

Design & Technology Long term plan



Cycle B – 2021 – 2022

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Brisons Class Year 1/ 2	All about me -	My Memory Box Learn to distinguish between fruit and vegetables and where they grow. Design a fruit and vegetable smoothie and accompanying packaging.	Marvellous mixtures	Our Magical Garden -	Marvellous minibeasts	The local environment Inspired by the song, 'Mouse in a windmill', design and construct a windmill for a client (mouse) to live in. Explore various types of windmill, how they work and their key features.
Longships Class Year ¾	Ancient Egypt Identify and learn about the key features of a castle, before designing and making a recycled-material castle (structure).	Predators	Traders, raiders and settlers	The Deep Blue Identify the difference between electrical and electronic products. Evaluate a range of existing torches and their features, then develop a new functional torch design.	Tremors	The Human Body
Cowloe Class Year 5/6	Space – Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, design, assemble and decorate a waistcoat for a chosen purpose	Crime and Punishment	Frozen planet Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe	Darwin's Delights	Ancient Greece Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms	Rivers -

Cycle A – 2022 – 2023

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Brisons Class Year 1/ 2	Superheroes Explore methods of joining fabric. Design and make a character-based hand puppet using a preferred joining technique, before decorating.	Famous for 5 minutes	The Great Fire of London Explore stability and methods to strengthen structures, to understand Baby Bear’s chair weaknesses and develop an improved solution for him to use.	Where in the World? Design and create a functional Ferris wheel, learn how different components fit together so that the wheel rotates and the structure stands freely.	Amazing animals Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving monster.	Life’s a beach -
Longships Class Year 3/4	Stone Age to iron Age	Potions Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, decorated pavilion	Journey down the Amazon Design, develop a program, house and promote a Micro:bit electronic charm to use in low-light conditions. Using a range of materials, design and make a boat with a working slingshot mechanism and house the mechanism using a range of nets.		Growing Learn about various fruits and vegetables, and when, where and why they are grown in different seasons. Discover the relationship between colour and health benefits.	Local Environment
Cowloe Class Year 5/6	Mayans Learn about the development of exchanging personal messages, to the invention of the Penny Black stamp. Develop an electronic greeting card, using paper-applicable circuit components.			Immigrants and refugees	Blood Heart Design and program a navigation tool to produce a multifunctional device for trekkers using CAD 3D modelling software. Pitch and explain the product to a guest panel.	Local history – Mining Research existing playground equipment and their different forms, before designing and developing a range of apparatus to meet a list of specified design criteria