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Design Technology Curriculum Overview

Our Ultimate End Goal: What will our artists be able to do when they leave us?
By the end of their time at Britannia Community Primary School, our Year 6 artists and designers will engage confidently in the production of creative work. <u>The children will:</u> At Britannia Primary School we follow the National Curriculum objectives for planning our lessons and are supported by the Lancashire Key Learning documents. We use the Kapow scheme of work to support teaching and learning of DT. Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and eventually making products and systems. Through the study of design and technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators. The national curriculum for art and design aims to ensure that all pupils: • develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • critique, evaluate and test their ideas and products and the work of others • understand and apply the principles of nutrition and learn how to cook.

Early Years Foundation Stage Framework and National Curriculum Coverage

EYFS	Key Stage 1	Key Stage 2	
Reception	Year 1 and Year 2	Year 3 and Year 4	Year 5 and Year 6
Creating with Materials ELG – Children at the expected level of development will: • 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. • Make use of props and materials when role playing characters in narratives and stories. • Use a range of small tools, including scissors, paintbrushes and cutlery. • Begin to show accuracy and care when drawing. • Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary	<u>Pupils should be taught to:</u> Key stage 1 Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to: <u>Design</u> • 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 <u>Make</u> • 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 Evaluate explore and evaluate a range of existing products • evaluate their ideas and products against design criteria <u>Technical knowledge</u> • build structures, exploring how they can be made stronger, stiffer and more stable	<u>Pupils should be taught to:</u> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to: <u>Design</u> • 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 <u>Make</u> • 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 <u>Evaluate</u> • 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	

	• explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	events and individuals in design and technology have helped shape the world <u>Technical knowledge</u> • 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

Long Term Plan Overview							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Explore different materials freely. Develop own ideas and decide which materials to use to express themselves. Join different materials to make our own houses and homes- Junk modelling					Textiles: Stuffed Toys Richard Steiff – German bear designer	Mechanisms: Automata Toys- mechanical window displays Hamleys mechanical window displays or other toy stores.

Autumn 2	Make gingerbread men- food link Christmas crafts – include a skill in the making. Christingle	Mechanisms: Moving Story Books Robert Sabuda- creator of the pop up book	Food: A Balanced Diet- making a wrap James Martin	Structures: Castles Edinburgh castle, Clitheroe castle.	Electrical Systems: Torches Conrad Hubert- inventor of torches		
Spring 1	Pancake day- choose and add toppings	Food: Fruit and Vegetable Smoothie Jo Wicks	Mechanisms: Moving Monsters Alexander Issigonis	Mechanisms: Pneumatic Systems Lonnie Johnson- Super Soaker			Structures: Playgrounds Charles Wicksteed – maker of the first slide
Spring 2	Make Union Jack flags Make crowns/hats for the queen - explore existing products - -explore the user and plan a suitable design				Textiles: Fastenings- book sleeve Sarah Jane Designs- book sleeve makers	Food: What Could Be Healthier? Bolognaise Gino D'Acampo	
Summer 1	Fruit kebabs- - Fruit tasting	Structures: Windmills	Textiles: Pouches- wallet or purse Michael	Food: Eating Seasonally- fruit tart Jamie Oliver			

	- Choose ingredients - Chop ingredients - Prepare fruit kebab	Siemens – maker of windmills	Kors, Channel, YSL, Louis Vitton- any purse/wallet makers				
Summer 2	Sculpture- Sea creatures made of clay. Make and evaluate it.				Food: Adapting a Recipe- budget a design brief Mary Berry	Structures: Bridges John Rennie the Elder, John Rennie the Younger, George Rennie- Designers of the London Bridge	Dine With Me- 3 course meal farm to fork Tom Kerridge

