

		R	1	2	3	4	5	6
Project Drivers	Term 1	Knowing me, knowing you	Key Driver: History The Adventures of Bear and the King	Key Driver: History Great Fire of London	Key Driver: History Ancient Greeks	Key Driver: Geography Europe	Key Driver: Geography Our planet	Key Driver: History World War Two
	Term 2	Key Driver: Geography Night and Day	Key Driver: Geography The Adventures of Bear (United Kingdom)	Key Driver: History Our Heroes (NHS)	Key Driver: Geography Journey or Endurance	Key Driver: History Romans	Key Driver: Geography Natural disasters	Key Driver: History Post war Britain
	Term 3	Key Driver: History Turrets and Tiaras	Key Driver: Geography Under the Sea	Key Driver: History Mary Anning Meets the Dinosaurs	Key Driver: History Ancient Egyptians	Key Driver: History Anglo Saxons	Key Driver: History Victorian Childhood	Key Driver: Geography Darwin and South America
	Term 4	Helping Hands	Key Driver: Geography Sustainability	Key Driver: Geography Garden Diversity	Key Driver: Geography The River Nile	Key Driver: Geography Rainforests	Key Driver: History Industrial Revolution	Key Driver: History Mayans
	Term 5	Key Driver: Geography In the garden	Key Driver: History Highway Rat	Key Driver: Geography Explorers	Key Driver: History Stone Age	Key Driver: History Vikings	Key Driver: History Elizabethans	Key Driver: Geography Coastal Geography of Devon
	Term 6	Key Driver: Geography Roaming in the rainforest	Key Driver: History and Geography My world, Their world.	Key Driver: Geography Where we live.	Key Driver: Geography Counties	Key Driver: Geography Canals	Key Driver: Geography Rivers	Key Driver: Geography Coastal Geography of Devon

Design Technology		R	1	2	3	4	5	6
Subject Coverage (focus/unit names)	Term 1	Junk Modelling	Food Technology: Fruits and Vegetables		Structures: Constructing a castle Food Technology: Eating Seasonally	Mechanical systems: Slingshot car	Food Technology: What could be healthier?	
	Term 2		Food Technology: Fruits and Vegetables	Structures: Baby Bears Chair	Structures: Constructing a castle Food Technology: Eating Seasonally	Structure: Pavilions	Food Technology: What could be healthier?	Mechanical systems: automata toys
	Term 3	Textiles: Bookmarks		Mechanism Make a moving dinosaur				
	Term 4			Textiles: Pouches			Structures: Bridges	
	Term 5	Structures: Boats	Structures: Constructing Windmills			Textiles: Fastenings		Textiles: waistcoats
	Term 6		Textiles: Puppets		Mechanical Systems: Pneumatic Toys		Mechanical Systems: Pop up books	Structure: Playgrounds
	Ongoing	Continuous Provision	VEX	VEX	VEX	VEX	VEX	VEX

KS1 National Curriculum Statements	R units	1 units	2 units	3 units	4 units	5 units	6 units
Design purposeful, functional, appealing products for themselves and other users based on design criteria		Textiles: Puppets Structures: Constructing Windmills	Structures: Baby Bears Chair Mechanism Make a moving dinosaur Textiles: Pouches				
Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology		Textiles: Puppets Structures: Constructing Windmills Food Technology: Fruits and vegetables	Structures: Baby Bears Chair Mechanism Make a moving dinosaur Textiles: Pouches				
Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]		Textiles: Puppets Structures: Constructing Windmills Food Technology: Fruits and vegetables	Structures: Baby Bears Chair Mechanism Make a moving dinosaur Textiles: Pouches				
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics		Textiles: Puppets Structures: Constructing Windmills Food Technology: Fruits and vegetables	Structures: Baby Bears Chair Mechanism Make a moving dinosaur Textiles: Pouches				
Explore and evaluate a range of existing products		Structures: Constructing Windmills	Mechanism Make a moving dinosaur Textiles: Pouches				
Evaluate their ideas and products against design criteria		Textiles: Puppets Structures: Constructing Windmills Food Technology: Fruits and vegetables	Structures: Baby Bears Chair Mechanism Make a moving dinosaur Textiles: Pouches				
Build structures, exploring how they can be made stronger, stiffer and more stable		Structures: Constructing Windmills	Structures: Baby Bears Chair				
Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		Structures: Constructing Windmills	Mechanism Make a moving dinosaur				
Use basic principles of a healthy and varied diet to prepare dishes		Food Technology: Fruits and vegetables					
Understand where food comes from		Food Technology: Fruits and vegetables					

KS2 National Curriculum Statements	R units	1 units	2 units	3 units	4 units	5 units	6 units
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				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books Food Technology: What could be healthier?	Mechanical systems: automata toys Textiles: waistcoats Structure: Playgrounds
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books Food Technology: What could be healthier?	Mechanical systems: automata toys Textiles: waistcoats Structure: Playgrounds
Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books Food Technology: What could be healthier?	Mechanical systems: automata toys Textiles: waistcoats Structure: Playgrounds
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books	Textiles: waistcoats Structure: Playgrounds
Investigate and analyse a range of existing products				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books Food Technology: What could be healthier?	Mechanical systems: automata toys Textiles: waistcoats Structure: Playgrounds
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work				Structures: Constructing a castle (adapt to Parthenon) Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car Structure: Pavilions Textiles: Fastenings	Structures: Bridges Mechanical Systems: Pop up books Food Technology: What could be healthier?	Mechanical systems: automata toys Textiles: waistcoats Structure: Playgrounds
Understand how key events and individuals in design and technology have helped shape the world				Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car	Food Technology: What could be healthier?	Mechanical systems: automata toys
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures				Structures: Constructing a castle (adapt to Parthenon)	Structure: Pavilions	Structures: Bridges	Structure: Playgrounds
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]				Mechanical Systems: Pneumatic Toys	Mechanical systems: Slingshot car	Mechanical Systems: Pop up books	Mechanical systems: automata toys
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]				Vex	Vex	Vex	Vex
Apply their understanding of computing to program, monitor and control their products				Vex	Vex	Vex	Vex
Understand and apply principles of a healthy and varied diet				Food Technology: Eating Seasonally		Food Technology: What could be healthier?	
