	Year 7	Year 7	Year 7	Year 7	Year 8	Year 8	Year 8	Year 8	Cross-curricular links with KS3 Computing
Design & Technology Curriculum Map 2022-2023 Years 7/8	Heroes and Villains	Block Bots	Print and pattern	Diet and Health	Mobile Amplifier	Restaurant design	STEM Mechanisms	Meals on Wheels	Cross-curricular miks with Ros companing
Staff				,					
SAK				✓					
CL		✓			\checkmark				
SW	✓								
BLL			\checkmark			✓			
PT <i>G</i>								\checkmark	
JSL							✓		
Material area									
Food				✓					
Graphics	√							✓	
Materials		√			√		√		
Textiles			√			√			
Design & Technology			√			√	√	√	
Band taught in									
X-Band	√	√	√	✓	✓	√	√	✓	
Y-Band	√	√	√	✓	✓	√		✓	
Design									
Use research and exploration, such as the study of different cultures, to identify and understand user needs	✓	✓	✓	✓	√	√	√	✓	 Design and code own game in Construct 2 Design and solve own Python programs
Identify and solve their own design problems and understand how to reformulate problems given to them	✓	✓	✓	✓	✓	✓	√	✓	
Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations					√		✓	✓	
Use a variety of approaches to generate creative ideas and avoid stereotypical responses	✓	✓	✓	✓	✓	✓	✓	✓	
Develop and communicate design ideas using annotated sketches	✓	✓	√		✓	✓	√	✓	Designing annotated posters with links to Environmental considerations and E-Safety
Develop and communicate design ideas using detailed plans				✓	✓		✓	✓	Flowol utilised to design flowcharts and algorithms
Develop and communicate design ideas using 3-D and mathematical modelling	√		✓	✓	✓		√	✓	
Develop and communicate design ideas using oral and digital presentations			✓		✓				
Develop and communicate design ideas using computer-based tools	✓				✓			✓	Powerpoint, Paint 3D, Gimp, Construct 2, Python, Flowol
Make									
Select from and use specialist tools, techniques, processes, equipment and machinery precisely	√	✓	√	√	✓	√	✓	✓	
Select from and use computer-aided manufacture	✓								

Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties	√	√	\checkmark	√	√	√	√	√	
Evaluate									
Analyse the work of past and present professionals and others to develop and broaden their understanding	✓	✓		√	✓	✓	✓	√	
Investigate new and emerging technologies		\checkmark		✓			\checkmark		 Robots and AI research Impact of new technologies (cultural, ethical, legal)
Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups	√	✓	✓	√	√	√	√	√	 Construct 2 Python projects Testing final work for usability
Understand developments in design and technology	√	\checkmark	\checkmark	√	✓	\checkmark	\checkmark	\checkmark	
Understand impact on individuals, society and the environment		√		✓	√	√	√	✓	 Environmental impacts of computing Powerpoint E-Safety/staying safe online
Understand the responsibilities of designers, engineers and technologists			✓	✓	✓	\checkmark	✓	✓	
Technical knowledge									
Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions	✓	✓	√	√	✓	✓	✓	√	
Understand how more advanced mechanical systems used in their products enable changes in movement and force					*		√		
Understand how more advanced electrical and electronic systems can be powered and used in their products					*				
Apply computing and use electronics to embed intelligence in products that respond to inputs and control outputs using programmable components					*			*	MicrobitsMaqueen robots
Cooking and nutrition									
Understand and apply the principles of nutrition and health				✓					
Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet				✓					
Become competent in a range of cooking techniques				✓					
Understand the source, seasonality and characteristics of a broad range of ingredients				✓					

= Delivered as part of the D&T content during Year 9