Year 8

Working towards an empathetic future Exploring displacement of people around the world as a result of natural and manmade disasters. How can D&T remedy some of these issues?		
Keywords	Key skills	Equipment/ processes used/ materials
CAD (Computer Aided-Design) CAM (Computer Aided-Manufacture) 3D printing Additive manufacturing Emphatic Modelling	Google SketchUp (CAD skills) 3D printing process Spatial Awareness Problem solving Specification User designed Team work	Laptops Google sketch-up/ Tinkercad 3D printers PLA Foam board Cutting board Craft knife

Hanging around/what's the hold up! Pupils will work through a design problem and use a combination of acrylic, card and pine to create a unique product/ alternatively, some may follow a focused practical task to ultimately provide a design solution. Using a combination of key skills such as 2D design, CAD/CAM, laser cutter, 3D printing, line bending, casting, hand tool skills and refinement.		
Keywords	Key skills	Equipment/ processes used/ materials
Iterative process. Acrylic Laser cutter CAD CAM Thermo plastic Thermosetting Line bending 3D printing Casting Reading working drawings	Comb joint Accuracy in measuring and cutting Laser cutting- new and emerging technologies working alongside traditional Sustainability Tolerances Uses and purposes of timbers Iterative process. 3D modelling. Problem solving.	Pine Tenon saws Bench hooks Acrylic Hardboard PVA/wood glue Belt sander Sandpaper

Chocolate Novelty Using 2D design to design a simple chocolate novelty and packaging.		
Keywords	Key skills	Equipment/ processes used/ materials
Iterative process. Acrylic Laser cutter CAD CAM Thermo plastic Thermosetting Vacuum forming Branding Fairtrade	Iterative process. 3D modelling. Problem solving. Branding	Laptops 2D design// HIPS MDF (for laser cutter) Laser cutter// Vacuum former// Belt sander/ sand paper// PVC// Book-lets // Laptops// 2D design// Paper/laminator