Design and Technology



Subject content

Year 7

Year 8

Year 9

Year 10

Year 11

Research

Board game product analysis Alberto Alessi product analysis

Design Movement interior

design

Designer Box design ideas

Upcycle Lamp product analysis

Section A: NEA

Responding to a given brief

Section A: NEA

Additional research into NEA

Design

Board game design ideas

Alien Design ideas

M

Magazine design ideas

Upcycle lamp design ideas

GCSE NEA

Design/development in response to a client and a given brief

Manufacture

Board game final product

Alien and Ball Bearing game

CAD: Sketch Up Interior design

CAD/CAM: Souvenir Box

CAD: Photoshop final Magazine

Upcycle Lamp final product

GCSE NEA

Manufacture a final product using a range of different materials and processes

Evaluation

Manufacturing evaluation for the Alien and Ball Bearing game Manufacturing evaluation of Souvenir Box

Colour Theory,

CAD/CAM, technical

drawing, design

movements, designers,

CAD (Sketch Up, 2D

Design), Wood

joints/fixings, functions

of tools/machines, CAM

Machines (Laser cutter)

and fabricating wood

Manufacturing evaluation for the Photoshop final Magazine

GCSE NEA

Evaluations throughout the NEA on all aspects

Technical Knowledge

Workshop Health and Safety

Electrical components

Wood joints/fixings

Functions of tools/machines

Functions of packaging, working with paper and board CAD (Photoshop), CAD/CAM theory, CAD/CAM in industry

> Sustainability, recycling, working with different materials, fixings & joints

GCSE exam

Core technical knowledge

Specialist materials (timbers/paper & board)

GCSE exam

Design and Make principles

Skills

Hand eye co-ordination, measuring/marking out, hand tools, machines, soldering, and presentation of work, designing, rendering, sketching, and evaluation skills Hand eye co-ordination, measuring/marking out, hand tools, machines, rendering, sketching, and working to a set brief, designing and presentation of work. CAD skills (Sketch Up & 2D Design), technical drawing, evaluation skills Hand eye co-ordination, measuring/marking out, hand tools, machines, rendering, sketching, and working to a set brief, designing and presentation of work.

CAD skills (Photoshop), evaluation skills, working with new materials

GCSE mock NEA

Research, design, CAD/CAM, practical skills, workshop skills GCSE NEA
Measuring/marking out,
hand tools, machines,
rendering, sketching, and
working to a set brief,
designing and
presentation of work.
CAD/CAM skills,
technical drawing,
modelling, working with a
range of materials,
evaluation skills