Year 3 Autumn				
Design NC LOs	 use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make: select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities 			
	 Evaluate: investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world Technical knowledge: apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products. Cooking and Nutrition understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, 			
Topic	Stone, Bronze and Iron Age Britain	Knowledge organiser	2.3 Paper circuits	
Concepts	Technical Knowledge, Practical Knowledge, Design Inspiration	Resources	card, scissors, glue, led light, button switch, copper tape	
Vocabulary	variety, purpose, contain, conjunction, external, inspiration, purpose, user			
Unit	Lesson 1: Paper Circuits (pg. 193)	LO: To develop technical knowledge.		
Development	Lesson 2: Design Inspiration (pg.197) LO: To	LO: To analyse and annotate existing products.		
	LO: To develop and communicate ideas through discussions, annotations, and diagrams.			
	.esson 4: Guided Design (pg. 203) LO: To select and use appropriate materials and cutting tools.			