incorporate circuits that use a variety of components into models or products.</p>	<p>Skill Use electrical circuits of increasing complexity in their models or products, showing an understanding of control.</p>	<p>Skill Understand and use electrical circuits that incorporate a variety of components (switches, lamps, buzzers and motors) and use programming to control their products.</p>	
	<p>Knowledge Batteries power some objects. A switch turns them off and on.</p>	<p>Knowledge Microwaves, toasters and blenders are machines. Machines need power to make them work.</p>	<p>Knowledge 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 electricity or off by breaking the circuit to prevent</p>	<p>Knowledge 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.</p>	<p>Knowledge An electric circuit can be used in a model, such as a lighthouse. It can be controlled using a switch.</p>	<p>Knowledge 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 motorised vehicles and switches</p>	<p>Knowledge 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 stereo.</p>	<p>Knowledge Computer programs can control electrical circuits that include a variety of components, such as switches, lamps, buzzers and motors.</p>	

				electricity from flowing. This can be a switch on the appliance or a wall socket switch.			for lights and televisions.		
Creativity	Generation of ideas	Skill 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.	Skill 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.	Skill Create a design to meet simple design criteria.	Skill Generate and communicate their ideas through a range of different methods.	Skill Develop design criteria to inform a design	Skill Use annotated sketches and exploded diagrams to test and communicate their ideas.	Skill Use pattern pieces and computer-aided design packages to design a product.	Skill Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.
		Knowledge	Knowledge It is important to share resources and communicate our ideas in order to get on with others.	Knowledge . A product or project is usually guided by a set of design criteria. . The project or product must meet the design criteria to be successful.	Knowledge Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.	Knowledge Design criteria are the exact goals a project must achieve to be successful. . These criteria might include the product's use, appearance, cost and target user.	Knowledge Annotated sketches and exploded diagrams show specific parts of a design, highlight sections or show functions. They communicate ideas in a visual, detailed way	Knowledge Computer-aided design (CAD) is the use of specialised computer software to design objects. CAD designs can also be made into objects using 3-D printers.	Knowledge 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.
	Structures	Skill Make simple structures using a range of materials.	Skill Construct simple structures and models using a range of materials.	Skill Construct simple structures, models or other products using a range of materials.	Skill Explore how a structure can be made stronger, stiffer and more stable.	Skill Create shell or frame structures using diagonal struts to strengthen them.	Skill Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them.	Skill Build a framework using a range of materials to support mechanisms.	Skill Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
		Knowledge . A bridge is a structure that crosses a space. . There are lots of different materials. Wood, stone and pebbles are hard strong.	Knowledge . A bridge is a structure that allows people and vehicles to cross over an open space. . There are lots of different types of puppets. Some puppets have moving parts. . There are lots of different types of	Knowledge Different materials can be used for different purposes, depending on their properties.	Knowledge Structures can be made stronger, stiffer and more stable by using cardboard rather than paper and triangular shapes rather than squares.	Knowledge . Diagonal struts create triangular shapes within a frame structure. . Adding diagonal struts to a frame structure adds strength and stability.	Knowledge 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	Knowledge . Support, stiffness and stability can be created by using triangular shapes to create strong frameworks, columns to support roofs and overlapping brickwork patterns. . Mechanisms and systems can work	Knowledge . Strength can be added to a framework by using multiple layers or changing its shape. . Triangles do not collapse or distort easily and so are used in architecture to provide support and stability.

