

	Explore	Design	Make - Construct	Make - Textiles	Make - Cooking	Evaluate
Year 1	<p>Name and explore a range of everyday products and describe how they are used.</p> <p>Identify products that use electricity to make them work and describe how to switch them on and off.</p> <p>Sort food into food groups by whether they are from an animal or plant source.</p> <p>Specific tools are used for particular purposes. Scissors for cutting, glue for sticking.</p>	<p>Create a design to meet simple design criteria</p> <p>Use design software to create a simple plan for a design</p> <p>Select the appropriate tools for a simple practical task</p> <p>Select healthy ingredients for cooking</p> <p>Design criteria are the explicit goals that a project must achieve.</p> <p>Different materials can be used for different purposes, depending on their properties i.e cardboard is a stronger building material than paper.</p>	<p>Use wheels and axles to make a simple moving model.</p> <p>Construct simple structures, models, or other products using a range of materials</p> <p>An axle is a rod or spindle that passes through the centre of a wheel to connect two wheels</p> <p>Electricity is a form of energy. Many household appliances use electricity (give examples). They can be switched on by completing the circuit to allow the flow of electricity or off by breaking the circuit.</p>	<p>Cut and join textiles using glue and simple stitches</p> <p>Select and use a range of materials, beginning to explain their choices</p> <p>Using gluing, stapling or tying to decorate fabric including buttons and sequins</p> <p>Scissors are used to cut fabrics. Glue and simple stitches i.e running for joining fabrics. Model the process of a running stitch.</p> <p>Fabrics can be decorated using materials such as buttons and sequins. They can be attached by sewing, gluing, stapling or tying.</p>	<p>Measure and weigh food items using non-standard measures, such as spoons and cups</p> <p>Using non standard measures is a way of measuring that does not involve scales (give example of other ways to measure)</p> <p>Fruit and veg are an important part of a healthy diet. Recommend 5 a day.</p> <p>Origins of food – animals for meat and dairy. Plants for fruits and nuts.</p>	<p>Talk about their own and each other's work, identifying strengths or weaknesses and offering support</p> <p>A strength is a good quality of a piece of work. A weakness is an are that can be improved</p>

		The importance of a product is to fulfil a goal and performs a useful purpose.				
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Year 2 Finger puppets - textiles	<p>Explain why a designer or inventor is important.</p> <p>Understand that different tools are suitable for different purposes I.e scissors for paper</p> <p>Understand that properties of different materials determine how they can or cannot be used I.e shiny material to paint.</p> <p>Structures can be made stronger, stiffer and more stable by using cardboard rather</p>		<p>Use a range of mechanism (levers, sliders, wheels and axels) in models or products</p> <p>Create an operational, simple series circuit</p> <p>A mechanism is a device that takes 1 type of motion or force and produces a different one. A mechanism makes a job easier to do, including sliders, levers, linkages, gears, pulleys and cams.</p> <p>A series circuit is made up of energy source (battery,</p>	<p>Use different methods for joining fabrics including glue and running stitch.</p> <p>Add simple decorative embellishments such as buttons, prints, sequins and applique.</p> <p>To understand a running stitch is to join fabrics and passing a needle in and out at an even distance.</p>	<p>Prepare ingredients by peeling, grating, chopping and slicing.</p> <p>Describe the types of food needed for a healthy and varied diet and apply the principles to make simple, healthy meal</p> <p>Healthy diet should include meat or fish, potatoes or rice, diary and small amount of fat. Plenty of fruit and veg.</p> <p>Identify the origins of common foods (milk, eggs, meat, fruit and veg). Food</p>	<p>Explain how closely their finished products meet their design criteria and say what they could do better in future.</p> <p>Finished products can be compared with design criteria to see how closely they match. Improvements can then be planned.</p>

	than paper, using triangles instead of squares and broader bases.		cells, wires and bulb). Circuit must be complete for the electricity to flow.		comes from 2 main sources (animals and plants). Examples inc poultry, fish, milk, eggs, honey, fruit, veg, oils, sugar and nuts from plants. Washing hands before handling food, cleaning surfaces, tying long hair back, storing food and wiping up spills.	
<p>Work safely and hygienically in construction and cooking activities</p> <p>Generate and communicate ideas through a range different methods (written, drawing, diagrams, modelling, speaking and using ICT)</p> <p>Select an appropriate tool for a task and explain their choice</p> <p>Choose appropriate components and materials and suggest ways of manipulating them to achieve a desired effect.</p> <p>Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive</p>						
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Year 3	Explore and use a range of mechanisms – levers, sliders, axles, wheels and cams in models or products.	Plan which materials will be needed for a task and explain why.	<p>Incorporate a simple circuit into a model.</p> <p>Create a shell or frame structure using a diagonal strut.</p>	Cut and join wools, threads and other materials to a loom. Decorate a loom weaving using embellishments, such as natural or	<p>Prepare and cook a simple savoury dish.</p> <p>Identify the main food groups – carbs, protein, dairy, fruit, veg, fats and sugar.</p>	Suggest improvements to their products and describe how to implement them, beginning to take the views of

