



Blocked Curriculum Overview: Long Term Plan : Design and Technology

	Advent Term		Lent Term		Pentecost Term	
Key Stage 1						
Cycle A 2023-24 2025-26	London Eye Design and create a model of the London Eye; how the different components fit together so that the wheels rotate and the structure stands freely. Select appropriate materials and develop their cutting and joining skills. (Based on the Kappow unit 'Fairground Wheel')		Art		Making a Moving monster Children learn about pivot, lever and linkage; design an animal that will move using a linkage mechanism.	
Cycle B 2022-23 2024-25	Constructing a Windmill Design, decorate and build a windmill for a mouse (client) to live in. Windmills, how they work and key features and functions.	Fruit and Vegetables Handle and explore fruits and vegetables, taste testing to establish chosen ingredients for a smoothie and packaging.	Knight's Chair Make a Knight's chair, fit for a castle. Children a brand new chair, exploring different shapes and materials. When designing the chair, they consider his needs and what he likes. (Based on the Kappow unit 'Baby Bear's Chair')		Puppets Explore different ways of joining fabrics before creating hand puppets based upon characters from a well-known fairytale. Develop technical skills of cutting, gluing, stapling and pinning	
Key Stage 2						
Cycle A 2023-24	What could be healthier? Research and modify a traditional Bolognese sauce recipe to make it healthier. Cook improved versions, creating appropriate packaging and learn about where the ingredients the importance of animal welfare when farming cattle.		Art		Waistcoats Select fabrics, use templates, pin, decorate and stitch materials together to create a waistcoat for a person or purpose of their choosing. Create or use a pattern template.	
Cycle B 2024-25	Torches Pupils apply their scientific understanding of electrical circuits to create an electrical Christmas Card. They design and evaluate their product against set design criteria. (Based on the Kappow unit 'Torches')		Pop up Books Create a four-page pop-up story book design, incorporating a range of functional mechanisms that use levers, sliders, layers and spacers to give the illusion of movement through interaction. (Stand Alone Unit)		Slingshot Car Transform lollipop sticks, wheels, dowel and straws into a moving car. Construct, make the launch mechanism, design and create the chassis of a vehicle using nets. Stand alone unit	
Cycle C 2025-26	Bridges After learning about various types of bridges and exploring how the strength of structures can be affected by the shapes used, create their own bridge and test its durability - using woodworking tools and techniques.		Shelter Exploring building structures, learning about what they are used for and investigate how to create strong and stable structures before designing and creating their own air raid shelter complete with cladding. (Based on the Kappow unit 'Pavilions')		Doodlers Using circuits to design a 'doodler'. 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. (Stand alone unit)	
Cycle D 2022-23	Electronic Charms Design, code, make and promote a Micro:bit electronic charm to use in low-light conditions, developing their understanding of programming to monitor and control products to solve a design scenario		Playground Design and create a model for a new playground featuring five apparatus, made from three different structures. Using a footprint as the base, practise visualising objects in plan view and get creative including natural features.		Eating Seasonally Pupils discover when and where fruits and vegetables are grown and learn about seasonality in the UK. They look at the relationship between the colour of fruits and vegetables and their health benefits by making three dishes.	

Mechanisms Mechanical Systems	Cooking and Nutrition	Structures	Textiles	KS2 only	
				Electrical Systems	Digital World



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