

Year 9

Pewter casting

Look at existing designers work and culture to inspire a simple design using pewter. (Differentiate by allowing pupils to add acrylic pieces.) In addition, a piece of packaging used to support and promote the product. This will be either a card piece of introduction to textiles.

Keywords	Key skills	Equipment/ processes used/ materials
Pewter Culture Inspiration Casting Ferrous Non-ferrous Alloys Textiles– weft Package	CAD/CAM (LASER CUT) Pewter casting Design influences Work of others User centred design Basic sewing Template/pattern Sublimation printing	Pewter ingots Pewter casting kit MDF-moulds Laser cutter Steel wood Buffer Thread/cord Sewing machine/ thread, needles

Initials

Technical drawing is incorporated to develop a combination of CAD/CAM and hand skills to produced a user-centred decorate initial. Incorporation of different joints (mitre/butt) and their relevance required. Advanced opportunity for those to include electronics.

Keywords	Key skills	Equipment/ processes used/ materials
Iterative process. Laser cutter CAD CAM Decoupage Mitre joint	Iterative process. Laser cutter 2D design Problem solving. Decoupage Painting	Laptops Paper Ruler Set square Isometric paper Laser cutting Hand skills Decoupage

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. Harder than it looks!

Keywords	Key skills	Equipment/ processes used/ materials
Route Corrugated card Prototype	Advanced card modelling skills Scale Accuracy of measurements and cutting	Corrugated card-scoring Lap joints Cutting mats Craft knife Hot glue