	<p>Explain the similarities and differences between the work of 2 designers. Based on a design criteria I.e visual impact, fitness for purpose, target market</p> <p>Describe how key events in DT have shaped the world and changed the way people live.</p>		<p>To understand how a lever, slider, axle and cam work and their purpose.</p> <p>An electric circuit can be used in a model, such as lighthouse, it can be controlled using a switch.</p> <p>To understand shell structures are hollow, 3D structures with a thin outer covering such as a box, frame structures are made from thin rigid components such as a tent frame. This gives a structure shape and support.</p> <p>Specific tools can be used for cutting I.e saws. Wood can be joined using glue, staples, nails or a combination. Safety rules are</p>	<p>silk flowers, tassels and bows.</p> <p>A loom is a piece of equipment that is used for making fabric by weaving wool or thread. Weaving is interlacing pieces of wool.</p>	<p>Identify and name foods that are produced in different places.</p> <p>To know preparation techniques for savoury dishes inc peeling, chopping, deseeding, slicing, dicing, grating, mixing and skinning.</p> <p>Food that grow in particular areas depends on factors such as rainfall, climate, soil type I.e Potatoe and Sugarbeet grow in the SE of England. Wheat, barley, veg grow well in the East of England</p>	<p>others into account.</p> <p>Asking questions can help others to evaluate their products, such as asking them whether the selected materials achieved the purpose of the model.</p>
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			understood. A bench hook to keep wood still. Junior hacksaw with a pistol grip (under adult supervision)			
Develop design criteria to inform a design and understand its purpose of meeting exact goals to be successful. Use tools safely for cutting and joining materials and components						
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Year 4	<p>Create and complete a comparison table to compare 2 or more products.</p> <p>Explain how and why significant designer or inventor shaped the world.</p> <p>Know that chemicals carry a hazard symbol and should be used under adult supervision and appropriate PPE.</p>	<p>Investigate and identify the design features of a familiar product.</p> <p>Use annotated sketches and exploded diagrams to test and communicate ideas.</p> <p>Prototype shell and frame structures showing awareness how to strengthen stiffen and reinforce them.</p> <p>To know the important features of a product eg</p>	<p>Work safely with every day chemical products under supervision such as disinfectant and handwash.</p> <p>Explore and use a range of mechanisms (levers, axles, cams gears and pulleys) in models or products.</p> <p>Incorporate circuits that use a variety of components into models or products.</p> <p>Write a programme to control a physical</p>	<p>Hand sew a hem or seam using a running stitch.</p> <p>Choose from a range of materials showing an understanding of their different characteristics.</p> <p>Create detailed decorative patterns on fabric using printing techniques.</p> <p>To know a hem runs along the edge of a piece of cloth or clothing. Made by turning under a raw edge and</p>	<p>Identify a range of cooking techniques to prepare a simple meal or snack.</p> <p>Design a healthy snack or pack lunch and explain why it is healthy.</p> <p>Identify and name foods that are produced in different places in the UK.</p> <p>To know ingredients, taste better and are cheaper when in season.</p>	<p>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.</p> <p>Evaluation can be done by considering whether the product does what it was designed to do, whether it has an attractive appearance, what</p>