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques				Food Technology: Eating Seasonally		Food Technology: What could be healthier?	
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed				Food Technology: Eating Seasonally		Food Technology: What could be healthier?	

		Threads	R	1	2	3	4	5	6
Disciplinary knowledge (skills)	Design	Textiles	<ul style="list-style-type: none"> <li>Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.</li> <li>Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>Using a template to create a design for a puppet</li> </ul>	<ul style="list-style-type: none"> <li>Designing a pouch.</li> </ul>		<ul style="list-style-type: none"> <li>Writing design criteria for a product, articulating decisions made.</li> <li>Designing a personalised book sleeve.</li> </ul>		<ul style="list-style-type: none"> <li>Designing a waistcoat in accordance to a specification linked to set of design criteria.</li> <li>Annotating designs, to explain their decisions.</li> </ul>
		Structures	<ul style="list-style-type: none"> <li>Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.</li> <li>To describe something they want to make / build / construct</li> <li>To say who they are making / building / constructing for</li> <li>To talk about what materials they are going to use when making / building / constructing</li> </ul>	<ul style="list-style-type: none"> <li>Learning the importance of clear design criteria.</li> <li>Including individual preferences and requirements in a design.</li> </ul>	<ul style="list-style-type: none"> <li>Generating and communicating ideas using sketching and modelling.</li> <li>Learning about different types of structures, found in the natural world and in everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a castle with key features to appeal to a specific person/purpose.</li> <li>Drawing and labelling a castle design using 2D shapes, labelling: -the 3D shapes that will create the features - materials needed and colours.</li> <li>Designing and/or decorating a castle tower on computer software.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect.</li> <li>Building frame structures designed to support weight.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a stable structure that is able to support weight.</li> <li>Creating a frame structure with a focus on triangulation.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.</li> </ul>
		Mechanisms/ Mechanical systems		<ul style="list-style-type: none"> <li>Creating a class design criteria for a moving dinosaur.</li> <li>Designing a dinosaur for a specific audience in accordance with design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a toy which uses a pneumatic system.</li> <li>Developing design criteria from a design brief.</li> <li>Generating ideas using thumbnail sketches and exploded diagrams.</li> <li>Learning that different types of drawings are used in design to explain ideas clearly</li> </ul>	<ul style="list-style-type: none"> <li>Designing a shape that reduces air resistance.</li> <li>Drawing a net to create a structure from.</li> <li>Choosing shapes that increase or decrease speed as a result of air resistance.</li> <li>Personalising a design.</li> </ul>	<ul style="list-style-type: none"> <li>Designing a pop-up book which uses a mixture of structures and mechanisms.</li> <li>Naming each mechanism, input and output accurately.</li> <li>Storyboarding ideas for a book</li> </ul>	<ul style="list-style-type: none"> <li>Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement.</li> <li>Understanding how linkages change the direction of a force.</li> <li>Making things move at the same time.</li> <li>Understanding and drawing cross-sectional diagrams to show the inner-workings of my design</li> </ul>	
		Cooking and nutrition	<ul style="list-style-type: none"> <li>Through play, children design and write recipes for healthy food choices.</li> <li>Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Designing smoothie carton packaging by-hand or on ICT software.</li> </ul>	<ul style="list-style-type: none"> <li>Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</li> </ul>	<ul style="list-style-type: none"> <li>Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.</li> <li>Writing an amended method for a recipe to incorporate the relevant changes to ingredients.</li> <li>Designing appealing packaging to reflect a recipe.</li> </ul>			
	Make	Textiles	<ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Use a range of small tools, including scissors, paintbrushes and cutlery.</li> <li>Share their creations, explaining the process they have used.</li> <li>To make / build / construct objects using a variety of materials</li> <li>To join materials together when making / building / constructing</li> </ul>	<ul style="list-style-type: none"> <li>Cutting fabric neatly with scissors.</li> <li>Using joining methods to decorate a puppet</li> <li>Sequencing the steps taken during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Selecting and cutting fabrics for sewing.</li> <li>Decorating a pouch using fabric glue or running stitch.</li> <li>Threading a needle.</li> <li>Sewing running stitch, with evenly spaced, neat, even stitches to join fabric.