			puppets including finger puppets.					together to perform a function. . A strong and stable structure is necessary to support mechanisms in a machine.	
	Use of ICT	Skill Seek support from adults to use digital devices to create a digital record of their creations.	Skill Use digital devices to take digital images or recordings of their creations to share with others	Skill Use design software to create a simple plan for a design	Skill <u>Use design software to create a simple labelled design or plan.</u>	Skill Write a program to make something move on a tablet or computer screen.	Skill Write a program to control a physical device, such as a light, speaker or buzzer.	Skill Link a physical device to a computer or tablet so that it can be controlled (such as changing motor speed or turning an LED on and off) by a program.	Skill Use a sensor to monitor an environmental variable, such as temperature, sound or light.
		Knowledge A camera or tablet can be used to take photographs.	Knowledge Digital devices can be used to share information about creations with others.	Knowledge 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.	Knowledge 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 materials and colours. Labels can be added to designs for clarity.	Knowledge A program is a set of instructions written to perform a specified task on a computer.	Knowledge Remote control is controlling a machine or activity from a distance. Computers can be used to remotely control a device.	Knowledge Equipment and devices can be controlled by pressing buttons on a control panel, such as on a washing machine or microwave.	Knowledge Many devices that we see in our homes and elsewhere use programmable sensors that monitor environmental variables, such as light, sound, movement and temperature.
Investigation	Investigation	Skill Explore simple tools within practical tasks and experiment with joining materials.	Skill Choose and explore appropriate tools for simple practical tasks.	Skill Select the appropriate tool for a simple practical task.	Skill <u>Select the appropriate tool for a task and explain their choice.</u>	Skill Use tools safely for cutting and joining materials and components	Skill Select, name and use tools with adult supervision.	Skill Name and select increasingly appropriate tools for a task and use them safely.	Skill Select appropriate tools for a task and use them safely and precisely.
		Knowledge Tools have different purposes. For example, scissors are used for cutting and glue is used for sticking.	Knowledge . There are different ways to join materials together. . Sewing is stitching things using a needle and thread.	Knowledge . Some foods need to be prepared before eating. . Peeling, slicing, chopping, grating, tearing or mashing are different methods of preparing foods.	Knowledge 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.	Knowledge 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	Knowledge 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	Knowledge 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	Knowledge Deconstructing garments identifies how they were made, the materials used and their properties. Hand stitches include running stitch, blanket stitch and whip stitch.

						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.	used with adult supervision and safety rules must be followed.	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.	
	Evaluation	Skill Share their creations with others and respond to questions and suggestions about how it was made.	Skill Adapt and refine their work as they are constructing and making.	Skill Talk about their own and each other's work, identifying strengths or weaknesses and offering support.	Skill Explain how closely their finished products meet their design criteria and say what they could do better in the future.	Skill Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account.	Skill 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.	Skill Test and evaluate products against a detailed design specification and make adaptations as they develop the product.	Skill Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.
		Knowledge Different aspects of designing and making can be discussed with others. Covered	Knowledge Recognise that it is possible to change and alter their designs and ideas as they are making them.	Knowledge .A strength is something that is good about a piece of work. . A weakness is an area that could be improved.	Knowledge . A finished product can be checked against design criteria to see how successfully it has been made or to evaluate how well it works. . Improvements can then be planned.	Knowledge Asking questions can help others to evaluate their products. For example, asking someone whether the materials selected helped achieve the purpose of the model.	Knowledge _Evaluation can be done by considering whether the product does 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. . The evaluation process can include suggesting improvements and explaining why they should be made.	Knowledge Testing a product against the design criteria will highlight anything that needs improvement or redesign.	Knowledge . An iterative process starts with requirements and continues by creating a product, testing it, and revising it before creating a better version. . The iterative process is a series of steps that are repeated, improving the product with each cycle.
Materials	Cutting & joining textiles	Skill	Skill	Skill Cut and join textiles using glue and simple stitches	Skill Use different methods of joining fabrics, including glue and running stitch.	Skill Cut and join wools, threads and other materials to a loom.	Skill Hand sew a hem or seam using a running stitch	Skill Combine stitches and fabrics with imagination to create a mixed media collage.	Skill Pin and tack fabrics in preparation for sewing and more complex pattern work.

