Hanley Castle High School curriculum outline for parents: **Textiles (Design & Technology) Year 10**

		Autumn Term		Spring Term		Summer Term	
Year 10	**Topic** Overview	**Mini project/-E-Textiles:** Pupils will create an embroidered brooch using E0Textiles based on the day of the dead or another related cultural celebration at this time of year. The final one will be papers and boards which could include forms of packaging or model making links to Textiles. **They will be expected to;** work with a different material and incorporate conductive threads, LED's and a switch with the brooch. This will cover systems as part of the core content.	**Clock project;** Create a clock design that will incorporate a wide range of material areas. **They will be introduced to:** Timbers (the clock stand) Polymers (the clock face – laser cut) Quilted textiles for the centre clock mechanism and manufacturing processes of each material, also techsoft (CAD) and have the opportunity to create a part of the clock that links to these areas. **Christmas Project: santa hat.** A short project to introduce another fabric that can be difficult to work with, faux fur. They will adapt a hat pattern, work with a 2 way stretch material, join fabrics with pile, using a combination of machining and hand sewing.	**Clock project continued/ theory:** Develop their own clock face, to recall skills developed last year and implementing new skills for other material areas. **They will be expected to;** produce a prototype whilst creating a manufacturing specification in preparation for year 11 coursework. Maths will be involved and theory work will be ongoing to back up this understanding continuing to link to material areas. **Short project – Repousse magnet (metal)** This short project working with metal, allows further theory work into another core area. Pupils will understand the possibilities of the metal and how it could be used in a variety of different ways, as well as being sewn onto fabrics.	**Fabrics and Fibres;** Final push on finishing material areas within the curriculum, social, ecological, cultural and ethical impact on decisions, surface treatments and finishes including screen printing, alongside levers and linkages, forces and stresses will also be addressed at this time. **They will be expected to:** Complete the last few areas of theory linked to mini makes. There will be a screen-printing exercise that reinforces another surface treatment within Textiles.	**New & emerging technologies, smart and composite materials;** Recap on smart materials, and introduce composites as well as push and pull marketing, crowdfunding etc., , links with business studies, **They will be expected to:** Make notes on final topics and answer exam questions based on topics covered so far as a revision strategy.	**Yr11 Coursework NEA:** Edexcel will have provided the titles for choosing your NEA topic. Any material area can be considered at this stage but doesn't need to be decided upon until later in the year. **They will be introduced to;** the NEA topics from Edexcel. This will be a portfolio of approximately 23 pages of A3. This is the design and make task which counts as 50% of their final GCSE grade.
	Disciplinary knowledge/skills	Laser cutter (CAM) Interfacing/ Reinforcement Specialist tools Key terminology Systems Embroidery Electronic components	CAD/CAM Laser cutting Timbers Polymers Mechanisms Textiles: quilting/laminating Faux fur/ synthetics Machining Specialist tools Templates	Manufacturing specification Metals Maths	Fabrics & Fibres Areas not completed within specialist area Screen printing Block printing Chemical and mechanical finishes Key terminology	New and emerging technologies Smart and composite materials Crowdfunding Cooperative Forms of energy Key terminology	Identifying task Writing brief Analysing the task Research: Target market Materials Existing products Moodboard Design Specification **The remainder of the coursework will be continued in Year11**

							(please see DT year 11- as this will be the one we're following)