

Being an Engineer (DT)

NC Coverage and Progression within Curious City Enquiries

KS1		Y1										Y2									
Design	design purposeful, functional, appealing products for themselves and other users based on design criteria																				
	generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology																				
Make	select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]																				
	select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics																				
Evaluate	explore and evaluate a range of existing products																				
	evaluate their ideas and products against design criteria																				
Technical knowledge	build structures, exploring how they can be made stronger, stiffer and more stable																				
	explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products																				
Cooking and nutrition	use the basic principles of a healthy and varied diet to prepare dishes																				
	understand where food comes from																				

KS2		Y3					Y4					Y5					Y6				
Design	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, reared, caught and processed																				