</li> <li>Neatly pinning and cutting fabric using a template.</li> </ul>		<ul style="list-style-type: none"> <li>Making and testing a paper template with accuracy and in keeping with the design criteria.</li> <li>Measuring, marking and cutting fabric using a paper template.</li> <li>Selecting a stitch style to join fabric.</li> <li>Working neatly by sewing small, straight stitches.</li> <li>Incorporating a fastening to a design.</li> </ul>	<ul style="list-style-type: none"> <li>Using a template when cutting fabric to ensure they achieve the correct shape.</li> <li>Using pins effectively to secure a template to fabric without creases or bulges.</li> <li>Marking and cutting fabric accurately, in accordance with their design.</li> <li>Sewing a strong running stitch, making small, neat stitches and following the edge.</li> <li>Tying strong knots.</li> <li>Decorating a waistcoat, attaching features (such as appliqué) using thread.</li> <li>Finishing the waistcoat with a secure fastening (such as buttons).</li> <li>Learning different decorative stitches.</li> <li>Sewing accurately with evenly spaced, neat stitches.</li> </ul>	

Evaluate	Structures	<ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Use a range of small tools, including scissors, paintbrushes and cutlery.</li> <li>Share their creations, explaining the process they have used.</li> <li>To make / build / construct objects using a variety of materials</li> <li>To join materials together when making / building / constructing</li> <li>To build / construct structures from a range of materials to a design brief that they have created or been given.</li> </ul>	<ul style="list-style-type: none"> <li>Making stable structures from card, tape and glue.</li> <li>Learning how to turn 2D nets into 3D structures.</li> <li>Following instructions to cut and assemble the supporting structure of a windmill.</li> <li>Making functioning turbines and axles which are assembled into a main supporting structure</li> </ul>	<ul style="list-style-type: none"> <li>Making a structure according to design criteria.</li> <li>Creating joints and structures from paper/card and tape.</li> <li>Building a strong and stiff structure by folding paper.</li> </ul>	<ul style="list-style-type: none"> <li>Constructing a range of 3D geometric shapes using nets.</li> <li>Creating special features for individual designs.</li> <li>Making facades from a range of recycled materials.</li> </ul>	<ul style="list-style-type: none"> <li>Creating a range of different shaped frame structures.</li> <li>Making a variety of free standing frame structures of different shapes and sizes.</li> <li>Selecting appropriate materials to build a strong structure and cladding.</li> <li>Reinforcing corners to strengthen a structure.</li> <li>Creating a design in accordance with a plan.</li> <li>Learning to create different textural effects with materials.</li> </ul>	<ul style="list-style-type: none"> <li>Making a range of different shaped beam bridges.</li> <li>Using triangles to create truss bridges that span a given distance and support a load.</li> <li>Building a wooden bridge structure.</li> <li>Independently measuring and marking wood accurately.</li> <li>Selecting appropriate tools and equipment for particular tasks.</li> <li>Using the correct techniques to saws safely.</li> <li>Identifying where a structure needs reinforcement and using card corners for support.</li> <li>Explaining why selecting appropriating materials is an important part of the design process.</li> <li>Understanding basic wood functional properties.</li> </ul>	<ul style="list-style-type: none"> <li>Building a range of play apparatus structures drawing upon new and prior knowledge of structures.</li> <li>Measuring, marking and cutting wood to create a range of structures.</li> <li>Using a range of materials to reinforce and add decoration to structures.</li> </ul>
	Mechanisms/ Mechanical systems			<ul style="list-style-type: none"> <li>Making linkages using card for levers and split pins for pivots.</li> <li>Experimenting with linkages adjusting the widths, lengths and thicknesses of card used.</li> <li>Cutting and assembling components neatly.</li> </ul>	<ul style="list-style-type: none"> <li>Creating a pneumatic system to create a desired motion.</li> <li>Building secure housing for a pneumatic system.</li> <li>Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.</li> <li>Selecting materials due to their functional and aesthetic characteristics.</li> <li>Manipulating materials to create different effects by cutting, creasing, folding and weaving .</li> </ul>	<ul style="list-style-type: none"> <li>Measuring, marking, cutting and assembling with increasing accuracy.</li> <li>Making a model based on a chosen design.</li> </ul>	<ul style="list-style-type: none"> <li>Following a design brief to make a pop up book, neatly and with focus on accuracy.</li> <li>Making mechanisms and/or structures using sliders, pivots and folds to produce movement.</li> <li>Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result.</li> </ul>	<ul style="list-style-type: none"> <li>Measuring, marking and checking the accuracy of the jelutong and dowel pieces required.</li> <li>Measuring, marking and cutting components accurately using a ruler and scissors.</li> <li>Assembling components accurately to make a stable frame.</li> <li>Understanding that for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles.</li> <li>Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set.</li> </ul>