The skills detailed below ensure progression in each artistic discipline and provide rich opportunities for children to engage in a range of art experiences. Aspects will be combined within an art learning experience and may also be woven into learning experiences from other subjects to further enrich them.							
EYFS - Reception	Key Stage 1			Key Stage 2			
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Exploring and Selecting: • Explore a variety of materials and tools freely. • Choose appropriate materials and tools for a specific purpose. • Make decisions about how to use resources creatively and effectively. **Joining and Constructing:** • Use joining techniques such as gluing, taping, folding, and slotting. • Build simple structures with attention to stability and shape. • Combine materials in different ways to achieve a	Structures	**Design:** • Learning the importance of a clear design criteria. • Including individual preferences and requirements in a design. **Make:** • Making stable structures from card. • Following instructions to cut and assemble the supporting structure of a windmill. • Making functioning turbines and axles which are assembled into a main supporting structure. • Finding the middle of an object. • Puncturing holes. • Adding weight to structures. • Creating supporting structures. • Cutting evenly and carefully.		**Design:** • Designing a castle with key features to appeal to a specific person/purpose. • Drawing and labelling a castle design using 2D shapes, labelling: - the 3D shapes that will create the features - materials needed and colours. • Designing and/or decorating a castle tower on CAD software. **Make:** • Constructing a range of 3D geometric shapes using nets. • Creating special features for individual designs. • Making facades from a range of recycled materials. **Evaluate:** • Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design.		**Design:** • Designing a stable structure that is able to support weight. • Creating a frame structure with a focus on triangulation. **Make:** • Making a range of different shaped beam bridges. • Using triangles to create truss bridges that span a given distance and support a load. • Building a wooden bridge structure. • Independently measuring and marking wood accurately. • Selecting appropriate tools and equipment for particular tasks. • Using the correct techniques to saws safely. • Identifying where a structure needs reinforcement and using card corners for support.	**Design:** • Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs. **Make:** • Building a range of play apparatus structures drawing upon new and prior knowledge of structures. • Measuring, marking and cutting wood to create a range of structures. • Using a range of materials to reinforce and add decoration to structures. **Evaluate:** • Improving a design plan based on peer evaluation. • Testing and adapting a design

design outcome. **Manipulating Materials:** • Cut materials safely using scissors. • Roll, pinch, shape, and mould malleable materials like clay or dough. • Fold and bend materials to change their form or function. **Using Tools Safely:** • Handle basic tools (scissors, glue sticks,		**Evaluate:** • Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't. • Suggest points for improvements.		• Suggesting points for modification of the individual designs		• Explaining why selecting appropriating materials is an important part of the design process. • Understanding basic wood functional properties. Evaluate: • Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary. • Suggesting points for improvements for own bridges and those designed by others.	to improve it as it is developed. • Identifying what makes a successful structure.

child-safe knives, spreaders) with care and control. • Follow simple safety and hygiene routines when using tools and preparing food. **Cooking and Food Preparation:** • Wash hands and maintain cleanliness while handling food. • Use basic food prep tools (plastic knives, spoons, peelers) with support. • Choose and combine ingredients based on taste, texture, or appearance.	Mechanisms	**Design:** • Explaining how to adapt mechanisms, using bridges or guides to control the movement. • Designing a moving story book for a given audience **Make:** • Following a design to create moving models that use levers and sliders. **Evaluate:** • Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed. • Reviewing the success of a product by testing it with its intended audience.	**Design:** • Creating a class design criteria for a moving monster. • Designing a moving monster for a specific audience in accordance with a design criteria. **Make:** • Making linkages using card for levers and split pins for pivots. • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used. • Cutting and assembling components neatly **Evaluate:** • Evaluating own designs against design criteria. • Using peer feedback to modify a final design.	**Design:** • Designing a toy which uses a pneumatic system. • Developing design criteria from a design brief. • Generating ideas using thumbnail sketches and exploded diagrams. • Learning that different types of drawings are used in design to explain ideas clearly. **Make:** • Creating a pneumatic system to create a desired motion. • Building secure housing for a pneumatic system. • Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy. • Selecting materials due to their functional and aesthetic characteristics.			**Design:** •Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement. • Understanding how linkages change the direction of a force. • Making things move at the same time. • Understanding and drawing cross-sectional diagrams to show the inner-workings of my design. **Make:** • Measuring, marking and checking the accuracy of the jelutong and dowel pieces required. • Measuring, marking and cutting components accurately using a ruler and scissors. • Assembling components

