

Intent:
 All pupils will understand safety rules in workshop and experience using a range of tools to produce an outcome.
 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 begin to 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 Health & Safety Using Plastics	1 - 2	Health and Safety in the workshop Vocabulary: Safety rules, PPE, Risk, Hazards,	To understand and adhere to rules To produce a safety poster	Literacy: Take part in discussion / Write with support SMSC: Health and safety
	3 - 4	Introduction to working with plastics Vocabulary: Acrylic, Foamex, Hard/soft, dull/shiny, flexible/stiff, clear/coloured.	Know how to mark out work accurately To use a Junior Hacksaw effectively To use a file correctly	Numeracy: Measure length
	5 - 8	Design and make activity: Key Fob project Vocabulary: Situation, Brief, Task, skills, tools, machines.	To smooth work using wet + dry paper To use the belt sander independently To use the pillar drill safely To polish work on buffing machine Introduction to what the laser cutter can do	Literacy: Write for a purpose Numeracy: Construct shapes STEAM: Industrial practices
Half Term 2 Structures	9 - 11	Bridges: Build a KNEX version of a famous bridge Vocabulary: Instructions, teamwork, roles, quality control.	Can follow pictorial instructions Can work as part of a small team Can build a structure using KNEX	SMSC: Working in a team STEAM: Civil Engineering
	12 - 15	Structures: Design and build a tall paper tower / strong bridge Vocabulary: Struts, ties, triangles, stress, load, testing, deform, fail.	Can design a structure Can work as part of a small team Can build a structure using paper straws	SMSC: Working in a team Gatsby Benchmark 4: Linking curriculum learning to careers.
Half Term 3 Graphics	16 - 18	Personal Monograms / Logos Packaging design Vocabulary: Monograms, criteria, nets, flaps, font, barcode, info.	Can combine and develop ideas Can design 3D packaging Can design using CAD	Numeracy: Construct 3D shapes and nets Computer Aided Design CorelDraw STEAM: CAD

Impact:
 Year 7 is the introduction to Design and Technology lessons in upper school. Students will know and understand the importance of Health and Safety and how to work safely in the workshop. They will be able to design products for themselves and to work in small teams to solve problems. Knowledge of Computer Aided Design will underpin progress in subsequent years while the introduction of Graphics will promote neat, attractive design work.

Note: Each Year 7 class will get three half terms in Technology and three half terms in Food Technology.