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EYFS ELG	ELG: Creating with Materials			ELG: Fine Motor Skills		
	- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used			Use a range of small tools, including scissors, paint brushes and cutlery;		
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas	D1a Begin to recognise different materials are used in products made D1b Suggest ideas and explain what they are going to do.	D2a Know how to explore and evaluate existing products- who and what are they for? What materials have been used and why? How and where are they used? D2b Develop design ideas through discussion, observation, drawing and modelling. D2c Know the purpose for what they intend to design and make based on design criteria	D3a Investigate existing products- such as purses (see D2a) and evaluate how well they work and meet the users needs. D3b Know the purpose of a pouch in Anglo-Saxon times D3c Know that a pouch should be securely closed and practical for the needs D3d Know what materials are best suited to making a pouch according to their properties D3e Order the stages of making a pouch.	D4a Investigate and evaluate existing products- such as a bird feeder, bug hotel or bird house – before developing criteria for a successful project. D4b Draw labelled drawings from different views showing specific features. D4c Develop a clear idea of what has to be done, planning which materials are suitable and how they will be cut and joined together D4d Compare their designs to other products available and the intended purpose D4e Know that Gustave Eiffel designed the Eiffel tower	D5a Investigate and evaluate existing products (such as outdoor footwear–Scent Packaging) before identifying key features and developing criteria for a successful finished product D5b Use discussion, annotated sketches, prototypes, pattern pieces to explain ideas D5c Know appropriate materials, tools and techniques to use for a task of making Roman sandals and perfume package D5d develop a design specification, for the perfume packaging, formulating precise plans (step by step) as a guide to making taking into account resources available and time	D6a Use research and develop design criteria to inform the design of functional products that are fit for purpose. Such as a security system or a bridge spanning a 30cm gap D6b Draw up a specification for their design using scaled measurements and with annotated plans and prototypes D6c Plan the order of their work, choosing appropriate materials, tools and techniques. D6d Know alternative methods, materials or tools to try if the first attempts fail. D6e – Know that Isambard Kingdom Brunel was an engineer during the Victorian era and designed bridges, railways and tunnels including the Clifton Suspension Bridge.



			representing ideas using annotated sketches and paper prototype			
	Expectations at the end of KS1			Expectations at the end of KS2		
	• design purposeful, functional, appealing products for themselves and other users based on design criteria • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology		• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design			



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products	W1a Know how to make structures, stronger and stiffer. W1b Examine mechanisms [levers, sliders, wheels and axles, in their products. W1c With help, measure, mark out, cut and shape paper and card W1d Use scissors, ruler and glue with increased confidence to build models W1e Know how to join and combine materials and components together using glue or masking tape. W1f Use paint to improve the appearance of their product.	W2a Know correct vocabulary to name and describe the tools used W2b Build structures and know how they can be made stronger, stiffer and more stable. W2c be to able measure, cut and score with increased accuracy W2d Know how to use hand tools safely W2E – know how to use a needle and thread to produce simple sewing stitches W2f Know how to cut, shape and join fabric to make a simple product. W2g know that sliders and pivots can be used to make models move	W3a Measure, mark out, cut, score and assemble components accurately using a ruler, pencil and scissors W3b know the reasons why different materials have been selected to make a pouch W3c Know how to change ideas to improve their work. W3d Be able to pin, sew and stitch materials together to create a pouch using running stitch.	W4a know how to use wood saws and bench hooks safely and accurately to make a animal shelter W4b Know how to measure, mark out and cut wood accurately W4c Know how to join and combine materials and components accurately in temporary and permanent ways. W4d know that digital devices can be used to identify and monitor changes in the environment such as temperature, sea levels, air quality. W4e Know how to reinforce and strengthen a 3D framework.	W5a Know which materials and tools are most suitable for making Roman sandals W5b Know that certain materials and components are used for their functional properties and aesthetic qualities. W5c Know how mechanical systems such as pulleys or gears create movement. W5d Be able to measure and cut out materials accurately to a given design W5e know the everyday application of control technology around school such as entrance doors and gates- (taught in computing)	W6a Know which tools, materials, components and techniques are appropriate for the task W6b Use tools safely and accurately. W6c Know how to make modifications as they go along and the reason why these are needed W6d Construct products using permanent joining techniques in wood. W6e Know how to construct an electrical circuits with different switches using their knowledge of conductors/ insulators and simple circuits W6f Know how to reinforce and strengthen a 3D framework. W6g Know that electrical systems have an input, process and output (taught in computing)
	Expectations at the end of KS1			Expectations at the end of KS2		
	- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics		- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities			



	• build structures, exploring how they can be made stronger, stiffer and more stable • explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	• apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products.
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	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating processes and products	E1a know how well a product works E1b When looking at existing products explain what they like and dislike about products and why. E1c Begin to recognise strengths and possible changes to make	E2a Evaluate their work against their design criteria. E2b Look at a range of existing products explain what they like and dislike about products and why. E2c identifying strengths and possible changes they might make to products made E2d know that nets are used to make 3D objects	E3a Evaluate their product against original design criteria <i>e.g. how well it meets its intended purpose</i> E3b Know how different bags are made from different materials and techniques which were not available in Anglo Saxon times. E3c Know how the invention of the zip has changed the design of bags and clothing E3d know how pneumatics enable heavier objects to be lifted	E4a Evaluate their products carrying out appropriate tests. E4b know how cogs mechanisms work and these are used in products such as clocks	E5a Evaluate a product against the original design specification and other products available E5b Know how footwear has changed since Roman times with the use of different materials and techniques	E6a Know the strengths and areas for development of products made E6b Use drawings with labels to explain evaluations E6c Know how product could be improved. E6d Compare different irrigation techniques to evaluate the efficiency of a Shaduf in Egyptian times. E6E Know how different bridges were constructed and designed
	Expectations at the end of KS1			Expectations at the end of KS2		
	- explore and evaluate a range of existing products - evaluate their ideas and products against design criteria			- investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world		



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Cooking and Nutrition	C1a Begin to know that that all food comes from plants or animals. C1b Know that different food has to be farmed and grown in hot and cold countries C1c Know that everyone should eat fruit and vegetables C1d Know why it is important to have clean hands and wipe surfaces before preparing food C1e begin to use how to use techniques see Food skills chart	C2a Know all food comes from plants or animals and recognise food from around the world C2b Know that food has been grown in different countries where the weather is hotter C2c Begin to recognise the different food groups which food are healthy and unhealthy C2d Know why it is important to have food hygiene rules when cooking C2e Know how to use techniques such as cutting, peeling and grating. Children can experience see Food skills chart	C3a Know how to prepare and cook a savoury scone safely and hygienically using a heat source. C3b Know how to use a range of techniques - see Food skills chart C3c Know that a healthy diet is made up from a variety and balance of different food depicted in ‘The Eat well plate’ C3d Know that food is grown, reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.	C4a Confidently use cutting, peeling and grating techniques to prepare a Greek salad and bake an orange muffins and honey bread C4b Know that to be active and healthy, food and drink are needed to provide energy for the body.	C5a Know how seasonality may effect ingredient choices over the year C5b Know that seasons may affect the food available. C5c Know that some food is processed into ingredients that can be eaten or used in cooking. C5d know how to prepare and cook a quiche; selecting a filling of their choice taking into account cost	C6a Know how to prepare and cook a healthy pasta using a heat source to add additional ingredients C6b Understand how to use a range of techniques – Food skills chart C6c Know that a healthy heart needs exercise and a healthy balanced diet	
	Expectations at the end of KS1				Expectations at the end of KS2		
		• use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from.		• understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.			