• Follow simple steps in making food items (e.g. fruit kebabs, pancakes). **Design Thinking:** • Communicate ideas through drawing, talking, or modelling. • Think about who the product is for and what it needs to do (user and purpose). • Plan simple designs before making. **Evaluating and Reflecting:** • Talk about what they have made and how they made it.				• Manipulating materials to create different effects by cutting, creasing, folding and weaving. <u>Evaluate:</u> • Using the views of others to improve designs. • Testing and modifying the outcome, suggesting improvements. • Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.			accurately to make a stable frame. • Understanding that for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles. • Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set. <u>Evaluate:</u> • Evaluating the work of others and receiving feedback on own work. • Applying points of improvement to their toys. • Describing changes they would make/do if they were to do the project again.

• Identify things they like about their creation. • Suggest simple changes or improvements to their work. **Developing Fine Motor Control:** • Improve hand–eye coordination through cutting, threading, sticking, and drawing. • Develop control over small movements when using tools or manipulating materials. **Creative Expression:**	Electrical systems				**Design:** • Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas. **Make:** • Making a torch with a working electrical circuit and switch. • Using appropriate equipment to cut and attach materials. • Assembling a torch according to the design and success criteria. **Evaluate:** • Evaluating electrical products. • Testing and evaluating the success of a final product.		

• Use a range of materials and techniques to express ideas and imagination. • Decorate and personalise products using colour, texture, and shape.	Cooking and nutrition	**Design:** • Designing smoothie carton packaging by-hand. **Make:** • Chopping fruit and vegetables safely to make a smoothie. • Juicing fruits safely to make a smoothie. **Evaluate:** • Tasting and evaluating different food combinations. • Describing appearance, smell and taste. • Suggesting information to be included on packaging. • Comparing their own smoothie with someone else's.	**Design:** • Designing three wrap ideas based on a food combination which work well together. **Make:** • Chopping foods safely to make a wrap. • Constructing a wrap that meets a design brief. • Grating foods to make a wrap. • Snipping smaller foods instead of cutting. **Evaluate:** • Describing the taste, texture and smell of fruit and vegetables. • Taste testing food combinations and final products. • Describing the information that should be included on a label. •Evaluating food by giving a score.	**Design:** • Designing a recipe for a savoury tart. **Make:** • Following the instructions within a recipe. • Tasting seasonal ingredients. • Selecting seasonal ingredients. • Peeling ingredients safely. • Cutting safely with a vegetable knife. **Evaluate:** • Establishing and using design criteria to help test and review dishes. • Describing the benefits of seasonal fruits and vegetables and the impact on the environment. • Suggesting points for improvement when making a seasonal tart.	**Design:** • Designing a biscuit within a given budget, drawing upon previous taste testing judgements. • Designing packaging for a biscuit that targets a specific group. **Make:** • Following a baking recipe, including the preparation of ingredients. • Cooking safely, following basic hygiene rules. • Adapting a recipe to meet the requirements of a target audience. • Using a cuboid net to create packaging. **Evaluate:** • Evaluating a recipe, considering: taste, smell, texture and appearance. • Describing the impact of the budget on the	**Design:** • Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. • Writing an amended method for a recipe to incorporate the relevant changes to ingredients. • Designing appealing packaging to reflect a recipe. • Researching existing recipes to inform ingredient choices. **Make:** • Cutting and preparing vegetables safely. • Using equipment safely, including knives, hot pans and hobs. • Knowing how to avoid cross-contamination. • Following a step by step method	**Design:** • Writing a recipe, explaining the key steps, method and ingredients. • Including facts and drawings from research undertaken **Make:** • Following a recipe, including using the correct quantities of each ingredient • Adapting a recipe based on research. • Working to a given timescale. • Working safely and hygienically with independence. **Evaluate:** • Evaluating a recipe, considering: taste, smell, texture and origin of the food group. • Taste testing and scoring final products. • Suggesting and writing up points of improvements when scoring others' dishes, and

					selection of ingredients. • Evaluating and comparing a range of food products. • Suggesting modifications to a recipe (e.g. This biscuit has too many raisins, and it is falling apart, so next time I will use less raisins).	carefully to make a recipe <u>Evaluate:</u> • Identifying the nutritional differences between different products and recipes. • Identifying and describing healthy benefits of food groups.	when evaluating their own throughout the planning, preparation and cooking process. • Evaluating health and safety in production to minimise cross contamination.