		<u>Knowledge</u>	<u>Knowledge</u>	<u>Knowledge</u> . A running stitch is made by passing a needle in and out of fabric. . Running stitches are made at equal distances apart.	<u>Knowledge</u> A running stitch is a basic stitch used to join two pieces of fabric.	<u>Knowledge</u> Weaving involves interlacing pieces of thread or yarn or other materials.	<u>Knowledge</u> 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.	<u>Knowledge</u> A collage is artwork made by sticking materials, such as scraps of paper or fabric, onto a background.	<u>Knowledge</u> Pinning with dressmaker pins and tacking with quick, temporary stitches holds fabric together in preparation for and during sewing.
Materials for purpose	<u>Skill</u> Explore and choose freely from a variety of materials when making.	<u>Skill</u> Select appropriate materials when constructing and making.	<u>Skill</u> Select and use a range of materials, beginning to explain their choices.	<u>Skill</u> Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.	<u>Skill</u> Plan which materials will be needed for a task and explain why	<u>Skill</u> Choose from a range of materials, showing an understanding of their different characteristics.	<u>Skill</u> Select and combine materials with precision	<u>Skill</u> Choose the best materials for a task, showing an understanding of their working characteristics. Core knowledge	
	<u>Knowledge</u>	<u>Knowledge</u> Different materials are suitable for different purposes, such as construction kits for modelling and ingredients for baking.	<u>Knowledge</u> 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.	<u>Knowledge</u> Properties of components and materials determine how they can and cannot be used.	<u>Knowledge</u> 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.	<u>Knowledge</u> Characteristics of materials, such as rigidity, strength and smoothness will affect the success of a working model. Visual qualities of a yarn can include its colour, elasticity, pattern and texture. Fabrics can be natural or synthetic. Natural fabrics include cotton, silk and wool. Synthetic fabrics include Lycra, polyester and nylon.	<u>Knowledge</u> 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.	<u>Knowledge</u> 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.	
Decorating & embellishing	<u>Skill</u>	<u>Skill</u>	<u>Skill</u> Use gluing, stapling or tying to decorate fabric, including buttons and sequins.	<u>Skill</u> Add simple decorative embellishments, such as buttons, prints, sequins and appliqué.	<u>Skill</u> Decorate a loom weaving using embellishments, such as natural or silk flowers, tassels and bows.	<u>Skill</u> Create detailed decorative patterns on fabric using printing techniques.	<u>Skill</u> Use applique to add decoration to a product or artwork.	<u>Skill</u> Use different methods of fastening for function and decoration, including press studs, Velcro and buttons.	
	<u>Knowledge</u>	<u>Knowledge</u>	<u>Knowledge</u> Decorations can be attached to fabric by gluing, stapling or tying.	<u>Knowledge</u> Embellishment is a decorative detail or feature added to something to make it more attractive.	<u>Knowledge</u> A loom weaving is a piece of fabric that has been woven on a loom by interlacing threads. An embellishment is a decorative detail or	<u>Knowledge</u> Block printing and fabric paint are used to create decorative, repeated patterns on fabrics.	<u>Knowledge</u> Applique is a technique where pieces of material are attached to another material by stitching or gluing.	<u>Knowledge</u> Fastenings hold a piece of clothing together. Types of fastenings include zips, press studs, Velcro and buttons.	

						feature, such as a silk flower, tassel or bow, added to something to make it more attractive.			
Nature	Food, preparation & cooking	Skill	Skill Follow instructions, including simple recipes, that include measures and ingredients.	Skill Measure and weigh food items using non-standard measures, such as spoons and cups.	Skill Prepare ingredients by peeling, grating, chopping and slicing.	Skill Prepare and cook a simple savoury dish.	Skill Identify and use a range of cooking techniques to prepare a simple meal or snack.	Skill Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish.	Skill Follow a recipe that requires a variety of techniques and source the necessary ingredients independently.
		Knowledge	Knowledge . When people celebrate they sometimes eat special food. . A recipe is a set of instructions that tells us how to make food. . Recipes show us how to make meals and snacks.	Knowledge . Fruits and vegetables can be mixed to make a healthy salad. . Salad dressings can improve the flavour of salads.	Knowledge A recipe is a set of instructions for preparing and cooking a meal.	Knowledge Preparation techniques for savoury dishes include peeling, chopping, deseeding, slicing, dicing, grating, mixing and skinning.	Knowledge Cooking techniques include baking, boiling, frying, grilling and roasting.	Knowledge 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.	Knowledge Ingredients can usually be bought at supermarkets, but specialist shops may stock different items such as specialist vegetables or coffees. 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.
	Nutrition	Skill Help to prepare a range of healthy snacks.	Skill Suggest healthy ingredients that can be used to make simple snacks.	Skill Select healthy ingredients for a fruit or vegetable salad.	Skill Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal.	Skill Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars).	Skill Design a healthy snack or packed lunch and explain why it is healthy.	Skill Evaluate meals and consider if they contribute towards a balanced diet.	Skill Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet.
		Knowledge Fruit and vegetables are healthy foods	Knowledge . Fruit and vegetables are healthy foods. . We need to eat at least five portions of fruit and vegetables a day. . Heating food can change its appearance,	Knowledge Fruit and vegetables are an important part of a healthy diet. . It is recommended that people eat at least five portions of fruit and vegetables every day.	Knowledge 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.	Knowledge . There are five main food groups: fruit and vegetables; carbohydrates (potatoes, bread, rice and pasta); proteins (beans, pulses, fish, eggs and meat); dairy	Knowledge . Foods need packaging to keep them fresh, safe to eat and free from damage. . Food packaging also provides nutritional information about the food inside.	Knowledge 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.	Knowledge Eating a balanced diet is a positive lifestyle choice that should be sustained over time. Food packaging provides important nutritional information about the food inside.

