

**Design and Technology**



Cycle A	1	2	3	4	5	6
	Time Travel	Planet Earth	Heroes and Villains	What's in the News?	Food for Thought	Incredible Humans
	EY	<p align="center"><u>Celebrations</u></p> <p><b>Adult Focussed Activity:</b> Cutting</p> <p><b>Overview:</b> Building on cutting skills developed through Autumn 1, the children will focus on cutting different shapes and along different lines (both curved and straight) with increasing control and precision. They will continue to practise using scissors safely and accurately.</p> <p><b>Continuous Provision:</b> Various cutting activities linked to celebrations will be found within the creative areas in the classroom.</p>	<p align="center"><u>Down on the Farm</u></p> <p><b>Adult Focussed Activity:</b> 3D Work</p> <p><b>Overview:</b> The children will work towards making animal puppets to retell a story.</p> <p><b>Continuous Provision:</b> The children will have access to a variety of materials and tools within their creative areas so that they can practise their cutting and joining techniques.</p>	<p align="center"><u>Get Growing</u></p> <p><b>Adult Focussed Activity:</b> Textiles and Materials</p> <p><b>Overview:</b> The children will practise their weaving skills, using natural and man-made materials.</p> <p><b>Continuous Provision:</b> The children will have access to different materials and textiles within their creative areas. They will be able to explore the use of different materials.</p>		
	1/2	<p align="center"><u>Hidden Habitats: Bug Hotels</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> The children will construct bug hotels, using a saw and bench hook with the support of an adult to cut wood safely. They will practise tearing, cutting, folding and curling when making the elements to go inside their bug hotels.</p> <p><b>Links to prior learning:</b> The children will have practised cutting and joining techniques in the Early Years, mainly working with paper and card. This unit develops the children's skills as they start to work with wood.</p>	<p align="center"><u>Save the Rainforests: Making a Stuffed Toy Animal</u></p> <p><b>Focus:</b> Sewing</p> <p><b>Overview:</b> The children will practise their sewing skills during this unit of work. They will begin by cutting out their fabric, within a centimetre of the edge of the template, before using running stitch to join their fabric. The final outcome will be a stuffed toy rainforest animal.</p> <p><b>Links to prior learning:</b> The children will have previously practised their sewing and weaving skills during the Early Years. Addition opportunities for practising the running stitch take place in KS1 during Cycle B, when the children make their own section of a patchwork quilt.</p>	<p align="center"><u>Take me to Italy: Cooking a Pasta Sauce</u></p> <p><b>Focus:</b> Food Technology</p> <p><b>Overview:</b> During this theme, the children will learn how to cut, peel and grate ingredients safely and hygienically. They will practise measuring out ingredients using measuring cups and/or electronic scales. With the help of an adult, they will sauté their ingredients to make a delicious pasta sauce.</p> <p><b>Links to prior learning:</b> Throughout the Early Years, the children will have taken part in work involving healthy eating. In addition to this unit of work, the children will also practise their cooking skills in KS1 during Cycle B, when they make a healthy pizza.</p>		
	3/4	<p align="center"><u>Up in Smoke: Erupting Volcanoes</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> During this theme, the children will design and make an erupting volcano. When designing their product, they will create annotated sketches with cross-sectional diagrams. To make the outer cone for the volcano, the children will learn how to use a safety scalpel to cut along a line accurately and neatly. They will also learn how to join two sides of cards together by making a slit and a tab.</p> <p><b>Links to prior learning:</b> The main skills learned during this unit of work are preceded by the skills learned when making pop-up cards in KS1. In KS1, the children will have been practising their accurate cutting and joining skills. Further opportunities to develop cutting skills take place in LKS2 when the children make snapping crocodiles.</p>	<p align="center"><u>Our City: Making an Anderson Shelter</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> During this unit of work, the children will design and make an Anderson shelter, linking to their history unit from last half term and their geography unit from this half term. The children will produce annotated sketches with cross-sectional diagrams whilst planning their design. They will create their Anderson shelters from wood, building on the woodwork skills that they learned in Key Stage One. In addition to this, the children will apply their knowledge of electrical circuits to add a light to their shelter.</p> <p><b>Designer:</b> Thomas Edison (Lightbulb Designer)</p> <p><b>Links to prior learning:</b> The children will have previously cut and joined wood when making bug hotels in KS1. Skills are also built upon during the design unit. The children learned about cross-sectional diagrams in the previous term.</p>	<p align="center"><u>Chocolate – Is It Worth It? Making Chocolates</u></p> <p><b>Focus:</b> Food Technology</p> <p><b>Overview:</b> This half term, the children will make their own mini bar of chocolate. They will extend their learning from Key Stage One, moving from the use of digital scales to analogue scales to weigh out their ingredients. The children will practise following steps from a recipe, and they'll learn how to safely melt chocolate by using a saucepan to simmer water.</p> <p><b>Links to prior learning:</b> In KS1, the children learned how to safely sauté ingredients in a pan, with support. They will be able to recap the safety information that they learned during KS1 when boiling water to melt the chocolate. The children will also have studied how to read scales during their maths lessons. In KS1, they will have learned how to read scales in increments of 2, 5 and 10. In LKS2, they read scales in 25s.</p>		