	Cooking and nutrition	<ul style="list-style-type: none"> <li>Through play, children replicate healthy food choices.</li> <li>Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.</li> <li>Use a range of small tools, including scissors, paint brushes and cutlery;</li> <li>To follow simple instructions to make different foods</li> </ul>	<ul style="list-style-type: none"> <li>Chopping fruit and vegetables safely to make a smoothie.</li> <li>Identifying if a food is a fruit or a vegetable.</li> <li>Learning where and how fruits and vegetables grow.</li> </ul>		<ul style="list-style-type: none"> <li>Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination.</li> <li>Following the instructions within a recipe.</li> </ul>		<ul style="list-style-type: none"> <li>Cutting and preparing vegetables safely.</li> <li>Using equipment safely, including knives, hot pans and hobs.</li> <li>Knowing how to avoid cross-contamination.</li> <li>Following a step by step method carefully to make a recipe.</li> </ul>	
	Textiles	<ul style="list-style-type: none"> <li>Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.</li> <li>Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate;</li> <li>Express their ideas and feelings about their experiences using full sentences, including use of past,</li> </ul>	<ul style="list-style-type: none"> <li>Reflecting on a finished product, explaining likes and dislikes.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluating the quality of the stitching on others' work.</li> <li>Discussing as a class the success of their stitching against the success criteria.</li> <li>Identifying aspects of their peers' work that they particularly like and explaining why</li> </ul>		<ul style="list-style-type: none"> <li>Testing and evaluating an end product against the original design criteria.</li> <li>Deciding how many of the criteria should be met for the product to be considered successful.</li> <li>Suggesting modifications for improvement.</li> <li>Articulating the advantages and disadvantages of different fastening types</li> </ul>		<ul style="list-style-type: none"> <li>Reflecting on their work continually throughout the design, make and evaluate process.</li> </ul>

		Structures	<p>present and future tenses and making use of conjunctions, with modelling and support from their teacher.</p> <ul style="list-style-type: none"> <li>• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>• Share their creations, explaining the process they have used.</li> <li>• To talk about their constructions / products, and what they are pleased with</li> <li>• To talk about their constructions and say how it could be even better</li> <li>• To talk about everyday objects that they like and say why they are good</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't.</li> <li>• Suggest points for improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploring the features of structures.</li> <li>• Comparing the stability of different shapes.</li> <li>• Testing the strength of own structures.</li> <li>• Identifying the weakest part of a structure.</li> <li>• Evaluating the strength, stiffness and stability of own structure</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design.</li> <li>• Suggesting points for modification of the individual designs.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating structures made by the class.</li> <li>• Describing what characteristics of a design and construction made it the most effective.</li> <li>• Considering effective and ineffective designs.</li> </ul>	<ul style="list-style-type: none"> <li>• Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary.</li> <li>• Suggesting points for improvements for own bridges and those designed by others.</li> </ul>	<ul style="list-style-type: none"> <li>• Improving a design plan based on peer evaluation.</li> <li>• Testing and adapting a design to improve it as it is developed.</li> <li>• Identifying what makes a successful structure.</li> </ul>
		Mechanisms/ Mechanical systems	<ul style="list-style-type: none"> <li>• Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.</li> <li>• Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate;</li> <li>• Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.</li> <li>• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>• Share their creations, explaining the process they have used.</li> <li>• To talk about their constructions / products, and what they are pleased with</li> <li>• To talk about their constructions and say how it could be even better</li> <li>• To talk about everyday objects that they like and say why they are good</li> </ul>		<ul style="list-style-type: none"> <li>• Troubleshooting scenarios posed by the teacher.</li> <li>• Evaluating own designs against design criteria.</li> <li>• Using peer feedback to modify a final design.</li> </ul>	<ul style="list-style-type: none"> <li>• Using the views of others to improve designs.</li> <li>• Testing and modifying the outcome, suggesting improvements.</li> <li>• Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating the work of others and receiving feedback on own work.</li> <li>• Suggesting points for improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating the work of others and receiving feedback on own work.</li> <li>• Applying points of improvement to their toys.</li> <li>• Describing changes they would make/do if they were to do the project again</li> </ul>