			taste, texture and colour. . Fruit and vegetables are healthy food			and alternatives (milk, cheese and yoghurt) and fats (oils and spreads). . Foods high in fat, salt and sugar should only be eaten occasionally as part of a healthy, balanced diet.			
Origins of food	Skill Explore and try a range of foods and suggest where they come from.	Skill Begin to identify the origins of some foods	Skill Sort foods into groups by whether they are from an animal or plant source.	Skill Identify the origin of some common foods (milk, eggs, some meats, common fruit and vegetables).	Skill Identify and name foods that are produced in different places.	Skill Identify and name foods that are produced in different places in the UK and beyond.	Skill Describe what seasonality means and explain some of the reasons why it is beneficial.	Skill Explain how organic produce is grown	
	Knowledge A recipe is a set of instructions that tells us how to make food.	Knowledge . Food can be from plants such as fruit, vegetables, nuts and seeds. . Animals provide meat and also produce food such as milk, eggs and honey	Knowledge . Some foods come from animals, such as meat, fish and dairy products. . Some come from plants, such as fruit and vegetables.	Knowledge . Food comes from two main sources: animals and plants. . Milk comes mainly from cows but also from goats and sheep. . Eggs belong to the animal product category. . They are laid by female animals. The most common types eaten by humans include chicken and duck eggs. . Honey is made by bees. . Most edible oils are made from plant parts. . Olive oil, vegetable oil and coconut oil are all made from plant sources. . Sugar is made from plants called sugar cane and sugar beet. . Plants also give us nuts, such as almonds, walnuts and hazelnuts.	Knowledge 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 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.	Knowledge 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 America.	Knowledge Buying seasonal food is beneficial for many reasons. These include the food having higher nutritional value, reducing transportation and supporting local growers. Seasonality is the time of year when the harvest or flavour of a type of food is at its best.	Knowledge . Whole foods have not been changed from their natural form. . Organic whole foods are grown without the use of man-made fertilisers, pesticides, growth regulators or animal feed additives	

Comparison	Compare & contrast	Skill Share their creations with others and begin to notice how the work of others is the same or different to their own	Skill Describe what, why and how something was made and compare with others.	Skill Describe the similarities and differences between two products.	Skill Compare different or the same products from the same or different brands.	Skill Explain the similarities and difference between the work of two designers	Skill Create and complete a comparison table to compare two or more products.	Skill Survey users in a range of focus groups and compare results.	Skill Create a detailed comparative report about two or more products or inventions.
		Knowledge	Knowledge Aspects of designing and making can be compared with others, including inspiration for making a product and the tools and techniques used.	Knowledge Two products can be compared by looking at a set of criteria and scoring both products against each one.	Knowledge A brand is a name, term, design, or symbol identifying a seller's products or services.	Knowledge Work from different designers can be compared by assessing specific criteria, such as their visual impact, fitness for purpose and target market.	Knowledge A comparison table is an organised way to compare products.	Knowledge Evaluations can be made by asking product users a selection of questions to obtain data on how the product has met its design criteria.	Knowledge Products and inventions can be compared using a range of criteria, such as the impact on society, ease of use, appearance and value for money
Significance	Significant people	Skill Begin to talk about important products.	Skill Explore significant products.	Skill Describe why a product is important.	Skill Explain why a designer or inventor is important	Skill Describe how key events in design and technology have shaped the world.	Skill Explain how and why a significant designer or inventor shaped the world.	Skill Describe the social influence of a significant designer or inventor.	Skill Present a detailed account of the significance of a favourite designer or inventor.
		Knowledge Important products are those that help people.	Knowledge A scarecrow is a model of a person dressed in old clothes and put in a field of growing crops to frighten birds away.	Knowledge The importance of a product may be that it fulfils its goals and performs a useful purpose.	Knowledge . School kitchen staff are important people because they design and provide healthy meals. . The Cath Kidston brand was an important British brand which began in the 1990s. . It was easily recognisable for its floral-patterned fabric and use of classic British iconography including the Red London Bus and London black cab.	Knowledge Key inventions in design and technology have changed the way people live.	Knowledge . Food deteriorates due to the growth of microorganisms. . 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. . The 'use by' date shows when the food is no longer safe to eat. . The 'best before' date shows the date after which the food will lose some flavour or texture.	Knowledge A Roman architect called Vitruvius said that successful buildings should have firmitas (stability), utilitas (useful space) and venustas (an attractive appearance).	Knowledge . Significant engineers have improved, safety, people's lives and trade through their constructions. Significant bridges include: the Menai Bridge, Clifton Suspension Bridge and Forth Bridge.

							<ul style="list-style-type: none">. William Morris was a British textile designer, artist and socialist activist associated with the British Arts and Crafts Movement.. William Morris was a significant contributor to the revival of traditional British textile arts and methods of production.. William Morris' motifs consisted mainly of leaves, flowers, fruits and birds.		
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