	Textiles		**Design:** • Designing a pouch. **Make:** • Selecting and cutting fabrics for sewing. • Decorating a pouch using fabric glue or running stitch. • Threading a needle. • Sewing running stitch, with evenly spaced, neat, even stitches to join fabric. • Neatly pinning and cutting fabric using a template. **Evaluate:** • Troubleshooting scenarios posed by teacher. • Evaluating the quality of the stitching on others' work. • Discussing as a class, the success of their stitching against the success criteria. • Identifying aspects of their			**Design:** • Designing a stuffed toy, considering the main component shapes required and creating an appropriate template. • Considering the proportions of individual components. **Make:** • Creating a 3D stuffed toy from a 2D design. • Measuring, marking and cutting fabric accurately and independently . • Creating strong and secure blanket stitches when joining fabric. • Threading needles independently. • Using appliqué to attach pieces of fabric decoration. • Sewing blanket stitch to join fabric. • Applying blanket stitch so the spaces between the	

			peers' work that they particularly like and why.			stitches are even and regular. <u>Evaluate:</u> • Testing and evaluating an end product and giving point for further improvements.	

Substantative Knowledge As there is such a wealth of artists and artworks to choose to study, it is essential that teachers choose work which will interest and inspire their particular group of children. The most important thing is that children have opportunities to express their ideas about art freely and that they understand that there are no right or wrong answers when talking about art. It is also important that children access work from a range of disciplines, not just painting.							
EYFS - Reception	Key Stage 1			Key Stage 2			
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Materials have different properties (e.g. hard, soft, rough, smooth, bendy, strong). Some materials are better suited for certain purposes (e.g. strong materials for walls, soft for decoration). Objects can be joined using glue, tape, tabs, or folding. Structures need to be stable and balanced to stand up. Tools like scissors, spreaders, and knives have specific purposes and must be used safely. Ingredients change when cooked (e.g. dough turns into biscuits).	Structures	To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses). • To understand that axles are used in structures and mechanisms to make parts turn in a circle. • To begin to understand that different structures are used for different purposes. • To know that a structure is something that has been made and put together. • To know that the sails or blades of a windmill are moved by the wind. • To know that a structure is something built for a reason. • To know that stable structures do not topple. • To know that adding weight to the base of a		• To understand that wide and flat based objects are more stable. • To understand the importance of strength and stiffness in structures. • To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse - and their purpose. • To know that a façade is the front of a structure. • To understand that a castle needed to be strong and stable to withstand enemy attack. • To know that a paper net is a flat 2D shape that can become a 3D shape once assembled. • To know that a design specification is a list of success		• To understand some different ways to reinforce structures. • To understand how triangles can be used to reinforce bridges. • To know that properties are words that describe the form and function of materials. • To understand why material selection is important based on properties. • To understand the material (functional and aesthetic) properties of wood. • To understand the difference between arch, beam, truss and suspension bridges. • To understand how to carry and use a saw safely.	• To know that structures can be strengthened by manipulating materials and shapes. • To understand what a 'footprint plan' is. • To understand that in the real world, design , can impact users in positive and negative ways. • To know that a prototype is a cheap model to test a design idea.