5/6	<p align="center"><u>Disaster! Designing an Earthquake-Proof Bridge</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> Building on learning from Key Stage One and Lower Key Stage Two, the children will continue to develop their woodwork skills. Whilst designing an earthquake-proof structure, such as a bridge, the children will learn how to use a mitre block to safely cut wood at an angle. They will measure and mark out their wood using protractors.</p> <p><b>Designer:</b> Robert Stephenson (Bridge Designer)</p> <p><b>Links to prior learning:</b> In Y3/4, when designing an Andersen Shelter, the children were introduced to how triangles are used for strength. The children also practised woodwork skills during this LKS2 unit. Learning how to cut wood at an angle, using a mitre block, is new learning in Y5/6. There is a further opportunity to practise this skill in Cycle B.</p>	<p align="center"><u>Our Changing World: Designing an Eco House</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> During this unit of work, the children will refine their design skills, creating annotated sketches and exploded diagrams when planning their own eco house. They will practise the accuracy of their cutting and measuring skills when creating nets to use to construct their houses. They will also apply their knowledge of electrical circuits when adding lightbulbs and a doorbell to their buildings.</p> <p><b>Links to prior learning:</b> In Y3/4, the children learned how to create annotated sketches and cross-sectional diagrams. Creating exploded diagrams is new learning for the children in Y5/6. In Y3/4, the children learned how to use a safety scalpel to cut slits and tabs, so this learning can be re-applied during this unit of work.</p>	<p align="center"><u>The Great Southcoates Bake Off: Making Hull Fair Brandy Snap</u></p> <p><b>Focus:</b> Food Technology</p> <p><b>Overview:</b> The children will be learning how to prepare for following a recipe, gathering together their own ingredients and utensils, before making their own Hull Fair themed brandy snap!</p> <p><b>Links to prior learning:</b> In KS1, the children learned how to safely sauté ingredients, with support. In LKS2, the children learned how to safely boil water. Their learning is extended in this theme as the children will learn how to dissolve butter and sugar safely, ensuring that the mixture doesn't crystallise!</p>			

		1 Kings and Queens	2 A Drop in the Ocean	3 A Stitch in Time	4 A Helping Hand	5 Battle of the Authors	6 Survival of the Fittest
Cycle B	EY	<p align="center"><u>Celebrations</u></p> <p><b>Adult Focussed Activity:</b> Cutting</p> <p><b>Overview:</b> Building on cutting skills developed through Autumn 1, the children will focus on cutting different shapes and along different lines (both curved and straight) with increasing control and precision. They will continue to practise using scissors safely and accurately.</p> <p><b>Continuous Provision:</b> Various cutting activities linked to celebrations will be found within the creative areas in the classroom.</p>		<p align="center"><u>Down on the Farm</u></p> <p><b>Adult Focussed Activity:</b> 3D Work</p> <p><b>Overview:</b> The children will work towards making animal puppets to retell a story.</p> <p><b>Continuous Provision:</b> The children will have access to a variety of materials and tools within their creative areas so that they can practise their cutting and joining techniques.</p>		<p align="center"><u>Get Growing</u></p> <p><b>Adult Focussed Activity:</b> Textiles and Materials</p> <p><b>Overview:</b> The children will practise their weaving skills, using natural and man-made materials.</p> <p><b>Continuous Provision:</b> The children will have access to different materials and textiles within their creative areas. They will be able to explore the use of different materials.</p>	
	1/2	<p align="center"><u>Penguin Parade: Pop-Up and Moving Cards</u></p> <p><b>Focus:</b> Mechanisms</p> <p><b>Overview:</b> During this theme, the children will be making cards with moving parts, to sell at the Christmas Fair! The children will practise their measuring and cutting skills, measuring to the nearest centimetre to create a simple mechanism for their card. The children will create a slider to make a penguin move across their design. They will also practise their shaping techniques, using tearing, folding and curling to create different elements for their cards.</p> <p><b>Links to prior learning:</b> The children will have practised cutting and joining techniques in the Early Years, mainly working with paper and card. This unit extends the children's knowledge as they will start to learn about sliders and pop-up mechanisms.