

Stone Hill School

Curriculum Plan 2020/21

Design Technology Year 8

**Intent:**

All pupils will consider the needs of other people when designing a product.  
 Most pupils will produce their own ideas and develop manual skills when using hand tools.  
 Some pupils will produce good designs, work effectively with hand tools and machines and show some independence in workshop.

Term	Week/s	Topic/Theme <i>Key vocabulary including Tier 3 subject specific words</i>	Learning Outcomes Knowledge and Skills To know, to use, to apply...	Links to: Literacy, Numeracy, SMSC, Gatsby Benchmarks
Half Term 1  Desk Tidy	1-2	Brief / Research / Design Vocabulary: client, requirements, wants, needs,	To design for a client Generation of multiple ideas Drawing to scale 1:1	Literacy – Research Literacy – Write for a purpose
	3-4	Marking out STEAM – Maths Vocabulary: Diameter, radius, millimetre, centimetre, ruler, pair of compasses.	Mark out work accurately in cm Mark out work accurately in mm	Numeracy – Measure length Numeracy – Construct shapes
	5-8	Re-cap Health & Safety Project - construction Vocabulary: Goggles, aprons, safety box, G-cramp.	Use a range of hand tools safely Use the pillar drill effectively Use the belt sander independently Smooth work using abrasive paper	SMSC – Personal safety / PPE Numeracy – addition / subtraction of materials / wastage
Half Term 2  Desk Tidy		Project - assembly Evaluation Vocabulary: client, survey, quality, evaluate, improvements.	Joining – glue, screw, bolt, assemble Finishing – Paint, Polish, Perfection Evaluation of outcome Does it hold the required items ?	Literacy – Listen to an opinion / Present information and opinions
Half Term 3  Electronic Dice		Project – Electronic dice Electronics STEAM – Maths STEAM – Science: Electronics / Thermoplastics Vocabulary: solder, component, resistor, printed circuit board.	Mark out work accurately in mm Can populate board with components Can solder independently Can use fault finding flow chart Can smooth / polish net Can bend into shape using heater Can assemble parts together Can make base fit (push-fit)	Literacy – Develop vocabulary Gatsby benchmark 4: Linking curriculum learning to careers.

**Impact:** Pupils will build on the basics learnt in Year 7 and start to develop practical skills, knowledge and experience to allow them to be more independent when they reach Year 9. The Electronic Dice project is an introduction to electronics and soldering in preparation for the MP3 Amplifier in Year 10.

**Note:** Each Year 8 class will get three half terms in Technology and three half terms in Food Technology.