Food must be prepared hygienically (e.g. wash hands, don't touch face while cooking). Some foods are healthy; children should begin to identify healthy and unhealthy choices. Fruits have different tastes, textures, and appearances. Ingredients can be chosen and sequenced based on preference or design (e.g. colour pattern on a fruit kebab). Decorations and products are often made for a purpose (e.g. a crown to wear, a flag to wave). Products are designed for users;		structure can make it more stable. • To know that design criteria is a list of points to ensure the product meets the clients needs and wants. • To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity. • To know that windmill turbines use wind to turn and make the machines inside work. • To know that a windmill is a structure with sails that are moved by the wind. • To know the three main parts of a windmill are the turbine, axle and structure. • To know that windmills are used to generate power and were used for grinding flour.		criteria for a product.			

the design should fit or be suitable for the person using it. Flags and symbols (like the Union Jack) use specific shapes and colours. Designs can be planned (through drawing or talking) before making. Finished products can be evaluated—children can say what they like or what they might change. Sculptures can be made by shaping, pinching, and rolling clay. Clay can be textured using tools to add detail.	Mechanisms	• To know that a mechanism is the parts of an object that move together. •To know that a slider mechanism moves an object from side to side. • To know that a slider mechanism has a slider, slots , guides and an object. • To know that bridges and guides are bits of card that purposefully restrict the movement of the slider. • To know that in Design and technology we call a plan a 'design'.	• To know that mechanisms are a collection of moving parts that work together as a machine to produce movement. • To know that there is always an input and output in a mechanism. • To know that an input is the energy that is used to start something working. • To know that an output is the movement that happens as a result of the input. • To know that a lever is something that turns on a pivot. • To know that a linkage mechanism is made up of a series of levers. • To know some real-life objects that contain mechanisms.	• To understand how pneumatic systems work. • To understand that pneumatic systems can be used as part of a mechanism. • To know that pneumatic systems operate by drawing in, releasing and compressing air. • To understand how sketches, drawings and diagrams can be used to communicate design ideas. • To know that exploded-diagrams are used to show how different parts of a product fit together. • To know that thumbnail sketches are small drawings to get ideas down on paper quickly.			• To understand that the mechanism in an automata uses a system of cams, axles and followers. • To understand that different shaped cams produce different outputs. • To know that an automata is a hand powered mechanical toy. • To know that a cross-sectional diagram shows the inner workings of a product. • To understand how to use a bench hook and saw safely. • To know that a set square can be used to help mark 90° angles.

Celebratory objects (e.g. Christingles) may have symbolic meaning	Electrical Systems				• To understand that electrical conductors are materials which electricity can pass through. • To understand that electrical insulators are materials which electricity cannot pass through. • To know that a battery contains stored electricity that can be used to power products. • To know that an electrical circuit must be complete for electricity to flow. • To know that a switch can be used to complete and break an electrical circuit. • To know the features of a torch: case, contacts, batteries, switch, reflector, lamp, lens. • To know facts from the history and invention of the electric light bulb(s) - by Sir		

					Joseph Swan and Thomas Edison.		

	Cooking and Nutrition	• To know that a blender is a machine which mixes ingredients together into a smooth liquid. • To know that a fruit has seeds. • To know that fruits grow on trees or vines. • To know that vegetables can grow either above or below ground. • To know that vegetables is any edible part of a plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).	• To know that 'diet' means the food and drink that a person or animal usually eats. • To understand what makes a balanced diet. • To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar. • To understand that I should eat a range of different foods from each food group, and roughly how much of each food group. • To know that 'ingredients' means the items in a mixture or recipe.	• To know that not all fruits and vegetables can be grown in the UK. • To know that climate affects food growth. • To know that vegetables and fruit grow in certain seasons. • To know that cooking instructions are known as a 'recipe'. • To know that imported food is food which has been brought into the country. • To know that exported food is food which has been sent to another country.. • To know that eating seasonal foods can have a positive impact on the environment. • To know that similar coloured fruits and vegetables often have similar nutritional benefits.	• To know that the amount of an ingredient in a recipe is known as the 'quantity.' • To know that safety and hygiene are important when cooking. • To know the following cooking techniques: sieving, measuring, stirring, cutting out and shaping. •To understand the importance of budgeting while planning ingredients for biscuits. • To know that products often have a target audience.	• To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed. • To know that recipes can be adapted to suit nutritional needs and dietary requirements. • To know that I can use a nutritional calculator to see how healthy a food option is. • To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects. • To know that coloured chopping boards can prevent cross-contamination. • To know that nutritional information is	• To know that 'flavour' is how a food or drink tastes. • To know that many countries have 'national dishes' which are recipes associated with that country. • To know that 'processed food' means food that has been put through multiple changes in a factory. • To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. • To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).

