



DESIGN AND TECHNOLOGY

Course Overview for Years 7, 8 & 9

Year	TERM 1	TERM 2	TERM 3	Home learning
7	Grab toy design and make – focus on mechanics, in particular levers and isometric sketching. Students create a 'grab toy' through using a selection of tools and machinery within the workshop	Catapult make project – focus on using tools and machinery safely. Students use a selection of hand tools and machinery to create a replica onager. Students also learn about ethical design.	STEM: electricity and structures project – focus on understanding electricity and building simple circuits, followed by learning about structures and building and testing a bridge structure	Homework projects are set throughout KS3. One homework project is completed by students per term. Year 7 i) Pop slot toy project ii) Futuristic city design project iii) Branding project
8	Bottle opener and packaging design and make – focus on ergonomics and anthropometrics, with third angle working drawings. Students design and create an ergonomic bottle opener concept with a working drawing to show how the idea might be manufactured	Money box project – focus on using tools and machinery and applying wood joints. Students build a working money box using a selection of tools and machinery. They learn about typeface design to inform their finishing details	Chocolate bar project – focus on Graphic design and net development. Students design and create a chocolate bar with packaging. They use CAD to develop graphics for their idea	Year 8 i) Biomimicry project ii) Egg container design project iii) Bird feeder design project
9	Flat pack furniture design and make – focus on user centred design and manufactured boards within products. Students design and make a concept for a piece of flat pack furniture. They explore	Mackintosh tealight holder project – focus on using source material to influence design ideas and in developing ideas into realisations. Students create a working	Bauhaus architecture project – focus on architectural drawing and modelling. Students learn to draw in 2-point perspective to create ideas for a Bauhaus inspired family	Year 9 i) Robin Day project ii) William Morris project iii) Olympic park project

	<p>typical materials and components that their idea might be made from.</p>	<p>drawing from their design (exploded isometric) and make their idea from their working drawing. They look at the work of mackintosh for inspiration.</p>	<p>home. They study the principles of Bauhaus and import these into their ideas. They select appropriate tools and materials to realise their idea.</p>	
--	---	--	---	--