

Year 7

Reuse, reduce and recycle!

Pupils learn all about the term's biomimicry and biomorphic design. Using a more sustainable practice, pupils investigate the importance of sustainability to produce a small product.

Keywords	Key skills	Equipment/ processes used/ materials
HPDE Recycle Sustainability Life cycle analysis. Biomimicry Inspiration LED Evaluation 6R's Life Cycle Assessment	Sustainability Hand tools and finishes User wants Research Understanding the world around them	Milk bottles Bottle tops (HDPE) Panini press Teflon sheet Silicon oven gloves Safety glasses Key ring Moulding/ forming Finishing Pillar drill

Yinka Ilori: Light me up!

Pupils will learn about timbers and plastics and their classifications and uses. Looking at the work of others to inspire their design work and incorporate electronics into the mix!

Keywords	Key skills	Equipment/ processes used/ materials
Soft wood/Hard wood Timber Medium Density Fibreboard 2D design CAD/CAM Vacuum form Sublimation Print/heat press	Hand tool skills Measuring and accuracy Creativity in design and imagination Laser cutter 2D design Work of others: design Soldering	Template Coping saw Heat press Vacuum forming Soldering iron

CRUMBLE

Pupils explore the program crumble to design and work a small moving product in groups.

Keywords	Key skills	Equipment/ processes used/ materials
Circuits LED Motor Systems Input	Knowledge of programs/ systems	Laptops Crumble kits Coding/ programming

Drawing

Pupils learn about different technical drawings.

Keywords	Key skills	Equipment/ processes used/ materials
Isometric Rendering	Technical drawing skills	PPT Pencils Set squares Drawing boards