				• To know that the appearance of food is as important as taste.		found on food packaging. • To know that food packaging serves many purposes.	
	Textiles		• To know that sewing is a method of joining fabric. • To know that different stitches can be used when sewing. • To understand the importance of tying a knot after sewing the final stitch. • To know that a thimble can be used to protect my fingers when sewing.				

Key Vocabulary			
EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
• Design • Make • Build • Create • Plan • Model • Product	<u>Structures:</u> Year 1: ● Axle ● Base ● Centre ● Design ● Evaluation ● Equal ● Evaluate ● Middle ● Rotate ● Rotor ● Rotor Blades ● Sails ● Same ● Stable ● Strong ● Structure ● Test ● Weak ● Wind ● Windmill <u>Mechanisms:</u> Year 1:	<u>Structures:</u> Year 3: ● Aesthetic ● Assemble ● Book sleeve ● Design criteria ● Evaluation ● Fabric ● Fastening ● Mock-up ● Net ● Running-stitch ● Stencil ● Target audience ● Target customer ● Template <u>Mechanisms:</u> Year 3:	<u>Structures:</u> Year 5: ● Abutment ● Accurate ● Arched bridge ● Beam bridge ● Coping saw ● Evaluation ● File ● Mark out ● Material properties ● Measure ● Predict ● Reinforce ● Research ● Sandpaper ● Set square ● Suspension bridge ● Tenon saw ● Test ● Truss bridge ● Wood Year 6:

• Tool • Material • Object • Structure Materials & Properties • Hard • Soft • Smooth • Rough • Bendy • Strong • Weak • Sticky • Heavy • Light • Flat • Shiny • Dull Joining & Construction • Stick • Glue • Tape • Fold	● Assemble ● Design ● Evaluation ● Mechanism ● Model ● Sliders ● Stencil ● Target audience ● Template ● Test Year 2: ● Evaluation ● Input ● Lever ● Linear motion ● Linkage ● Mechanical ● Mechanism ● Motion ● Oscillating motion ● Output ● Pivot ● Reciprocating motion ● Rotary motion ● Survey <u>Cooking and Nutrition:</u> Year 1: ● Blender ● Fruit ● Healthy ● Ingredients ● Recipe ● Smoothie ● Vegetable ● Seed ● Root ● Leaf ● Stem ● Flavour ● Design ● Cut ● Juice ● Table knife ● Juicer ● Plant ● Bush ● Tree ● Vine ● Chopping board ● Fork ● Taste ● Select ● Blend ● Evaluate ● Compare ● Appearance ● Balanced Year 2: ● Carbohydrates ● Combination ● Dairy ● Design ● Design brief ● Diet ● Feel ● Grate ● Grater ● Menu ● Oils ● Prepare ● Proteins ● Review ● Scissors ● Smell ● Snip ● Spread ● Spreads <u>Textiles:</u> Year 2: ● Accurate ● Fabric ● Knot ● Pouch ● Running-stitch ● Sew ● Shape ● Stencil ● Template ● Thimble	● Exploded-diagram ● Function ● Input ● Lever ● Linkage ● Mechanism ● Motion ● Net ● Output ● Pivot ● Pneumatic system ● Thumbnail sketch <u>Electrical Systems:</u> Year 4: ● Battery ● Bulb ● Buzzer ● Cell ● Component ● Conductor ● Copper ● Design criteria ● Electrical item ● Electricity ● Electronic item ● Function ● Insulator ● Series circuit ● Switch ● Test ● Torch ● Wire <u>Textiles:</u> Year 3: ● 2D shapes ● 3D shapes ● Castle ● Design criteria ● Evaluate ● Facade ● Feature ● Flag ● Net ● Recyclable ● Scoring ● Stable ● Strong ● Structure ● Tab ● Weak <u>Cooking and Nutrition:</u> Year 3: ● Arid ● Climate ● Complementary ● Country ● Export ● Import ● Mediterranean ● Mock-up ● Mountain ● Peel ● Polar ● Seasonal ● Seasons ● Snip ● Temperate ● Texture ● Tropical ● Weather Year 4: ● Adapt ● Addition ● Budget ● Buttery ● Combine ● Comment ● Construct ●	● Adapt ● Apparatus ● Bench hook ● Cladding ● Coping saw ● Design ● Dowel ● Evaluation ● Feedback ● Idea ● Jelutong ● Landscape ● Mark out ● Measure ● Modify ● Natural materials ● Plan view ● Playground ● Prototype ● Reinforce ● Sketch ● Strong ● Structure ● Tenon saw ● Texture ● User ● Vice ● Weak <u>Mechanisms:</u> Year 6: ● Accurate ● Assembly-diagram ● Automata ● Axle ● Bench hook ● Cam ● Clamp ● Component ● Cutting list ● Diagram ● Dowel ● Drill bits ● Exploded-diagram ● Finish ● Follower ● Frame ● Function ● Hand drill ● Jelutong ● Linkage ● Mark out ● Measure ● Mechanism ● Model ● Research ● Right-angle ● Set square ● Tenon saw <u>Textiles:</u> Year 5: ● Accurate ● Annotate ● Appendage ● Blanket-stitch ● Design criteria ● Detail ● Evaluation ● Fabric ● Sew ● Shape ● Stuffed toy ● Stuffing ● Template <u>Cooking and Nutrition:</u> Year 5: ● Abattoir ● Adaptation ● Balanced ● Beef ● Brand ● Cook ● Cross-