		<p>material or structure.</p> <p>To understand annotated sketches and exploded diagrams show a specific part of a design, highlight sections or show functions – communicating in a visual way.</p> <p>To understand a prototype is a mock-up of a design that will look like the finished product but may not be full size or made with the same materials.</p> <p>A comparison table can be used to compare products.</p>	<p>device (light, speaker or buzzer)</p> <p>Mechanisms can be used to add functionality to a model.</p> <p>Components can be added to circuits to achieve a particular goal.</p>	<p>sewing to give a neat finish.</p>	<p>To know different techniques such as baking, boiling, frying, grilling and roasting.</p> <p>To know what a healthy snack is including wholemeal, skimmed and low-sugar alternatives.</p> <p>To know areas of the world, have conditions suited for certain crops.</p>	<p>changes were made during the making process and why the changes were made. Evaluation also includes suggesting improvements and explaining why they should be made.</p>
<p>Select, name and use tools.</p> <p>To know what tools are useful for cutting and joining i.e. craft knife, junior hacksaws, glue guns</p> <p>To know that materials and components have a range of properties making them suitable for different tasks. Selecting correctly depending on design criteria.</p>						
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Year 5	<p>Explore function and purpose of safety features on products.</p>	<p>Explain how the design of a product must be influenced by the culture or society in which designed or made.</p> <p>Use pattern pieces and computer-aided design packages to design a product.</p>	<p>Use mechanical systems in their products, such as pneumatics.</p> <p>Use electrical circuits of increasing complexity in their models or products, showing an understanding of control</p> <p>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.</p> <p>Various methods can be used to support a framework. These include cross braces, guy ropes and diagonal struts. Frameworks can be built using lolly sticks, skewers and bamboo canes</p>	<p>Combine stitches and fabrics with imagination to create a mixed media collage.</p> <p>Select and combine materials with precision</p> <p>Use applique to add decoration to a product or artwork.</p>	<p>Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish.</p> <p>Describe what seasonality means and explain some of the reasons why it is beneficial.</p> <p>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.</p> <p>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</p>	<p>Test and evaluate products against a detailed specifications and make adaptations s they develop the product</p> <p>Test a product against the design criteria will highlight anything that needs improvement or redesign. Changes are often made to design during manufacture.</p>
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					Seasonality is the time of year when the harvest or flavour of a type of food is at its best. Buying seasonal food is beneficial for many reasons	
Name and select increasingly appropriate tools for a task and use them safely.						
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Year 6		<p>Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways</p> <p>Design criteria should cover the intended use of the product, age range targeted and final appearance. Ideas can be communicated in a range of ways, including through discussion, annotated sketches, cross-</p>	<p>Explain and use mechanical systems in their products to meet a design brief</p> <p>Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.</p> <p>Mechanical systems can include sliders, levers, linkages, gears, pulleys and cams. Other mechanisms include pneumatics and hydraulics.</p>	<p>Pin and tack fabrics in preparation for sewing and more complex pattern work</p> <p>Choose the best materials for a task, showing an understanding of their working characteristics.</p> <p>Use different methods of fastening for function and decoration, including press studs, Velcro and buttons.</p>	<p>Follow a recipe that requires a variety of techniques and source the necessary ingredients independently.</p> <p>Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet.</p> <p>Explain how organic produce is grown.</p> <p>Ingredients can usually be bought at supermarkets, but specialist shops may stock different items.</p>	<p>Demonstrate modifications made to a product as a results of ongoing in evaluation by themselves and to others.</p> <p>Design is an iterative process, meaning alterations and improvements are made continually throughout the manufacturing process. Evaluating a product while its being manufactured ad explaining these</p>

		sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.	Strength can be added to a framework by using multiple layers	Pinning with dressmaker pins and tacking with quick, temporary stitches holds fabric together in preparation for and during sewing	<p>Eating a balanced diet is a positive lifestyle choice that should be sustained over time</p> <p>Organic produce is food that has been grown without the use of man-made fertilisers, pesticides, growth regulators or animal feed additives. Organic farmers use crop rotation, animal and plant manures, hand-weeding and biological pest control</p>	evaluations to others can help to refine it.
<p>Select appropriate tools for a task and use them safely and precisely.</p> <p>Precision is important in producing a polished, finished product. Correct selection of tools and careful measurement can ensure the parts fit together correctly.</p> <p>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.</p>						
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EYFS Cooking – Cracker Faces (cooking)			Cut, tear, fold and stick a range of papers and fabrics	Safely use and explore a variety of materials, tools and techniques, experimenting with	Using a range of small tools effectively including cutlery	

Celebration decoration (construction)			Safely use and explore a variety of materials, tools and techniques,	colour, design, texture, form and function.	Suggest healthy ingredients that can be used to make simple snacks.	
Collaboration street (construction)			experimenting with colour, design, texture, form and function.	Use a range of small tools, including scissors.	Safely use and explore a variety of materials, tools and techniques,	
Bridge for the troll (construction)			Use a range of small tools including scissors	Weaving	experimenting with colour, design, texture, form and function.	
					Use a range of small tools, including cutlery.	

Skills – black

Knowledge - Blue