		Cooking and nutrition	<ul style="list-style-type: none"> <li>• Through play, children test and evaluate their creations.</li> </ul>	<ul style="list-style-type: none"> <li>• Tasting and evaluating different food combinations.</li> <li>• Describing appearance, smell and taste.</li> <li>• Suggesting information to be included on packaging</li> </ul>		<ul style="list-style-type: none"> <li>• Establishing and using design criteria to help test and review dishes.</li> <li>• Describing the benefits of seasonal fruits and vegetables and the impact on the environment.</li> <li>• Suggesting points for improvement when making a seasonal tart.</li> </ul>		<ul style="list-style-type: none"> <li>• Identifying the nutritional differences between different products and recipes.</li> <li>• Identifying and describing healthy benefits of food groups.</li> </ul>	

Threads		R	1	2	3	4	5	6	
Substantive knowledge	Technical	Textiles	<ul style="list-style-type: none"> <li>To know which material would be suitable for a specific purpose.</li> <li>To know what fabric and material is.</li> <li>To know how to set a goal and to know when it has been achieved.</li> <li>To know that 'joining' means connecting two pieces of material together.</li> <li>To know how to self-select media or mix of media to create a self-portrait to display in the classroom.</li> <li>To know that fabric can be joined temporarily.</li> <li>To understand that a template (or fabric pattern) is used to cut out the same shape.</li> </ul>	<ul style="list-style-type: none"> <li>To know that 'joining technique' means connecting two pieces of material together.</li> <li>To know that there are various temporary methods of joining fabric by using staples, glue or pins.</li> <li>To understand that different techniques for joining materials can be used for different purposes.</li> <li>To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.</li> <li>To know that drawing a design idea is useful to see how an idea will look.</li> </ul>	<ul style="list-style-type: none"> <li>To know that sewing is a method of joining fabric.</li> <li>To know that different stitches can be used when sewing.</li> <li>To understand the importance of tying a knot after sewing the final stitch.</li> <li>To know that a thimble can be used to protect my fingers when sewing.</li> </ul>		<ul style="list-style-type: none"> <li>To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro.</li> <li>To know that different fastening types are useful for different purposes.</li> <li>To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions.</li> </ul>		<ul style="list-style-type: none"> <li>To understand that it is important to design clothing with the client/ target customer in mind.</li> <li>To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric.</li> <li>To understand the importance of consistently sized stitches.</li> </ul>
		Structures	<ul style="list-style-type: none"> <li>To know that tape and glue can join materials together and can make structures stronger.</li> <li>To know which material would be suited for a specific purpose i.e. cardboard to create a strong tower due to its properties.</li> <li>To understand that materials can be manipulated for a desired effect.</li> <li>To know that you can use pieces to build different shapes.</li> </ul>	<ul style="list-style-type: none"> <li>To understand that the shape of materials can be changed to improve the strength and stiffness of structures.</li> <li>To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses).</li> <li>To understand that axles are used in structures and mechanisms to make parts turn in a circle.</li> <li>To begin to understand that different structures are used for different purposes.</li> <li>To know that a structure is something that has been made and put together.</li> </ul>	<ul style="list-style-type: none"> <li>To know that shapes and structures with wide, flat bases or legs are the most stable.</li> <li>To understand that the shape of a structure affects its strength.</li> <li>To know that materials can be manipulated to improve strength and stiffness.</li> <li>To know that a structure is something which has been formed or made from parts.</li> <li>To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.</li> <li>To know that a 'strong' structure is one which does not break easily.</li> <li>To know that a 'stiff' structure or material is one which does not bend easily.</li> </ul>	<ul style="list-style-type: none"> <li>To understand that wide and flat based objects are more stable.</li> <li>To understand the importance of strength and stiffness in structures.</li> </ul>	<ul style="list-style-type: none"> <li>To understand what a frame structure is.</li> <li>To know that a 'free-standing' structure is one which can stand on its own.</li> </ul>	<ul style="list-style-type: none"> <li>To understand some different ways to reinforce structures.</li> <li>To understand how triangles can be used to reinforce bridges.</li> <li>To know that properties are words that describe the form and function of materials.</li> <li>To understand why material selection is important based on properties.</li> <li>To understand the material (functional and aesthetic) properties of wood.</li> </ul>	<ul style="list-style-type: none"> <li>To know that structures can be strengthened by manipulating materials and shapes.</li> </ul>
