



EYFS – Nursery and Reception					
Construction	Chalking, cutting and sticking	Construction	Chalking, cutting and sticking	Construction	
		Nur	sery		
Explore blocks and construction sets  Understand how to use glue to stick materials onto paper	Explore cutting and sticking different materials with support  To show greater control when using a glue stick and glue spreader to stick materials to paper		Continue to develop their knowledge of cutting and how to join different materials using tape and glue  Explore a range of materials with independence		
		Rece	eption		
To explore different types of glue for a range of purposes  Use simple blocks and construction sets for a purpose	Uses simple cutting tools and sticking techniques competently and appropriately.	Share creative ideas with peers and begin to work together, sharing skills.  Constructs with a purpose in mind, using a variety of resources  To be able to safely construct with a purpose and evaluate their designs.	Use tools and techniques with increased care and precision.  To plan, carry out and evaluate and change where necessary.  Manipulates materials to achieve a planned effect.  To identify and select resources and tools to achieve a particular outcome.	Problem solve and reflect on their designs and creations.  To be able to safely construct with a purpose and evaluate their designs.	





Key Stage 1 - Years 1 and 2					
Cycle A			Cycle B		
Structures Baby Bear's Chair	Food Fruit & Vegetables	Mechanisms Making a Moving Storybook	Textiles Puppets	Mechanisms Vehicles	Mechanisms Making a Moving Monster
To explore the concept and features of structures and the stability of different shapes.  To understand that the shape of the structure affects its strength.  To make a structure according to design criteria.  To produce a finished structure and evaluate its strength, stiffness and stability.	To identify if a food is a fruit or a vegetable.  To identify where plants grow and which parts we eat.  To taste and compare fruit and vegetables.  To make a fruit and vegetable smoothie.	To explore making mechanisms.  To design a moving story book.  To construct a moving picture.  To evaluate my finished product.	To join fabrics together using different methods.  To use a template to create my design.  To join two fabrics together accurately.  To embellish my design using joining methods.	To understand how wheels move.  To identify what stops wheels from turning.  To design a moving vehicle.  To build a moving vehicle.	To look at objects and understand how they move.  To look at objects and understand how they move.  To explore different design options.  To make a moving monster.





Lower Key Stage 2 - Years 3 and 4					
Cycle A			Cycle B		
Digital World Mindful Moments Timer	Textiles Egyptian Collar	Electrical System Electrical Poster	Mechanical Systems Pneumatic Toys	Structures Roman Pavilions	Food Eating Seasonally
To create a design criteria for an electronic timer based on analysis of existing products.  To apply understanding of computer programming to instruct and control a Micro:bit to function as a timer.  To design, make and develop a prototype case for my mindful moment timer.  To design a logo for a mindfulness company using computer-aided design.	To learn how to sew cross-stitch and to appliqué.  To develop and use a template.  To assemble fabric parts into a fabric product.  To decorate fabric using appliqué and cross-stitch.	To understand the purpose of information design.  To research a set topic to develop a range of initial ideas.  To develop an initial idea into a final design.  To assemble my final product and incorporate a simple circuit.	To understand how pneumatic systems work.  To design a toy that uses a pneumatic system.  To create a pneumatic system.  To test and finalise ideas against design criteria.	To create a range of different shaped frame structures.  To design a structure.  To build a frame structure.  To add cladding to a frame structure.	To know that climate affects food growth.  To understand the advantages of eating seasonal foods grown in the UK.  To create a recipe that is healthy and nutritious using seasonal vegetables.  To safely follow a recipe when cooking.





		Upper Key Stage	e 2 - Years 5 and 6			
Cycle A			Cycle B			
Food Come Dine With Me	Electrical Systems Doodlers	Textiles Waistcoats	Mechanical Systems Pop-Up Book	Digital World Navigating the World	Structures Bridges	
To research and design a three-course meal.  To prepare a meal using a recipe.  To understand where their food comes from.  To write up a recipe.	To understand how motors are used in electrical products.  To investigate an existing product to determine the factors that affect the product's form and function.  To put findings from research into practice to develop an improved product.  To develop a DIY kit for another individual to assemble their product.	To design a waistcoat.  To mark and cut fabric according to a design.  To assemble a waistcoat.  To decorate your waistcoat.	To design a pop-up book.  To follow my design brief to make my pop-up book.  To use layers and spacers to cover the working of mechanisms.  To create a high-quality product suitable for a target user.	To write a design brief and criteria based on a client request.  To write a program to include multiple functions as part of a navigation device.  To develop a sustainable product concept.  To develop 3D CAD skills to produce a virtual model.  To present a pitch to 'sell' the product to a specified client.	To explore how to reinforce a beam (structure) to improve its strength.  To build a spaghetti truss bridge.  To build a wooden truss bridge.  To complete, reinforce and evaluate my truss bridge.	