

DESIGN TECHNOLOGY CURRICULUM MAP

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
RECEPTION	ALL ABOUT ME Sharing Information About Myself Joining different materials to build houses and homes and working together to design and create large-scale road maps.	CELEBRATIONS Diwali, Bonfire Night, Christmas Joining materials to make a 3D rocket, and designing with felt to add detail to fabric	ICE KINGDOMS The Arctic and the North Pole Using different tapes and glues to strengthen and add detail to designs, and exploring simple mechanisms to make a moving mode of transport.	TRADITIONAL TALES Fairy Tales and Nursery Rhymes Exploring threading and weaving, and following a simple healthy recipe, adding detail to the finished food.	GROWING AND CHANGING Life Cycles Adapting and evaluating ideas to make farm buildings and animal enclosures, and exploring recycled materials to design and create a bee hotel	SUN, SEA & SAND The Seaside, Under the Sea and Joining recycled materials to make a floating boat and using ink dye to create patterns and effects on fabric.
	Mechanisms Wheels and Axles Learning about the key parts of a wheeled vehicle, the children develop an understanding of how wheels, axles and axle holders work while designing and making a moving vehicle.		Structures: Stable structures Exploring how structures can be made more stable with a wide base and extra weight added to the base, the children will apply these skills in designing and making a stable pencil pot for a Year 1 pupil.			Cooking and nutrition: Balanced Diet (Y2 unit) Learning about the importance of a balanced diet and using that knowledge to create a tasty wrap, this unit includes new lessons with both teacher and pupil videos.
YEAR 1			Structures: A chair for a bear Explore stability and methods to strengthen structures, to understand Baby Bear's chair weaknesses and develop an improved solution for him to use.		Mechanisms: Fairground wheel Building a rotating fairground wheel with a free-standing structure, this unit offers a simplified wheel design made from repurposed materials.	Textiles: Pouches Learn how to sew a running stitch ready to design, make and decorate a pouch using a template
		Cooking and nutrition: Eating seasonally Learning about seasonal foods and creating a seasonal food tart and develops the children's food preparation skills.		Digital World: Wearable technologies Design, code and promote a piece of wearable technology to use in low light conditions, developing their understanding of programming to monitor and control products to solve a design scenario.		Textiles Cross-stitch and appliqué Learn and apply two new sewing techniques – cross-stitch and appliqué. Utilise these new skills to design and make a cushion or Egyptian collar.
YEAR 2						
YEAR 3						
YEAR 4		Structures Helmets Exploring shell structures and how they are strengthened to protect or contain. Creating a helmet for a specific user and strengthening it using layering.		Mechanical systems: Mechanical cars Making and designing mechanical cars that use different methods of movement		Electrical systems: Torches Applying their scientific understanding of electrical circuits, children create a torch, designing and evaluating their product against set design criteria.
		Mechanical systems: Pop-up book Creating a functional pop-up book using levers, sliders, layers and spacers to create paper-based mechanisms.		Cooking and nutrition: Developing a recipe Learning a simple bolognese recipe and adapting it to improve nutritional content.	Electrical systems: Wobble Doodlers Explore series circuits further and introduce motors. Explore how the design cycle can be approached at a different starting point, by investigating an existing product, which uses a motor, to encourage pupils to problem-solve and work out how the product has been constructed, ready to develop their own	
YEAR 5						
YEAR 6		Textiles Bags Design bags for a specific user using pattern piece templates. Choose features to add to the designs that are aesthetic or functional. Sew features onto the bags, such as fastenings and pockets.		Digital World: Navigating the World Programming a navigation tool to produce a multifunctional device for trekkers. Combining 3D objects to form a complete product in CAD 3D modelling software and presenting a pitch to 'sell' their product.	Cooking and nutrition: Enterprise Projects Use a range of food preparation and cooking skills to devise and cook a diverse menu for paying café customers	