		Mechanisms/ Mechanical systems	<ul style="list-style-type: none"> <li>To know that wheels need to be round to rotate and move.</li> <li>To understand that an action leads to a reaction. i.e. push and pull.</li> <li>To understand how to balance.</li> </ul>		<ul style="list-style-type: none"> <li>To know that mechanisms are a collection of moving parts that work together as a machine to produce movement.</li> <li>To know that there is always an input and output in a mechanism.</li> <li>To know that an input is the energy that is used to start something working.</li> <li>To know that an output is the movement that happens as a result of the input.</li> <li>To know that a lever is something that turns on a pivot.</li> <li>To know that a linkage mechanism is made up of a series of levers</li> </ul>	<ul style="list-style-type: none"> <li>To understand how pneumatic systems work.</li> <li>To understand that pneumatic systems can be used as part of a mechanism.</li> <li>To know that pneumatic systems operate by drawing in, releasing and compressing air.</li> </ul>	<ul style="list-style-type: none"> <li>To understand that all moving things have kinetic energy.</li> <li>To understand that kinetic energy is the energy that something (object/person) has by being in motion.</li> <li>To know that air resistance is the level of drag on an object as it is forced through the air.</li> <li>To understand that the shape of a moving object will affect how it moves due to air resistance.</li> </ul>	<ul style="list-style-type: none"> <li>To know that mechanisms control movement.</li> <li>To understand that mechanisms can be used to change one kind of motion into another.</li> <li>To understand how to use sliders, pivots and folds to create paper-based mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>To understand that the mechanism in an automata uses a system of cams, axles and followers.</li> <li>To understand that different shaped cams produce different outputs.</li> </ul>
	Additional	Textiles							

		Structures		<ul style="list-style-type: none"> <li>To know that a client is the person I am designing for.</li> <li>To know that design criteria is a list of points to ensure the product meets the clients needs and wants.</li> <li>To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity.</li> <li>To know that windmill turbines use wind to turn and make the machines inside work.</li> <li>To know that a windmill is a structure with sails that are moved by the wind.</li> <li>To know the three main parts of a windmill are the turbine, axle and structure.</li> </ul>	<ul style="list-style-type: none"> <li>To know that natural structures are those found in nature.</li> <li>To know that man-made structures are those made by people.</li> </ul>	<ul style="list-style-type: none"> <li>To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse - and their purpose.</li> <li>To know that a façade is the front of a structure.</li> <li>To understand that a castle needed to be strong and stable to withstand enemy attack.</li> <li>To know that a paper net is a flat 2D shape that can become a 3D shape once assembled.</li> <li>To know that a design specification is a list of success criteria for a product.</li> </ul>	<ul style="list-style-type: none"> <li>To know that a pavilion is a decorative building or structure for leisure activities.</li> <li>To know that cladding can be applied to structures for different effects.</li> <li>To know that aesthetics are how a product looks.</li> <li>To know that a product's function means its purpose.</li> <li>To understand that the target audience means the person or group of people a product is designed for.</li> <li>To know that architects consider light, shadow and patterns when designing.</li> </ul>	<ul style="list-style-type: none"> <li>To understand the difference between arch, beam, truss and suspension bridges.</li> <li>To understand how to carry and use a saw safely.</li> </ul>	<ul style="list-style-type: none"> <li>To understand what a 'footprint plan' is.</li> <li>To understand that in the real world, design, can impact users in positive and negative ways.</li> <li>To know that a prototype is a cheap model to test a design idea.</li> </ul>
		Mechanisms/ Mechanical systems			<ul style="list-style-type: none"> <li>To know some real-life objects that contain mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>To understand how sketches, drawings and diagrams can be used to communicate design ideas.</li> <li>To know that exploded-diagrams are used to show how different parts of a product fit together.</li> <li>To know that thumbnail sketches are small drawings to get ideas down on paper quickly.</li> </ul>	<ul style="list-style-type: none"> <li>To understand that products change and evolve over time.</li> <li>To know that aesthetics means how an object or product looks in design and technology.</li> <li>To know that a template is a stencil you can use to help you draw the same shape accurately.</li> <li>To know that a birds-eye view means a view from a high angle (as if a bird in flight).</li> <li>To know that graphics are images which are designed to explain or advertise something.</li> <li>To know that it is important to assess and evaluate design ideas and models against a list of design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>To know that a design brief is a description of what I am going to design and make.</li> <li>To know that designers often want to hide mechanisms to make a product more aesthetically pleasing.</li> </ul>	<ul style="list-style-type: none"> <li>To know that an automata is a hand powered mechanical toy.</li> <li>To know that a cross-sectional diagram shows the inner workings of a product.</li> <li>To understand how to use a bench hook and saw safely.</li> <li>To know that a set square can be used to help mark 90° angles.</li> </ul>
Cooking and nutrition			<ul style="list-style-type: none"> <li>To know how to manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.</li> <li>To recognise different foods as either healthy or unhealthy</li> <li>To know how to use basic cutlery and utensils to make and eat food</li> <li>To know when we make food for other people that it needs to be appealing.</li> </ul>	<ul style="list-style-type: none"> <li>Understanding the difference between fruits and vegetables.</li> <li>To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).</li> <li>To know that a blender is a machine which mixes ingredients together into a smooth liquid.</li> <li>To know that a fruit has seeds and a vegetable does not.</li> <li>To know that fruits grow on trees or vines.</li> <li>To know that vegetables can grow either above or below ground.</li> <li>To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</li> </ul>		<ul style="list-style-type: none"> <li>To know that not all fruits and vegetables can be grown in the UK.</li> <li>To know that climate affects food growth.</li> <li>To know that vegetables and fruit grow in certain seasons.</li> <li>To know that cooking instructions are known as a 'recipe'.</li> <li>To know that imported food is food which has been brought into the country.</li> <li>To know that exported food is food which has been sent to another country.</li> <li>To understand that imported foods travel from far away and this can negatively impact the environment.</li> <li>To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.</li> <li>To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.</li> <li>To know safety rules for using, storing and cleaning a knife safely.</li> <li>To know that similar coloured fruits and vegetables often have similar nutritional benefits.</li> </ul>		<ul style="list-style-type: none"> <li>To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues.</li> <li>To know that I can adapt a recipe to make it healthier by substituting ingredients.</li> <li>To know that I can use a nutritional calculator to see how healthy a food option is.</li> <li>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.</li> </ul>	



Threads		R	1	2	3	4	5	6	
Vocabulary	Technical	<ul style="list-style-type: none"> <li>Technology</li> <li>Tape</li> <li>Record</li> <li>Computer</li> <li>Photograph</li> <li>Push</li> <li>Pull</li> <li>Balance</li> <li>Roll</li> <li>Strengthen</li> <li>Strong</li> <li>Weak</li> </ul>	<ul style="list-style-type: none"> <li>Fabric</li> <li>Glue</li> <li>Hand puppet</li> <li>Safety pin</li> <li>Staple</li> <li>Stencil</li> <li>Template</li> <li>Net</li> <li>Stable</li> <li>Strong</li> <li>Weak</li> <li>Windmill</li> <li>Axle</li> <li>Axle holder</li> <li>Chassis</li> <li>Mechanic</li> <li>Mechanism</li> <li>Wheel</li> </ul>	<ul style="list-style-type: none"> <li>Input</li> <li>Lever</li> <li>Linear motion</li> <li>Linkage</li> <li>Mechanical</li> <li>Mechanism</li> <li>Motion</li> <li>Oscillating motion</li> <li>Output</li> <li>Pivot</li> <li>Reciprocating motion</li> <li>Rotary motion</li> <li>Function</li> <li>Man-made</li> <li>Mould</li> <li>Stable</li> <li>Stiff</li> <li>Strong</li> <li>Structure</li> <li>Weak</li> <li>Fabric</li> <li>Knot</li> <li>Running-stitch</li> <li>Sew</li> <li>Shape</li> <li>Stencil</li> </ul>	<ul style="list-style-type: none"> <li>Net</li> <li>Recyclable</li> <li>Scoring</li> <li>Stable</li> <li>Strong</li> <li>Structure</li> <li>Tab</li> <li>Weak</li> <li>Accurate</li> <li>Applique</li> <li>Cross-stitch</li> <li>Decorate</li> <li>Fabric</li> <li>Patch</li> <li>Running-stitch</li> <li>Seam</li> <li>Stencil</li> <li>Stuffing</li> <li>Function</li> <li>Input</li> <li>Lever</li> <li>Linkage</li> <li>Mechanism</li> <li>Motion</li> <li>Output</li> <li>Pivot</li> <li>Pneumatic system</li> <li>Thumbnail sketch</li> </ul>	<ul