

Year 9 Design Technology Overview

Pewter casting

Look at existing designers work and culture to inspire a simple design using pewter. (Differentiate by allowing pupils to add acrylic pieces.)

Keywords	Key skills	Equipment/ processes used/ materials
Pewter Culture Inspiration Casting Ferrous Non-ferrous Alloys	CAD/CAM (LASER CUT) Pewter casting Design influences Work of others	Pewter ingots Pewter casting kit MDF-moulds Laser cutter Steel wood Buffer Thread/cord

Recycled plastics

Pupils undertake a simple make task using recycled plastics to make a simple key ring

Keywords	Key skills	Equipment/ processes used/ materials
HPDE Recycle Sustainability Polymers Life Cycle Assessment	Sustainability Hand tools and finishes Heat processing	Milk bottles Bottle tops (HDPE) Panini press Teflon sheet Silicon oven gloves Safety glasses

Night Light.

Using simple vacuum forming process to produce base. Use laser cutter to design and make the decorative element. Simple electronic circuit for produce light.

Keywords	Key skills	Equipment/ processes used/ materials
Iterative process. Laser cutter CAD CAM Thermo plastic Thermosetting	Iterative process. Laser cutter 2D design Problem solving. Forming process	Laptops Paper Acrylic Scanner Night light kits Vacuum former HIPS Strip heater Soldering iron Solder

