



DESIGN TECHNOLOGY CURRICULUM LTP



YEAR GROUP	AUTUMN	SPRING	SUMMER
EYFS	Design Technology in EYFS begins through developing a love of 'Expressive Arts and Design'. Our pupils develop being imaginative and expressive, crafting and creating with material.		
YEAR 1	<p>Structures Windmills</p> <p>Construct a windmill to complete a request from a user. Develop an understanding of different types of windmill, how they work and their key features. Begin to use technical skills such as making evenly spaced cuts and adding weight to ensure a successful structure.</p> <p>Mechanical Systems Making a Moving Story Book - (Lesson 1)</p>	<p>Textiles Puppets</p> <p>Exploring different ways of joining fabrics before creating their own hand puppets based upon characters from a well-known fairytale. Children work to develop their technical skills of cutting, glueing, stapling and pinning.</p>	<p>Cooking and Nutrition Smoothies</p> <p>Handle and explore fruits and vegetables and learn how to identify fruit, before undertaking taste testing to establish chosen ingredients for a smoothie they will make, with accompanying packaging.</p>
YEAR 2	<p>Structures Baby Bear's Chair</p> <p>Using the tale of Goldilocks and the Three Bears as inspiration, children help Baby Bear by making him a brand-new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is strong.</p>	<p>Mechanical Systems Fairground Wheel</p> <p>Design and create a functional fairground wheel, consider how the different components fit together so that the wheel rotates and the structure stands freely. Select appropriate material properties and develop their cutting and joining skills. Research existing structures and survey to further inform the design.</p>	<p>Mechanical Systems Making a Moving Monster</p> <p>After learning the terms; pivot, lever and linkage, children design a monster which will move using a linkage mechanism. Children practise making linkages of different types and varying the materials they use to bring their monsters to life.</p> <p>Cooking and nutrition: Balanced Diet - (Lesson 1)</p>
YEAR 3	<p>Cooking and Nutrition Eating Seasonally</p> <p>Pupils discover when and where fruits and vegetables are grown and learn about seasonality in the UK. They respond to a design brief to design a seasonal food tart using ingredients harvested in the UK in May and June.</p> <p>Textiles Cross-stitch and Appliqué - (Lesson 1)</p>	<p>Digital World Wearable Technology</p> <p>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.</p>	<p>Structures Constructing a Castle</p> <p>Learning about the features of a castle, children design and make one of their own. Using configurations of handmade nets and recycled materials to make towers and turrets and constructing a base to secure them.</p> <p>Mechanical Systems Pneumatic Toys - (Lesson 1 and/or 2)</p>
YEAR 4	<p>Structures Pavilions</p> <p>Exploring pavilion structures, children learn about what they are used for and investigate how to create strong and stable structures before designing and creating their own pavilions, complete with cladding.</p> <p>Cooking and Nutrition Adapting a Recipe - (Lesson 2)</p>	<p>Mechanical Systems Making a Slingshot Car</p> <p>Transforming lollipop sticks, wheels, dowels and straws into a moving car. Using a glue gun to, making a launch mechanism, designing and making the body of the vehicle using nets and assembling these to the chassis.</p>	<p>Electrical Systems Torches</p> <p>Applying their scientific understanding of electrical circuits, children create a torch, designing and evaluating their product against set design criteria.</p> <p>Textiles Fastenings - (Lesson 1)</p>
YEAR 5	<p>Electrical Systems Doodlers</p> <p>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.</p>	<p>Mechanical Systems Making a Pop-up Book</p> <p>Creating a four-page pop-up storybook design incorporating a range of mechanisms and decorative features, including: structures, levers, sliders, layers and spacers.</p>	<p>Cooking and Nutrition Developing a Recipe</p> <p>Research and modify a traditional bolognese sauce recipe to improve the nutritional value. Cook improved version and create packaging that fits design criteria. Learn about where beef comes from.</p>
YEAR 6	<p>Textiles Waistcoats</p> <p>Selecting suitable fabrics, using templates, pinning, decorating and stitching to create a waistcoat for a person or purpose of their choice.</p>	<p>Structures Playgrounds</p> <p>Designing and creating a model of a new playground featuring five apparatus, made from three different structures. Creating a footprint as the base, pupils visualise objects in plan view and get creative with their use of natural features.</p>	<p>Digital World Navigating the World</p> <p>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.</p>