• Cut • Join • Slot • Connect • Balance • Stable • Tall • Wide • Base • Roof • Edge • Corner Food & Cooking • Chop • Slice • Mix • Stir • Pour • Spread • Peel • Wash • Clean • Ingredients • Recipe		Cream ● Crunchy ● Cuboid ● Fold ● Hygiene ● Layout ● Market research ● Modify ● Multiplication ● Opinion ● Pounds	contamination ● Develop ● Enhance ● Equipment ● Farm ● Label ● Measure ● Nutrient ● Nutrition ● Nutritional value ● Preference ● Press ● Process ● Safety ● Theme Year 6: ● Balance ● Bitter ● Bridge method ● Complement ● Cookbook ● Farm to fork ● Method ● Nationality ● Reared ● Research ● Pairing ● Preparation ● Salty ● Sour ● Storyboard ● Sweet ● Umami <u>Textiles:</u> Year 5: ● Accurate ● Annotate ● Appendage ● Blanket-stitch ● Design criteria ● Detail ● Evaluation ● Fabric ● Sew ● Shape ● Stuffed toy ● Stuffing ● Template

• Topping • Healthy • Tasty • Sweet • Sour • Crunchy • Juicy • Yummy --- **Tools** • Scissors • Glue stick • Knife (child-safe) • Spoon • Rolling pin • Cutter • Peeler --- **Evaluation & Reflection** • Like • Change • Improve • Better • Favourite • Try again			

• Next time			

Experiences and Opportunities Children should have regular opportunities to look at real works of art in galleries and in their local environment and to consider the role that the arts have to play in shaping the world around us and helping us all to make it a better place.						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Trips/Visits:	Trips/Visits:	Trips/Visits:	Trips/Visits:	Trips/Visits:	Trips/Visits:	Trips/Visits:
Visitor:	Visitor:	Visitor:	Visitor:	Visitor:	Visitor:	Visitor:
Sharing artwork:	Sharing artwork:	Sharing artwork:	Sharing artwork:	Sharing artwork:	Sharing artwork:	Sharing artwork: