



Overview of Topics

Source: Planbee Scheme

	LITTLE ACORNS – to be confirmed					
	Autumn		Spring		Summer	
Year A	MY LITTLE WORLD!	PRINCESSES AND KNIGHTS	DINOSAURS	PIRATES	HOLIDAYS NEAR AND FAR	MINI BEASTS AND MINI WORLDS
Year B	SUPERHEROES!	I LIKE TO PLAY!	THIS IS MY HOME	BABY ANIMALS ON THE FARM	JUNGLE ADVENTURES	LET'S GO SEE...

Area of Design Technology	Stable Structures	Mechanical Systems	Cooking & Nutrition
	Textiles	Programming and electrical systems	Inventions & Achievements

	ACORNS					
	Autumn		Spring		Summer	
Year A	ALL ABOUT ME	CASTLES	AMAZING ANIMALS	ARCTIC ADVENTURES	SUN SEA AND SAND	THE SECRET WORLD OF PLANTS
		Stable Structures Stable Structures		Vehicles Mechanical Systems	Perfect Pizzas (link with Seaside Snacks Y1/2) Cooking & Nutrition	
		<ul style="list-style-type: none"> I can identify the features of toy garages. I know what the word 'stable' means. I can make changes to the design of a stable structure to make it fit for purpose. 		I can investigate a range of vehicles, identifying and labelling their features. <ul style="list-style-type: none"> I know what an axle is. I know what a chassis is. 	<ul style="list-style-type: none"> I can name a variety of pizza toppings. I can use the model of the balanced plate to evaluate how healthy different pizzas are. I can explore different types of bread and 	

		<ul style="list-style-type: none"> • I can explore a range of materials and evaluate the usefulness of their properties for a particular project. • I can explore how to make stable structures that hold a given object. • I can follow a design to make a stable structure. • I know some ways to make a structure more stable. <ul style="list-style-type: none"> • I can evaluate my finished structure against a set of given criteria. 		<ul style="list-style-type: none"> • I can explore different ways of using axles, chassis and wheels to create a moving base. • I can design a vehicle with wheels, axles and chassis, as well as a body. • I can follow a design to make a moving vehicle. <ul style="list-style-type: none"> • I can evaluate my finished moving vehicle. 	<p>evaluate which would work best for a pizza base.</p> <ul style="list-style-type: none"> • I can identify which food group a variety of pizza toppings belong to. • I can sort pizza toppings into groups based on different criteria, e.g. animal vs plant products. • I can explain why each of the food groups is important for a balanced diet. • I can design and make a healthy pizza following given criteria. <ul style="list-style-type: none"> • I can evaluate my finished pizza, saying what I think and feel about it. 	
	SUPERHEROES!	TOYS	HOUSES AND HOMES	GREAT FIRE OF LONDON	OUR AMAZING WORLD	TRAVEL AND TRANSPORT
Year B		Puppets Textiles	Moving Minibeasts Mechanical Systems			Eat More Fruit and Vegetables (link with Teddy Bears Picnic Y1/2) Cooking & Nutrition
		<ul style="list-style-type: none"> • I can explore a variety of puppets, identifying and labelling their features. • I can cut out felt using a simple template. • I can stick pieces of felt together to make a finger puppet. • 	<p>I can make a sliding mechanism out of card.</p> <ul style="list-style-type: none"> • I know what a pivot and lever are. • I can use a pivot and lever mechanism using card and a split pin. • I can make a wheel 			<p>I can name a variety of fruits and vegetables.</p> <ul style="list-style-type: none"> • I can use adjectives to describe the taste, smell and texture of a variety of fruits and vegetables. • I know that some fruits and vegetables need to

		<p>I can add pieces of felt and other materials to a finger puppet to create features, such as eyes, hats and mouths. • I can use running stitch to join two pieces of fabric together. • I can use overstretch to join two pieces of fabric together. • I can sew a button onto a piece of fabric. • I can design a glove puppet for a particular purpose. • I can follow a design to make a glove puppet by sewing two pieces of fabric together and adding decorations. • I can evaluate my finished glove puppet by identifying what went well and what could be improved.</p>	<p>mechanism using card and a split pin. • I can match a mechanism to the type of movement they produce. • I can design a moving minibeast picture to include a variety of moving mechanisms. • I can follow a design to create a moving minibeast picture for a particular purpose. • I can evaluate my finished moving minibeast picture by identifying things that worked well and things that could be improved.</p>			<p>be washed, cut, cored, peeled or grated before they can be eaten.</p> <ul style="list-style-type: none"> • I understand basic food hygiene, e.g. washing hands, tying long hair back and keeping surfaces clean. • I can use a knife to cut some fruits and vegetables in different ways. • I can grate an apple and a carrot. • I can peel a banana, apple and cucumber.
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OAK CLASS						
	Autumn		Spring		Summer	
Year A	Here We Are!	Out of the Shadows	Third Rock from the Sun	Beyond our wildest Imagination	Ruthless Romans	Nurturing Nature
		British Inventors Y3 Stable Structures Inventions & Achievements	Bird House Builders Y6 Stable Structures			Making Mini Greenhouses Y4 Stable Structures
		<ul style="list-style-type: none"> • I can explain how concrete is used to make structures more stable. • I can create a structure strong enough to hold a dictionary using just newspaper and tape. <p>I can explain about the invention of the mackintosh. • I can investigate ways of making fabric waterproof. • I can explain about the invention of the world wide web. • I can describe how the invention of the internet has changed the world.</p>	<ul style="list-style-type: none"> • I can investigate the appearance and function of a variety of different bird houses. • I can identify what materials have been used to construct a variety of bird houses and suggest how the parts have been joined together. • I know what a flat pack diagram is and can use it to identify each part of a structure. • I can create a flat pack diagram of a constructed bird house. • I can draw an exploded diagram. • I can identify the tools associated with basic woodworking. • I can measure, clamp, saw, sand and join wood. • I can use a hand drill to drill a hole in a piece of wood. • I know the 			<p>I know what a greenhouse is and how they work. • I can explore a range of different greenhouses. • I know how greenhouses are used today. • I can explain how the shape of a structure affects its stability. • I know that the weight of the structure needs to be evenly spread on the base to make it secure. • I know that the wider a structure's base is, the more stable it will be. • I can use 3D nets to explore potential structures for a greenhouse, assessing their stability. • I can investigate ways of making a structure more stable, e.g. by inserting dowelling or adding</p>

			<p>safety rules I need to follow when doing woodwork. • I can design a bird house for a particular bird, taking into account the bird's needs. • I can select appropriate tools and materials to use when making a bird house. • I can create a sturdy bird house frame using wood. • I can evaluate my finished bird house, taking into account the views of others to improve my work. • I can use observation to evaluate the effectiveness of my bird house.</p>			<p>triangles at the joins. • I can experiment with a range of materials to test which would be most appropriate for making the structure of a mini greenhouse. • I can design a mini greenhouse using specific design criteria. • I can select appropriate tools and materials to make a mini greenhouse. • I can follow my design to make a mini greenhouse. • I can evaluate my finished mini greenhouse for stability, effectiveness and visual appeal.</p>
Year B	Fighting Fit	May the Force Be with You	Battles, Blackouts and Blitz	Extreme Earth	The Indus Valley	The Art of South America
		Fashion and Textiles Y5 Textiles	Light Up Signs Y3 Programming and electrical systems		Programming Pioneers Y6 Programming and electrical systems Inventions & Achievements	
		I can explain the process of turning raw cotton into cloth. • I know that products that are woven together are called textiles. • I know that different textiles have different properties, and can match these to their	<p>• I can explore and analyse illuminated signs. • I can create a simple circuit with incandescent bulbs and a switch. • I can describe the difference between an LED and an incandescent light bulb.</p>		I can explain how computers and computer programs are used in a variety of products. • I can explain how modern memory chips work to store information. • I can write an algorithm to	

purpose. • I can identify straight stitch, zigzag stitch, whip/blanket stitch, blind stitch, buttonhole stitch and overlock stitch on a variety of ready-made garments. • I can describe what the job of a fashion designer entails. • I can sew a basting stitch. • I can sew a whip stitch. • I can sew a hem. • I can sew back stitch. • I can sew an appliqué decoration. • I can use back stitch to embroider. • I know what a pattern piece is and why they are important when designing a garment. • I can design a drawstring bag, including the necessary pattern pieces. • I can use pattern pieces to measure, mark, cut and sew fabric. • I can sew design elements according to design criteria. • I can join two pieces of fabric by hand sewing, using an appropriate stitch. • I can evaluate my finished product against a set of design criteria.

• I can create a simple circuit with an LED bulb and a resistor. • I can make a circuit with a string of LED lights. • I can design an illuminated light box against a set of design criteria. • I can select materials, tools and components to create a free-standing structure. • I can make a stable, free-standing structure to house an electrical circuit. • I can strip, twist and join wire to make permanent connections. • I can insert an electrical circuit into a free-standing structure to create an illuminated light box. • I can evaluate the effectiveness of my finished product against the design criteria

suggest how various appliances might work. • I know what a computer engineer is and what they do. • I can describe some examples of how computer hardware and software specialists work together to create new products. • I can develop and build a prototype pedestrian crossing using computer programming. • I can develop, model and communicate ideas for an embedded system which monitors and controls a door, room or both. • I can describe the typical design process for computer-controlled electronic products. • I can debug errors in an algorithm. • I can suggest ways to change an algorithm to improve a system. • I can select and use electronic components to construct a prototype of an embedded computer-controlled room system. • I can evaluate my design for a computer-controlled system and consider the

					<p>views of others to improve my work.</p> <p>I know that Charles Babbage created the first mechanical computer. • I know that Ada Lovelace is referred to as the world's first computer programmer.</p> <p>• I know that Steve Jobs and Steve Wozniak co-founded Apple, Inc. to make the first Apple computers.</p>	
Year C	The Game of Survival	The Vikings	A Giant Leap for Humankind	Water Everywhere	Listen Up!	The Rainforest
		Chinese Inventions Y5 Mechanical Systems Inventions & Achievements	Building Bridges Y5 Stable Structures			Seasonal Food Cooking & Nutrition
		<ul style="list-style-type: none"> • I explore how different transmissions create different movements. • I can use a crank to change the motion on a transmission from circular to linear motion. <p>I can explain how the invention of paper helped shape the world.</p> <ul style="list-style-type: none"> • I can explain the traditional method for making paper. • I can test a variety of types of paper for strength, absorbency, opacity, etc. 	<ul style="list-style-type: none"> • I know what beams and pillars are and how they are used in bridge construction. • I can predict which beams will be strongest from their cross-section. • I can test the strength of different beam shapes using paper and card. • I can explain what a truss is and how trusses make bridges stronger. • I can identify the three types of trusses commonly used in bridge design. • I can build a truss bridge 			<p>I can explain what the term 'seasonal food' means.</p> <ul style="list-style-type: none"> • I know that different parts of the world have different seasonal food. • I can discuss the benefits and problems of unseasonal food being available in shops all year round. • I know that some foods, like wheat, are available all year round in the UK. • I can practise cooking skills including slicing, dicing, beating, whisking, folding,

• I can make recycled paper. • I know how gunpowder was invented. • I can explain how the invention of gunpowder helped shape the world. • I can explain how the invention of the compass changed the world. • I can make a hanging/floating compass. • I can design and label my own compass. • I can explain what water-powered machines are and how they helped change the world. • I can explain why kites were first invented and how they were made. • I can make a variety of kite prototypes and test their effectiveness. • I can design, make and evaluate a kite according to specific design criteria.

spanning a width of 40cm using paper straws. • I can use a fair test to evaluate the strength of my truss bridge. • I can explain how arches work to make bridges stronger. • I can test the arch heights to see which can bear the most load. • I can make an arch frame. • I can explain how suspension bridges use tension forces to work. • I can design, make and evaluate a prototype suspension bridge using a scale of 1:100 according to specific design criteria

sieving, rolling and grating. • I can follow a recipe to make fairy cakes. • I can describe the cycle of wheat production in the UK. • I can distinguish between fruits that are grown in the UK and those that are grown abroad. • I know how food producers can speed up or slow down the ripening process to make fruits and vegetables available all year round. • I can follow a recipe to make fruit tarts using seasonal fruit. • I can follow a recipe to make stuffed peppers. • I know some of the nutrients we get from fruits, vegetables, meat, fish and dairy products. • I know when certain meats are in season in the UK and which are available all year round. • I can follow a recipe to make meatballs. • I know some vegetarian options that provide the same nutrients as meat. • I can explain how fish are caught or reared, processed and used in

						healthy meals. • I can use what I have learnt about seasonal food to design healthy meals and menus.
Year D	The Art Of Being Human	The Battle of Shrewsbury	It's Electric	Crash, Bang, Wallop!	Ancient Greece	Classification Connoisseurs
		Seasonal Stocking Y4 Textiles		Story Books Y3 Mechanical Systems		Burgers Y6 Cooking and Nutrition
		I can explain the difference between the function and visual appeal of a product. • I can evaluate the function and visual appeal of a variety of Christmas stockings. • I can use pins to temporarily fasten two pieces of fabric together. • I can use running stitch, back stitch, over stitch and zigzag stitch to join two pieces of fabric together. • I can hide the finishing knot. • I can identify a variety of decorative techniques that have been used to decorate Christmas stockings. • I can sew a button, bead, sequin or pipe cleaner onto a piece of fabric. • I can embroider shapes and patterns into a piece of		I can explore moving parts in storybooks, suggesting how they work and what purpose they serve. • I can explain what the words 'linkage', 'pivot', 'rotate' and 'lever' mean. • I can use a paper concertina to make an object pop out of a book. • I can arrange and stick paper between pages to create a pop-out. • I can use levers to create moving parts. • I can create moving wheel mechanisms to create different effects. • I can experiment with different fonts and graphic design features. • I can design pages of a storybook to include moving mechanisms and appropriate graphic features. • I can follow my designs to create a		I know that most foods we buy have nutrition labels to help us make informed choices about what we eat. • I know that calories come from fats, proteins and carbohydrates. • I can evaluate how healthy a burger is based on its nutrition label. • I can compare different burgers and assess which is healthiest. • I can explain some of the different ways in which burger patties are cooked. • I can follow a recipe to make a beef, turkey or vegetable burger patty. • I can add ingredients to a basic burger patty to reflect global cuisine. • I can follow a recipe to make different burger sauces, including salsa, tzatziki and barbecue sauce. • I

		<p>fabric. • I can use appliqué to add decoration to a piece of fabric. • I can design a Christmas stocking incorporating a range of decorative techniques. • I can use a template to cut out front and back pattern pieces. • I can follow a design to create a Christmas stocking. • I can evaluate the function and visual appeal of my finished Christmas stocking.</p>		<p>storybook with moving mechanisms. • I can evaluate how well my moving mechanisms work. • I can evaluate the overall effectiveness of my storybook</p>		<p>can design a burger menu to incorporate different patties, sides and sauces. • I can explore, taste and assess different types of bread and their suitability for a burger bun. • I can offer suggestions for some alternatives for bread. • I can add mixtures of herbs and spices to a basic bread dough to make flavoured burger buns. • I can design a burger for a particular purpose. • I can design a burger for someone with particular dietary requirements. • I can make and evaluate a burger, following my recipe and design.</p>
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