</p>		<p align="center"><u>Magical Memories: Sewing a Patchwork Quilt</u></p> <p><b>Focus:</b> Sewing</p> <p><b>Overview:</b> In this theme, the children will be making a piece of a patchwork quilt. The children will engage in discussions at the planning stage, talking about the different elements that they would like to include in their design. They will then practise cutting fabric, to within a centimetre of the edge of a template, before using a running stitch to join their pieces of material together.</p> <p><b>Links to prior learning:</b> The children will have previously practised their sewing and weaving skills during the Early Years. Addition opportunities for practising the running stitch take place in KS1 during Cycle A, when the children make their own stuffed animal toy.</p>		<p align="center"><u>Predators: Making Predator Pizzas</u></p> <p><b>Focus:</b> Food Technology</p> <p><b>Overview:</b> Predator Pizzas are on the menu in this theme! The children will learn to cut, peel and grate ingredients safely and hygienically, following a simple recipe to cook their own pizzas. The children will make their own tomato base for the pizza by safely sauteing their ingredients.</p> <p><b>Links to prior learning:</b> Throughout the Early Years, the children will have taken part in work involving healthy eating. In addition to this unit of work, the children will also practise their cooking skills in KS1 during Cycle A, when they make a tasty pasta sauce.</p>	
	3/4	<p align="center"><u>Searching for Jellyfish: Creating a Ship's Crane</u></p> <p><b>Focus:</b> Mechanisms</p> <p><b>Overview:</b> In this unit, the children will be learning about how pulley systems and cams can be used to create moving parts. The children will design and make their own crane for a ship, using a pulley system to make their crane move.</p> <p><b>Designer:</b> Archimedes. (The children will learn how Archimedes influences the development of early pulley systems.)</p> <p><b>Links to prior learning:</b> This is the children's first introduction to pulley systems. However, in KS1, they were introduced to simple mechanisms when adding sliders to their pop-up cards. The children will also look at different types of mechanisms later in the year, when they make snapping crocodiles!</p>		<p align="center"><u>The Romans: Sewing a Roman Purse</u></p> <p><b>Focus:</b> Sewing</p> <p><b>Overview:</b> The children will be building on the sewing skills that they learned in Key Stage One. They will practise threading their own needles and cutting their fabric out neatly, to within half a centimetre of the edge of a template. They will learn how to use 'right sides together' to create a neatly finished edge whilst making a Roman purse. The children will learn how to use a backstitch to join their fabric together.</p> <p><b>Links to prior learning:</b> The children learned how to use the running stitch in KS1. In LKS2, it is their first opportunity to practise threading needles.</p>		<p align="center"><u>Deadly 60: Making a Snapping Crocodile</u></p> <p><b>Focus:</b> Mechanisms</p> <p><b>Overview:</b> During this theme, the children will learn how to use levers and linkages to make a snapping crocodile. They will plan their design using annotate sketches and cross-sectional diagrams before creating their design.</p> <p><b>Links to prior learning:</b> The children have previously learned how to add sliders to pop-up cards. In addition to this, earlier in the year, they were introduced to pulley systems. The children can recap this prior learning when learning how to use linkages and levers in their snapping crocodile design.</p>	
	5/6	<p align="center"><u>The Journey: Creating a Cam Toy</u></p> <p><b>Focus:</b> Mechanisms</p> <p><b>Overview:</b> The children will continue to develop their design skills, using annotated sketches and exploded diagrams to design their own cam toy. During this unit of work, the children will learn about the difference between pulleys and cams. They will decide how to make their vehicle move, considering the use of mechanical and electrical systems.</p> <p><b>Links to prior learning:</b> Previous D&amp;T learning in Y3/4 introduced the children to pulleys, linkages and levers. Learning about cams is new learning for the children in Y5/6.</p>		<p align="center"><u>Shakespeare: Creating an Elizabethan Costume Accessories</u></p> <p><b>Focus:</b> Sewing</p> <p><b>Overview:</b> The children will continue to develop their sewing skills during this theme, whilst making their own Elizabethan costume accessory. The children will carefully consider how to create a professional looking finish for their design, learning how to use layers to stiffen their fabric and how to use a blanket stitch for a neat edge.</p> <p><b>Links to prior learning:</b> In KS1, the children learned how to use the running stitch. In Y3/4, they were introduced to the backstitch. They also practised threading their own needle. Learning the blanket stitch and how to tie a knot is new learning for the children this year.</p>		<p align="center"><u>Running Wild: Creating a Shelter</u></p> <p><b>Focus:</b> Construction</p> <p><b>Overview:</b> Building on from the Anderson Shelter that the children designed and made in Lower Key Stage Two, during this unit of work, the children will be extending their skills by using a mitre block to safely cut wood at an angle whilst making their own shelter.</p> <p><b>Links to prior learning:</b> Woodwork skills have previously been taught in KS1, when making a bug hotel, and LKS2, when making an Andersen Shelter. The learning is extended in UKS2 as the children learn how to use a mitre block to cut wood at an angle.</p>	