



DT Overview

	Autumn	Spring	Summer
Year 3	Structures Constructing a castle 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.	Digital World Wearable Technology 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.	Cooking and Nutrition Eating Seasonally 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.
Year 4	Structures Pavilions 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.	Mechanical Systems Making a slingshot car 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.	Electrical Systems Torches Applying their scientific understanding of electrical circuits, children create a torch, designing and evaluating their product against set design criteria.
Year 5	Electrical Systems 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.	Mechanical Systems Gears and Pulleys Investigate the history, mechanics, and uses of gears and pulleys. Construct a gear and pulley system and design an eco-bike that utilises energy from an exercise bike for practical work.	Cooking and Nutrition Developing a Recipe 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.
Year 6	Structures Playgrounds 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.	Textiles Waistcoats Selecting suitable fabrics, using templates, pinning, decorating and stitching to create a waistcoat for a person or purpose of their choice.	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.