

**Stone Hill School**  
**Curriculum Plan 2019/20**  
**DT Year 10**

**Intent:**  
**All** - will produce a design and manufacture an outcome.  
**Most** - will successfully produce an outcome using a range skills and processes.  
**Some** - will independently produce a well presented outcome which satisfies the brief.

Term	Week/s	Topic/Theme <i>Steam</i>	Learning Outcomes Knowledge and Skills To know, to use, to apply...	Literacy Link Numeracy Link SMSC Link
<b>Half Term 1</b>	1	Research	Internet research into personal music devices.  The evolution of personal music.	Literacy: Internet search for information
	2	Design – MP3 Amplifier	Design of own idea Materials selection	SMSC: Sustainability of materials
	3-4	Electronics introduction  STEAM: Science – storing and transfer of electrical energy.	Understanding; Ohms, watts, volts, farads, amps, decibels - units of measurement. Input and output. Amplification.	Numeracy: using units of measurement  Numeracy: Using equations $V= I \times R$
	5-8	Project – MP3 Amplifier Circuit building	Populating the board, polarity, soldering, IC's, Problem solving independently Using a flow chart to solve problems independently	STEAM: Industrial practices
<b>Half Term 2</b>	9-15	Designing a housing / vac-formed casing	Accurate marking out using ruler Sketch modelling of casing Vacuum forming Independent production of outcome	Numeracy: Measuring and marking out
<b>Half Term 3</b>	16-18	Evaluation	Identify faults with own outcome Suggest how it could be improved	Literacy: following written instructions  SMSC: Group discussions with peer group

**Intended impact:** In Year 10 students look into the history of music and predict what will happen in the future. They select and combine materials introduced in previous years, fit electronics and use CAD to incorporate Laser-cut parts into their designs. The focus for this year is working independently.

**Note:** Each Year 10 class will get three half terms in Technology and three half terms in Food Technology. If they finish early, they design and make a clock.