style="list-style-type: none"> <li>Aesthetic</li> <li>Cladding</li> <li>Evaluation</li> <li>Frame structure</li> <li>Function</li> <li>Pavilion</li> <li>Reinforce</li> <li>Stable</li> <li>Structure</li> <li>Texture</li> <li>Theme</li> <li>Aesthetic</li> <li>Assemble</li> <li>Evaluation</li> <li>Fastening</li> <li>Mock-up</li> <li>Net</li> <li>Running-stitch</li> <li>Stencil</li> <li>Aesthetic</li> <li>Air resistance</li> <li>Chassis</li> <li>Function</li> <li>Kinetic energy</li> <li>Mechanism</li> <li>Structure</li> </ul>	<ul style="list-style-type: none"> <li>Aesthetic</li> <li>Computer-aided design (CAD)</li> <li>Caption</li> <li>Input</li> <li>Linkage</li> <li>Mechanism</li> <li>Motion</li> <li>Output</li> <li>Pivot</li> <li>Prototype</li> <li>Slider</li> <li>Structure</li> <li>Accurate</li> <li>Annotate</li> <li>Appendage</li> <li>Blanket-stitch</li> <li>Detail</li> <li>Evaluation</li> <li>Sew</li> <li>Shape</li> <li>Stuffing</li> <li>Abutment</li> <li>Arched bridge</li> <li>Beam bridge</li> <li>Coping saw</li> <li>File</li> <li>Mark out</li> <li>Measure</li> <li>Reinforce</li> <li>Set square</li> <li>Suspension bridge</li> <li>Tenon saw</li> <li>Truss bridge</li> </ul>	<ul style="list-style-type: none"> <li>Accurate</li> <li>Assembly-diagram</li> <li>Automata</li> <li>Axle</li> <li>Bench hook</li> <li>Cam</li> <li>Clamp</li> <li>Component</li> <li>Cutting list</li> <li>Diagram</li> <li>Dowel</li> <li>Drill bits</li> <li>Exploded-diagram</li> <li>Finish</li> <li>Follower</li> <li>Frame</li> <li>Function</li> <li>Hand drill</li> <li>Jelutong</li> <li>Linkage</li> <li>Accurate</li> <li>Adapt</li> <li>Annotate</li> <li>Fastening</li> <li>Knot</li> <li>Properties</li> <li>Running-stitch</li> <li>Seam</li> </ul>	<ul style="list-style-type: none"> <li>Sew</li> <li>Shape</li> <li>Thread</li> <li>Mark out</li> <li>Measure</li> <li>Mechanism</li> <li>Right-angle</li> <li>Set square</li> <li>Tenon saw</li> <li>Adapt</li> <li>Apparatus</li> <li>Bench hook</li> <li>Cladding</li> <li>Coping saw</li> <li>Dowel</li> <li>Landscape</li> <li>Measure</li> <li>Modify</li> <li>Prototype</li> <li>Reinforce</li> <li>Sketch</li> <li>Strong</li> <li>Structure</li> <li>Tenon saw</li> <li>Texture</li> <li>Vice</li> <li>Weak</li> </ul>
	Additional	<ul style="list-style-type: none"> <li>Picture</li> <li>Drawing</li> <li>Use</li> <li>Experiment</li> <li>Change</li> <li>Tools</li> <li>Materials</li> <li>Idea</li> <li>Improve</li> </ul>	<ul style="list-style-type: none"> <li>Decorate</li> <li>Design</li> <li>Model</li> <li>Client</li> <li>Evaluation</li> <li>Test</li> <li>Fix</li> </ul>	<ul style="list-style-type: none"> <li>Thimble</li> <li>Pouch</li> <li>Evaluation</li> <li>Accurate</li> <li>Test</li> <li>Natural</li> <li>Survey</li> <li>Template</li> </ul>	<ul style="list-style-type: none"> <li>Exploded-diagram</li> <li>Target audience</li> <li>Target customer</li> <li>Template</li> <li>Detail</li> <li>2D shapes</li> <li>3D shapes</li> <li>Castle</li> <li>Design criteria</li> <li>Evaluate</li> <li>Facade</li> <li>Feature</li> <li>Flag</li> </ul>	<ul style="list-style-type: none"> <li>Design</li> <li>Design criteria</li> <li>Graphics</li> <li>Target audience</li> <li>Target customer</li> <li>Template</li> <li>Fabric</li> <li>Book sleeve</li> <li>Inspiration</li> </ul>	<ul style="list-style-type: none"> <li>Wood</li> <li>Test</li> <li>Sandpaper</li> <li>Research</li> <li>Predict</li> <li>Material properties</li> <li>Evaluation</li> <li>Accurate</li> <li>Template</li> <li>Stuffed toy</li> <li>Fabric</li> <li>Design criteria</li> <li>Design</li> <li>Design brief</li> <li>Exploded-diagram</li> <li>Function</li> </ul>	<ul style="list-style-type: none"> <li>User</li> <li>Natural materials</li> <li>Plan view</li> <li>Playground</li> <li>Evaluation</li> <li>Feedback</li> <li>idea</li> <li>Design</li> <li>Model</li> <li>Research</li> </ul>	<ul style="list-style-type: none"> <li>Unique</li> <li>Waistcoat</li> <li>Waterproof</li> <li>Design criteria</li> <li>Detail</li> <li>Fabric</li> <li>Target audience</li> <li>Target customer</li> <li>Template</li> </ul>
	Cooking and nutrition	<ul style="list-style-type: none"> <li>Food</li> <li>Meal</li> <li>Snack</li> <li>Healthy</li> <li>Diet</li> <li>Chop</li> <li>Cut</li> <li>Cook</li> </ul>	<ul style="list-style-type: none"> <li>Blender</li> <li>Carton</li> <li>Fruit</li> <li>Healthy</li> <li>Ingredients</li> <li>Peel</li> <li>Peeler</li> <li>Recipe</li> <li>Slice</li> <li>Smoothie</li> <li>Stencil</li> <li>Template</li> <li>Vegetable</li> </ul>		<ul style="list-style-type: none"> <li>Climate</li> <li>Dry climate</li> <li>Exported</li> <li>Imported</li> <li>Mediterranean climate</li> <li>Nationality</li> <li>Nutrients</li> <li>Polar climate</li> <li>Recipe</li> <li>Seasonal food</li> <li>Seasons</li> <li>Temperate climate</li> <li>Tropical climate</li> </ul>		<ul style="list-style-type: none"> <li>Beef</li> <li>Cross-contamination</li> <li>Diet</li> <li>Ethical issues</li> <li>Farm</li> <li>Healthy</li> <li>Ingredients</li> <li>Method</li> <li>Nutrients</li> <li>Packaging</li> <li>Reared</li> <li>Recipe</li> <li>Research</li> <li>Substitute</li> <li>Supermarket</li> <li>Vegan</li> <li>Vegetarian</li> <li>Welfare</li> </ul>		