Year 8

Advance card modelling

From technical drawings that they produced themselves pupils use scaled measurements to replicate a cardboard prototype using a number of different joints. Emphasis on creating curves and neat edges. Hard-

Keywords	Key skills	Equipment/ processes used/ materials
Modelling Corrugated card/ Prototype Scoring / orthographic	Spatial Awareness Problem solving Advanced card modelling skills/ Scale/	Cutting board Craft knife

Tidy 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

<u>Chocolate Novelty</u>

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